

# A review of ZnO nanoparticles as solar photocatalysts: S applications

Renewable and Sustainable Energy Reviews  
81, 536-551

DOI: [10.1016/j.rser.2017.08.020](https://doi.org/10.1016/j.rser.2017.08.020)

Citation Report

#	ARTICLE	IF	CITATIONS
1	Three-Dimensional ZnO Hierarchical Nanostructures: Solution Phase Synthesis and Applications. Materials, 2017, 10, 1304.	2.9	69
2	Enhanced photocatalytic degradation of lindane using metal-semiconductor Zn@ZnO and ZnO/Ag nanostructures. Journal of Environmental Sciences, 2018, 74, 107-115.	6.1	87
3	Enhancing photoresponsivity of ultraviolet photodetectors based on ZnO/ZnO:Eu ( $x=0, 0.2, 1, 5$ and) Tj ETQg 0.0 0 rgBJ /Overlock	2.9	7
4	A novel rapid synthesis, characterization and applications of calcium phosphate nanospheres from Baltic seawater. Ceramics International, 2018, 44, 9076-9079.	4.8	1
5	Fabrication and catalytic activities of anodes consisting of ZnO nanorods on boron-doped diamond film. Journal of Alloys and Compounds, 2018, 743, 187-195.	5.5	13
6	Review on the criteria anticipated for the fabrication of highly efficient ZnO-based visible-light-driven photocatalysts. Journal of Industrial and Engineering Chemistry, 2018, 62, 1-25.	5.8	697
7	Combination of Ag <sub>2</sub> CrO <sub>4</sub> and AgI semiconductors with g-C <sub>3</sub> N <sub>4</sub> : Novel nanocomposites with substantially improved photocatalytic performance under visible light. Solid State Sciences, 2018, 77, 62-73.	3.2	16
8	Mn-doping-induced photocatalytic activity enhancement of ZnO nanorods prepared on glass substrates. Applied Surface Science, 2018, 439, 285-297.	6.1	131
9	A review on bio-synthesized zinc oxide nanoparticles using plant extracts as reductants and stabilizing agents. Journal of Photochemistry and Photobiology B: Biology, 2018, 183, 201-221.	3.8	233
10	Photocatalytic oxidation of six endocrine disruptor chemicals in wastewater using ZnO at pilot plant scale under natural sunlight. Environmental Science and Pollution Research, 2018, 25, 34995-35007.	5.3	43
11	Chitosan Membrane Embedded With ZnO/CuO Nanocomposites for the Photodegradation of Fast Green Dye Under Artificial and Solar Irradiation. Analytical Chemistry Insights, 2018, 13, 117739011876336.	2.7	42
12	TiO <sub>2</sub> coated ZnO nanorods growth using NCD process and their gas sensing properties. Superlattices and Microstructures, 2018, 120, 250-256.	3.1	6
13	High-performance ultraviolet-visible driven ZnO morphologies photocatalyst obtained by microwave-assisted hydrothermal method. Journal of Photochemistry and Photobiology A: Chemistry, 2018, 353, 358-367.	3.9	33
14	Deposition of ZnO thin films by ultrasonic spray pyrolysis technique. Effect of the milling speed and time and its application in photocatalysis. Materials Science in Semiconductor Processing, 2018, 75, 288-295.	4.0	30
15	A review on bismuth telluride (Bi <sub>2</sub> Te <sub>3</sub> ) nanostructure for thermoelectric applications. Renewable and Sustainable Energy Reviews, 2018, 82, 4159-4169.	16.4	257
16	Halide-Modulated Functionality of Wide Band Gap Zinc Oxide Semiconductor Nanoparticle. ChemistrySelect, 2018, 3, 6382-6393.	1.5	4
17	On the Interactions and Synergism between Phases of Carbon-Phosphorus-Titanium Composites Synthesized from Cellulose for the Removal of the Orange-G Dye. Materials, 2018, 11, 1766.	2.9	27
18	Effects of three different nanoparticles on bioaccumulation, oxidative stress, osmoregulatory, and immune responses of <i>Carcinus aestuarii</i> . Toxicological and Environmental Chemistry, 2018, 100, 693-716.	1.2	6

#	ARTICLE	IF	CITATIONS
19	Luminescent Properties of Spark Eroded ZnO Nanopowder. , 2018, , .		0
20	Linking nanomaterial properties to biological outcomes: analytical chemistry challenges in nanotoxicology for the next decade. Chemical Communications, 2018, 54, 12787-12803.	4.1	33
21	Band Engineering of SrTiO <sub>3</sub> : Effect of Synthetic Technique and Site Occupancy of Doped Rhodium. Journal of Physical Chemistry C, 2018, 122, 27567-27574.	3.1	56
22	Botanically Templated Monolithic Macrostructured Zinc Oxide Materials for Photocatalysis. Inorganics, 2018, 6, 103.	2.7	2
23	Synthesis, characterisation, and antimicrobial activity of ZnO-based nanocomposites. Micro and Nano Letters, 2018, 13, 1667-1671.	1.3	2
24	A comparative assessment of the UV-photocatalytic activities of ZnO synthesized by different routes. Journal of Environmental Chemical Engineering, 2018, 6, 7161-7171.	6.7	22
25	Photoactive ZnO nanosuspension for intensification of organics contaminations decomposition. Chemical Engineering and Processing: Process Intensification, 2018, 134, 45-50.	3.6	16
26	Adsorption of SF <sub>6</sub> Decomposed Products over ZnO(101̄0): Effects of O and Zn Vacancies. ACS Omega, 2018, 3, 18739-18752.	3.5	9
27	Activated Hydrotalcites Obtained by Coprecipitation as Photocatalysts for the Degradation of 2,4,6-Trichlorophenol. Advances in Materials Science and Engineering, 2018, 2018, 1-15.	1.8	6
28	Surface modification of micro-sized CuO by in situ-growing heterojunctions CuO/Cu <sub>2</sub> O and CuO/Cu <sub>2</sub> O/Cu: effect on surface charges and photogenerated carrier lifetime. Applied Physics A: Materials Science and Processing, 2018, 124, 1.	2.3	16
29	Structural and Magnetic Properties of Co-Mn Codoped ZnO Nanoparticles Obtained by Microwave Solvothermal Synthesis. Crystals, 2018, 8, 410.	2.2	19
30	Carbon dots modifier for highly active photocatalysts based on ZnO porous microspheres. Journal of Materials Science: Materials in Electronics, 2018, 29, 19994-20002.	2.2	12
31	Influence of g-C <sub>3</sub> N <sub>4</sub> Precursors in g-C <sub>3</sub> N <sub>4</sub> /NiTiO <sub>3</sub> Composites on Photocatalytic Behavior and the Interconnection between g-C <sub>3</sub> N <sub>4</sub> and NiTiO <sub>3</sub> . Langmuir, 2018, 34, 13144-13154.	3.5	79
32	Graphene and silver decorated ZnO composite synthesis, characterization and photocatalytic activity evaluation. Diamond and Related Materials, 2018, 90, 26-31.	3.9	63
33	A Facile Synthesis of Visible-Light Driven Rod-on-Rod like $\gamma$ -FeOOH/ $\gamma$ -AgVO <sub>3</sub> Nanocomposite as Greatly Enhanced Photocatalyst for Degradation of Rhodamine B. Catalysts, 2018, 8, 392.	3.5	42
34	Effect of calcination temperature on the physicochemical properties of zinc oxide nanoparticles synthesized by coprecipitation. Materials Research Express, 2018, 5, 125018.	1.6	26
35	Preparation and Enhanced Photocatalytic Properties of 3D Nanoarchitectural ZnO Hollow Spheres with Porous Shells. Nanomaterials, 2018, 8, 687.	4.1	11
36	ZnO nanoparticles increase photosynthetic pigments and decrease lipid peroxidation in soil grown cilantro (Coriandrum sativum). Plant Physiology and Biochemistry, 2018, 132, 120-127.	5.8	94

#	ARTICLE	IF	CITATIONS
37	Growth of ZnO Nanorods on Graphitic Carbon Nitride gCN Sheets for the Preparation of Photocatalysts with High Visible-Light Activity. <i>ChemCatChem</i> , 2018, 10, 4973-4983.	3.7	76
38	Synthesis of Pr-doped ZnO nanoparticles: Their structural, optical, and photocatalytic properties. <i>Chinese Physics B</i> , 2018, 27, 086102.	1.4	17
39	Photocatalytic activity of ZnO nanostructures grown on electrospun CAB ultrafine fibers. <i>Applied Surface Science</i> , 2018, 455, 61-69.	6.1	24
40	Screened Coulomb hybrid density functional investigation of oxygen point defects on ZnO nanowires. <i>Computational Condensed Matter</i> , 2018, 16, e00307.	2.1	2
41	A review on recent advances in photodegradation of dyes using doped and heterojunction based semiconductor metal sulfide nanostructures for environmental protection. <i>Materials Today Energy</i> , 2018, 9, 83-113.	4.7	254
42	A straightforward route to obtain organic/inorganic hybrid network from bio-waste: Electroless deposition of ZnO nanostructures on eggshell membranes. <i>Chemical Physics Letters</i> , 2018, 706, 24-30.	2.6	8
43	Rare earth ions doped ZnO: Synthesis, characterization and preliminary photoactivity assessment. <i>Journal of Solid State Chemistry</i> , 2018, 264, 42-47.	2.9	76
44	Green synthesis of ZnO and ZnO/CuO nanocomposites in <i>Mentha longifolia</i> leaf extract: characterization and their application as anti-bacterial agents. <i>Journal of Materials Science: Materials in Electronics</i> , 2018, 29, 13596-13605.	2.2	66
45	Photon-absorption-based explanation of ultrasonic-assisted solar photochemical splitting of water to improve hydrogen production. <i>International Journal of Hydrogen Energy</i> , 2018, 43, 14439-14450.	7.1	18
46	Graphene/ZnO nanocomposite with seamless interface renders photoluminescence quenching and photocatalytic activity enhancement. <i>Journal of Materials Science</i> , 2018, 53, 13924-13935.	3.7	8
47	The effect of doping with rare earth elements (Sc, Y, and La) on the stability, structural, electronic and photocatalytic properties of the O-terminated ZnO surface; A first-principles study. <i>Applied Surface Science</i> , 2018, 457, 315-322.	6.1	28
48	Mixed-Phase 2D-MoS <sub>2</sub> as an Effective Photocatalyst for Selective Aerobic Oxidative Coupling of Amines under Visible-Light Irradiation. <i>Chemistry - A European Journal</i> , 2018, 24, 13871-13878.	3.3	45
49	Electrochemical synthesis of cobalt disulfide nanoparticles and their application as potential photocatalyst. <i>Journal of Materials Science: Materials in Electronics</i> , 2018, 29, 13833-13841.	2.2	14
50	Hydrothermal synthesis, structure, and photocatalytic properties of SnO <sub>2</sub> /rGO nanocomposites with different GO concentrations. <i>Materials Research Express</i> , 2018, 5, 095506.	1.6	14
51	Use of lactic acid modified MoS <sub>2</sub> nanopetals to improve photocatalytic degradation of organic pollutants. <i>Materials Research Express</i> , 2018, 5, 095016.	1.6	13
52	Novel magnetically retrievable Bi <sub>2</sub> WO <sub>6</sub> /magnetic carbon nano-onions composite with enhanced photoactivity under visible light. <i>Journal of Colloid and Interface Science</i> , 2018, 531, 502-512.	9.4	24
53	Fabrication of Ag-modified porous ZnMgO nanorods with enhanced photocatalytic performance. <i>Journal of Materials Science: Materials in Electronics</i> , 2018, 29, 16962-16970.	2.2	2
54	Hydrothermal synthesis of graphene-ZnTiO <sub>3</sub> nanocomposites with enhanced photocatalytic activities. <i>Research on Chemical Intermediates</i> , 2018, 44, 6621-6636.	2.7	12

#	ARTICLE	IF	CITATIONS
55	Low-temperature construction of MoS <sub>2</sub> quantum dots/ZnO spheres and their photocatalytic activity under natural sunlight. <i>Journal of Colloid and Interface Science</i> , 2018, 530, 714-724.	9.4	32
56	New Insights into Sensitization Mechanism of the Doped Ce (IV) into Strontium Titanate. <i>Materials</i> , 2018, 11, 646.	2.9	32
57	Porphyrin-Functionalized Zinc Oxide Nanostructures for Sensor Applications. <i>Sensors</i> , 2018, 18, 2279.	3.8	25
58	Epigrammatic progress and perspective on the photocatalytic properties of BiVO <sub>4</sub> -based photocatalyst in photocatalytic water treatment technology: A review. <i>Journal of Molecular Liquids</i> , 2018, 268, 438-459.	4.9	104
59	Lignocellulosic Biomass Transformations via Greener Oxidative Pretreatment Processes: Access to Energy and Value-Added Chemicals. <i>Frontiers in Chemistry</i> , 2018, 6, 141.	3.6	208
60	Sol-gel synthesis and photocatalytic activity of ZnO@Ag-Sm nanoparticles for water treatment. <i>Journal of Materials Science: Materials in Electronics</i> , 2018, 29, 10986-10991.	2.2	6
61	Ultrasonic treatment as recent and environmentally friendly route for the synthesis and characterization of polymer nanocomposite having PVA and biosafe BSA-modified ZnO nanoparticles. <i>Polymers for Advanced Technologies</i> , 2018, 29, 2174-2183.	3.2	10
62	Room-temperature synthesis of ZnO@GO nanocomposites as anode for lithium-ion batteries. <i>Journal of Materials Research</i> , 2018, 33, 1506-1514.	2.6	22
63	Controlled synthesis, morphological, optical and electrical properties of copper-doped zinc oxysulfide nanostructures. <i>Applied Physics A: Materials Science and Processing</i> , 2018, 124, 1.	2.3	17
64	Synthesis and Characterization of Self-Assembled ZnO Nanoparticles Embedded Within a SiO <sub>2</sub> Matrix Deposited on (111) p-Type Silicon By Reactive RF Sputtering Using Metallic Zinc Target As Precursor. <i>Journal of Electronic Materials</i> , 2018, 47, 6607-6612.	2.2	2
65	A facile microwave-assisted synthesis of PbMoO <sub>4</sub> nanoparticles and their key characteristics analysis: a good contender for photocatalytic applications. <i>Materials Research Express</i> , 2018, 5, 095032.	1.6	41
66	Facile, seedless and surfactant-free synthesis of ZnO nanostructures by wet chemical bath method and their characterization. <i>Applied Nanoscience (Switzerland)</i> , 2018, 8, 1823-1830.	3.1	5
67	UV-LEDs floating-bed photoreactor for the removal of caffeine and paracetamol using ZnO supported on polystyrene pellets. <i>Chemical Engineering Journal</i> , 2018, 350, 703-713.	12.7	61
68	A survey on artificial neural networks application for identification and control in environmental engineering: Biological and chemical systems with uncertain models. <i>Annual Reviews in Control</i> , 2019, 48, 250-272.	7.9	46
69	Recent Development of Graphitic Carbon Nitride-Based Photocatalyst for Environmental Pollution Remediation. , 0, , .		4
70	Study of ZnO <sub>1-x</sub> S <sub>x</sub> synthesis by non-alcoxide sol-gel method employed in the photocatalytic degradation of a persistent organic pollutant in water. <i>Journal of Physics: Conference Series</i> , 2019, 1247, 012002.	0.4	0
71	One-pot synthesis of ZnO@Ag and ZnO@Co nanohybrid materials for photocatalytic applications. <i>Journal of Physics and Chemistry of Solids</i> , 2019, 135, 109120.	4.0	20
72	Adsorption behaviors of gas molecules on the surface of ZnO nanocrystals under UV irradiation. <i>Science China Technological Sciences</i> , 2019, 62, 2226-2235.	4.0	18

#	ARTICLE	IF	CITATIONS
73	Application of metal oxide semiconductors in light-driven organic transformations. <i>Catalysis Science and Technology</i> , 2019, 9, 5186-5232.	4.1	143
74	A Novel Process for the Preparation of ZnO Nanoparticles and ZnO/Ni <sub>0.5</sub> Zn <sub>0.5</sub> Fe <sub>2</sub> O <sub>4</sub> Nanocomposites. <i>Journal of Nanoscience and Nanotechnology</i> , 2019, 19, 8180-8186.	0.9	1
75	Liquid N <sub>2</sub> quenching induced oxygen defects and surface distortion in TiO <sub>2</sub> and the effect on the photocatalysis of methylene blue and acetone. <i>Applied Surface Science</i> , 2019, 494, 266-274.	6.1	18
76	Elucidating room-temperature optical transitions in annealed ZnO nanoparticles synthesized from an aqueous method. <i>Materials Research Express</i> , 2019, 6, 105048.	1.6	5
77	Photoelectrochemical Performance of ZnO Nanorods Grown on Stainless Steel Substrate. <i>IOP Conference Series: Materials Science and Engineering</i> , 0, 515, 012023.	0.6	7
78	Removal of chemical oxygen demand from agro effluent by ZnO photocatalysis and photo-Fenton. <i>SN Applied Sciences</i> , 2019, 1, 1.	2.9	14
79	Enhancement of visible-light-driven photocatalytic performance of BiOBr nanosheets by Co <sup>2+</sup> doping. <i>Journal of Materials Science: Materials in Electronics</i> , 2019, 30, 14967-14976.	2.2	23
80	Solar-Light-Driven Efficient ZnO@Single-Walled Carbon Nanotube Photocatalyst for the Degradation of a Persistent Water Pollutant Organic Dye. <i>Catalysts</i> , 2019, 9, 498.	3.5	46
81	Microbial synthesis of zinc oxide nanoparticles and their potential application as an antimicrobial agent and a feed supplement in animal industry: a review. <i>Journal of Animal Science and Biotechnology</i> , 2019, 10, 57.	5.3	325
82	A Review on Porous Polymeric Membrane Preparation. Part I: Production Techniques with Polysulfone and Poly (Vinylidene Fluoride). <i>Polymers</i> , 2019, 11, 1160.	4.5	224
83	ZnO rod/reduced graphene oxide sensitized by Fe <sub>2</sub> O <sub>3</sub> nanoparticles for effective visible-light photoreduction of CO <sub>2</sub> . <i>Journal of Colloid and Interface Science</i> , 2019, 554, 335-343.	9.4	51
84	Development and characterization of nanosheets attached nanotetrapods of zinc oxide. <i>SN Applied Sciences</i> , 2019, 1, 1.	2.9	6
85	Electrochemistry Studies of Hydrothermally Grown ZnO on 3D-Printed Graphene. <i>Nanomaterials</i> , 2019, 9, 1056.	4.1	12
86	A facile one pot flash combustion synthesis of ZnO nanoparticles and their characterizations for photocatalytic applications. <i>Journal of Molecular Structure</i> , 2019, 1197, 610-616.	3.6	51
87	Core-Shell or Dimer Heterostructures? Synergistic Catalysis of an Advanced Oxidation Process at the Exposed Interface under Illumination. <i>ACS Applied Materials &amp; Interfaces</i> , 2019, 11, 28996-29003.	8.0	5
88	Synthesis and photocatalytic activity of Gd doped ZnO nanoparticles for enhanced degradation of methylene blue under visible light. <i>Materials Science in Semiconductor Processing</i> , 2019, 103, 104622.	4.0	81
89	Highly efficient photocatalytic activity of stable manganese-doped zinc oxide (Mn:ZnO) nanofibers via electrospinning method. <i>Materials Science in Semiconductor Processing</i> , 2019, 103, 104621.	4.0	38
90	Hydrothermal synthesis of strontium-doped ZnS nanoparticles: structural, electronic and photocatalytic investigations. <i>Bulletin of Materials Science</i> , 2019, 42, 1.	1.7	29

#	ARTICLE	IF	CITATIONS
91	A combined experimental and computational study on a nanohybrid material for potential application in NIR photocatalysis. <i>Applied Catalysis A: General</i> , 2019, 583, 117124.	4.3	13
92	ZnO formation through decomposition of zinc bis(ethyl acetoacetate) by steaming treatment. <i>Journal of Sol-Gel Science and Technology</i> , 2019, 91, 255-260.	2.4	6
93	Morphological, structural and optical properties of Mg-doped ZnO nanocrystals synthesized using polyol process. <i>Materials Science in Semiconductor Processing</i> , 2019, 102, 104595.	4.0	33
94	Deposition of zinc oxide as an electron transport layer in planar perovskite solar cells by spray and SILAR methods comparable with spin coating. <i>RSC Advances</i> , 2019, 9, 20917-20924.	3.6	51
95	One-step co-precipitation method to construct black phosphorus nanosheets/ZnO nanohybrid for enhanced visible light photocatalytic activity. <i>Applied Surface Science</i> , 2019, 497, 143682.	6.1	40
96	One-step synthesis of BiOBr/WO <sub>3</sub> .0.33H <sub>2</sub> O composite for highly efficient visible-light-driven photocatalyst. <i>Solid State Sciences</i> , 2019, 98, 106021.	3.2	14
97	Preparation of Photocatalytic Porous Nano-ZnO from Galvanizing Dross. <i>Solid State Phenomena</i> , 0, 298, 186-194.	0.3	0
98	Defects Engineering in Photocatalytic Water Splitting Materials. <i>ChemCatChem</i> , 2019, 11, 6177-6189.	3.7	90
99	Microwave heating assisted synthesis of novel SnSe/g-C <sub>3</sub> N <sub>4</sub> composites for effective photocatalytic H <sub>2</sub> production. <i>Journal of Industrial and Engineering Chemistry</i> , 2019, 80, 74-82.	5.8	41
100	Zr-Modified ZnO for the Selective Oxidation of Cinnamaldehyde to Benzaldehyde. <i>Catalysts</i> , 2019, 9, 716.	3.5	4
101	pH-responsive kinematics of photocatalytic degradation of Rh B with polypyrene microspheres. <i>Materials Research Express</i> , 2019, 6, 105916.	1.6	1
102	A comparative photocatalytic study of TiO <sub>2</sub> loaded on three natural clays with different morphologies. <i>Applied Clay Science</i> , 2019, 183, 105352.	5.2	37
103	Study on the effect of the concentration of Hibiscus sabdariffa extract on the green synthesis of ZnO nanoparticles. <i>Results in Physics</i> , 2019, 15, 102807.	4.1	126
104	Evaluating the photocatalytic efficiency of the BiVO <sub>4</sub> /rGO photocatalyst. <i>Scientific Reports</i> , 2019, 9, 16091.	3.3	78
105	Simple design and preliminary evaluation of continuous submerged solid small-scale laboratory photoreactor (CS4PR) using TiO <sub>2</sub> /NO <sub>3</sub> -@TC for dye degradation. <i>Journal of Environmental Chemical Engineering</i> , 2019, 7, 103482.	6.7	27
106	Hydrothermal modification of zinc oxide and titanium dioxide for photocatalytic degradation of Rhodamine B. <i>AIP Conference Proceedings</i> , 2019, , .	0.4	0
107	Analysis of the Structural Evolution of Zinc Oxide Powders Obtained by Mechanical High-Energy Grinding. <i>Technical Physics</i> , 2019, 64, 1330-1335.	0.7	2
108	Influence of Gd doping on the visible-light photocatalytic activity and magnetic properties of BiFeO <sub>3</sub> particles. <i>Materials Research Express</i> , 2019, 6, 115044.	1.6	9



#	ARTICLE	IF	CITATIONS
109	SiO <sub>2</sub> -Coated ZnO Nanoflakes Decorated with Ag Nanoparticles for Photocatalytic Water Oxidation. Chemistry - A European Journal, 2019, 25, 14123-14132.	3.3	17
110	Flexible Photocatalytic Paper with Cu <sub>2</sub> O and Ag Nanoparticle-Decorated ZnO Nanorods for Visible Light Photodegradation of Organic Dye. Nanoscale Research Letters, 2019, 14, 204.	5.7	18
111	Zinc Oxide for Functional Textile Coatings: Recent Advances. Coatings, 2019, 9, 550.	2.6	121
112	Fabrication of ZnO@Ag <sub>3</sub> PO <sub>4</sub> Core-Shell Nanocomposite Arrays as Photoanodes and Their Photoelectric Properties. Nanomaterials, 2019, 9, 1254.	4.1	73
113	PVP-assisted synthesis of rod-like ZnO photocatalyst for photodegradation of reactive red (RR141) and Congo red (CR) azo dyes. Journal of Materials Science: Materials in Electronics, 2019, 30, 17804-17819.	2.2	35
114	Cu <sub>2</sub> O-CuO@biochar composite: Synthesis, characterization and its efficient photocatalytic performance. Applied Surface Science, 2019, 498, 143846.	6.1	71
115	Photocatalytic degradation of Rhodamine B by zinc oxide nanoparticles synthesized using the leaf extract of Cyanometra ramiflora. Journal of Photochemistry and Photobiology B: Biology, 2019, 199, 111621.	3.8	190
116	Irisin alleviates pulmonary epithelial barrier dysfunction in sepsis-induced acute lung injury via activation of AMPK/SIRT1 pathways. Biomedicine and Pharmacotherapy, 2019, 118, 109363.	5.6	87
117	Recent advancements in photocatalyst-based platforms for the destruction of gaseous benzene: Performance evaluation of different modes of photocatalytic operations and against adsorption techniques. Journal of Photochemistry and Photobiology C: Photochemistry Reviews, 2019, 41, 100316.	11.6	76
118	Highly efficient Cu-phthalocyanine-sensitized ZnO hollow spheres for photocatalytic and antimicrobial applications. Composites Part B: Engineering, 2019, 176, 107314.	12.0	47
119	One-Step Synthesis of Highly Monodisperse ZnO Core-Shell Microspheres in Microfluidic Devices. , 2019, , .		1
120	ZnO as a Functional Material, a Review. Crystals, 2019, 9, 505.	2.2	227
121	Use of ionic liquid TEA-PS.BF <sub>4</sub> as media synthesis of ZnO based on coprecipitation method. Journal of Alloys and Compounds, 2019, 810, 151835.	5.5	2
122	Understanding Reaction Kinetics by Tailoring Metal Co-catalysts of the BiVO <sub>4</sub> Photocatalyst. ACS Omega, 2019, 4, 16597-16602.	3.5	24
123	Halloysite-Doped Zinc Oxide for Enhanced Sunscreening Performance. ACS Applied Nano Materials, 2019, 2, 6575-6584.	5.0	20
124	g-C <sub>3</sub> N <sub>4</sub> -Mediated Synthesis of Cu <sub>2</sub> O To Obtain Porous Composites with Improved Visible Light Photocatalytic Degradation of Organic Dyes. ACS Omega, 2019, 4, 17301-17316.	3.5	37
125	Synthesis, characterization, and photocatalytic properties of ZnO nanoparticles prepared by a precipitation-calcination method using a natural alkaline solution. Materials Research Express, 2019, 6, 045501.	1.6	13
126	Solar light-driven complete mineralization of aqueous gram-positive and gram-negative bacteria with ZnO photocatalyst. Solar Energy, 2019, 180, 351-359.	6.1	14



#	ARTICLE	IF	CITATIONS
127	A novel miniature planar gas ionization sensor based on selective growth of ZnO nanowires. <i>Sensors and Actuators A: Physical</i> , 2019, 288, 55-60.	4.1	20
128	Design and tailoring of one-dimensional ZnO nanomaterials for photocatalytic degradation of organic dyes: a review. <i>Research on Chemical Intermediates</i> , 2019, 45, 2197-2254.	2.7	131
129	Study on highly efficient BiOCl/ZnO p-n heterojunction: Synthesis, characterization and visible-light-excited photocatalytic activity. <i>Journal of Molecular Structure</i> , 2019, 1183, 209-216.	3.6	37
130	Porous ZnO/Carbon nanocomposites derived from metal organic frameworks for highly efficient photocatalytic applications: A correlational study. <i>Carbon</i> , 2019, 146, 348-363.	10.3	89
131	Recent advances of nanocarbon-inorganic hybrids in photocatalysis. , 2019, , 521-588.		5
132	Multiple energy applications of quantum-dot sensitized TiO <sub>2</sub> /PbS/CdS and TiO <sub>2</sub> /CdS/PbS hierarchical nanocomposites synthesized via p-SILAR technique. <i>Chemical Physics Letters</i> , 2019, 717, 69-76.	2.6	44
133	Controlled synthesis of In-doped ZnO: the effect of indium doping concentration. <i>Journal of Materials Science: Materials in Electronics</i> , 2019, 30, 11833-11842.	2.2	16
134	The synthesis of CB[8]/ZnO composites materials with enhanced photocatalytic activities. <i>Heliyon</i> , 2019, 5, e01714.	3.2	14
135	Effective coupling of BiPO <sub>4</sub> /g-C <sub>3</sub> N <sub>4</sub> hybrid composites in ciprofloxacin photodegradation. <i>Research on Chemical Intermediates</i> , 2019, 45, 3865-3878.	2.7	22
136	Water Treatment Devices Based on Zero-Valent Metal and Metal Oxide Nanomaterials. , 2019, , 187-225.		8
137	Covalent bonding of ZnO nanostructures with dispersible carbon nanotubes for self-assembly photocatalytic heterostructures. <i>Applied Surface Science</i> , 2019, 492, 219-227.	6.1	18
138	Photoactive nanoarchitectures based on clays incorporating TiO <sub>2</sub> and ZnO nanoparticles. <i>Beilstein Journal of Nanotechnology</i> , 2019, 10, 1140-1156.	2.8	50
139	Effectively H <sub>2</sub> generation over CdS/KTa <sub>0.75</sub> Nb <sub>0.25</sub> O <sub>3</sub> composite via water splitting. <i>Journal of Colloid and Interface Science</i> , 2019, 552, 622-632.	9.4	30
140	Facile one-pot solvothermal method to synthesize solar active Bi <sub>2</sub> WO <sub>6</sub> for photocatalytic degradation of organic dye. <i>Journal of Alloys and Compounds</i> , 2019, 801, 502-510.	5.5	67
141	Nanostructured ZnO-based materials for biomedical and environmental applications. , 2019, , 285-305.		1
142	Physicochemical properties of chimie douce derived, digestively ripened, ultra-small (r<20 nm) ZnO QDs. <i>Colloids and Surfaces A: Physicochemical and Engineering Aspects</i> , 2019, 575, 310-317.	4.7	8
143	Fluorinated Reduced Graphene Oxide-Encapsulated ZnO Hollow Sphere Composite as an Efficient Photocatalyst with Increased Charge-Carrier Mobility. <i>Langmuir</i> , 2019, 35, 8681-8691.	3.5	21
144	Removal of Pesticides with Endocrine Disruptor Activity in Wastewater Effluent by Solar Heterogeneous Photocatalysis Using ZnO/Na <sub>2</sub> S <sub>2</sub> O <sub>8</sub> . <i>Water, Air, and Soil Pollution</i> , 2019, 230, 1.	2.4	19

#	ARTICLE	IF	CITATIONS
145	L-cysteine modified ZnO: Small change while great progress. Materials Science and Engineering C, 2019, 103, 109818.	7.3	19
146	Zinc Oxide Nanoparticles Obtained by Supercritical Antisolvent Precipitation for the Photocatalytic Degradation of Crystal Violet Dye. Catalysts, 2019, 9, 346.	3.5	68
147	Metal-organic frameworks for CO2 photoreduction. Frontiers in Energy, 2019, 13, 221-250.	2.3	25
148	Core/shell rGO/BiOBr particles with visible photocatalytic activity towards water pollutants. Applied Surface Science, 2019, 490, 580-591.	6.1	55
149	Nanosized Fe3O4 incorporated on a TiO2 surface for the enhanced photocatalytic degradation of organic pollutants. Journal of Molecular Liquids, 2019, 287, 110967.	4.9	56
150	Vertically aligned zinc oxide nanosheet for high-performance photocatalysis of water pollutants. Ceramics International, 2019, 45, 16821-16828.	4.8	13
151	TiO2, SnO2 and ZnO catalysts supported on mesoporous SBA-15 versus unsupported nanopowders in photocatalytic degradation of methylene blue. Microporous and Mesoporous Materials, 2019, 285, 247-258.	4.4	70
152	Layer by Layer Assembly of Zinc Oxide Nanotubes and Nanoflowers as Catalyst for Separate and Simultaneous Catalytic Degradation of Dyes and Fuel Additive. ChemistrySelect, 2019, 4, 5548-5559.	1.5	12
153	Visible-light-driven photocatalytic activity of tiny ZnO nanosheets anchored on NaBiS2 nanoribbons via hydrothermal synthesis. Journal of Materials Science: Materials in Electronics, 2019, 30, 10900-10911.	2.2	27
154	P3HT/Ag/TiO2 ternary photocatalyst with significantly enhanced activity under both visible light and ultraviolet irradiation. Applied Surface Science, 2019, 488, 228-236.	6.1	19
155	Ultrasonic spray pyrolysis deposited ZnO thin film for photocatalytic activity. AIP Conference Proceedings, 2019, , .	0.4	7
156	Mechanistic insight into the endophytic fungus mediated synthesis of protein capped ZnO nanoparticles. Materials Science and Engineering B: Solid-State Materials for Advanced Technology, 2019, 243, 214-221.	3.5	62
157	Stable ZnO nanocatalysts with high photocatalytic activity for textile dye treatment. Nano Structures Nano Objects, 2019, 18, 100303.	3.5	32
158	Auto-combustion synthesis of pure and Er, Dy co-doped ZnO nanomaterials for efficient methyl orange degradation using solar and visible light photocatalysis. Materials Research Express, 2019, 6, 075044.	1.6	7
159	Enhancement of the photocatalytic activity of ZnO nanoparticles by silver doping for the degradation of AY99 contaminants. Journal of Molecular Structure, 2019, 1191, 76-84.	3.6	56
160	Mesoporous honeycomb-like ZnO as ultraviolet photocatalyst synthesized via solution combustion method. Materials Research Bulletin, 2019, 117, 72-77.	5.2	26
161	Modeling and analysis of optical properties of nanoparticles and nanofluids for effective absorption of solar radiation and their heating. SN Applied Sciences, 2019, 1, 1.	2.9	11
162	Stable hierarchical ZnO structures for photocatalytic degradation of 2,5-dihydroxybenzoic acid. Materials Science in Semiconductor Processing, 2019, 97, 48-55.	4.0	12

#	ARTICLE	IF	CITATIONS
163	The effect of Zr loading in Zr/TiO <sub>2</sub> prepared by pressurized hot water on its surface, morphological and photocatalytic properties. Journal of Sol-Gel Science and Technology, 2019, 90, 369-379.	2.4	4
164	Europium-doped ZnO nanospheres “controlling optical properties and photocatalytic activity. Journal of Materials Chemistry C, 2019, 7, 3909-3919.	5.5	27
165	Photocatalytic zinc oxide nanoparticles synthesis using Peltophorum pterocarpum leaf extract and their characterization. Optik, 2019, 185, 248-255.	2.9	79
166	Controllable Transformation of Aligned ZnO Nanorods to ZIF-8 as Solid-Phase Microextraction Coatings with Tunable Porosity, Polarity, and Conductivity. Analytical Chemistry, 2019, 91, 5091-5097.	6.5	57
167	Facile surface modification of ceramic membranes using binary TiO <sub>2</sub> /SiO <sub>2</sub> for achieving fouling resistance and photocatalytic degradation. Journal of Sol-Gel Science and Technology, 2019, 91, 198-207.	2.4	5
168	Optimizing the interface of C/titania@reduced graphene oxide nanofibers for improved photocatalytic activity. Journal of Materials Science, 2019, 54, 8907-8918.	3.7	19
169	New approach for the transformation of metallic waste into nanostructured Fe <sub>3</sub> O <sub>4</sub> and SnO <sub>2</sub> -Fe <sub>3</sub> O <sub>4</sub> heterostructure and their application in treatment of organic pollutant. Waste Management, 2019, 87, 719-730.	7.4	19
170	Facile synthesis of LaDySn <sub>2</sub> O <sub>7</sub> SnSe nanocomposite with excellent photocatalytic Activity under visible light. Materials Chemistry and Physics, 2019, 229, 362-371.	4.0	7
171	A simple synthesis route for preparation and optical properties of PMMA-g-ZnO nanocomposites through surface-initiated radical polymerization. IOP Conference Series: Materials Science and Engineering, 2019, 479, 012108.	0.6	1
172	Mechanisms of removal of heavy metal ions by ZnO particles. Heliyon, 2019, 5, e01440.	3.2	131
173	Nanocoatings and thin films. , 2019, , 463-477.		2
174	Surface oxygen vacancies of ZnO: A facile fabrication method and their contribution to the photoluminescence. Journal of Alloys and Compounds, 2019, 791, 722-729.	5.5	63
175	Photocatalytic effect of ZnO on the stability of nonfullerene acceptors and its mitigation by SnO <sub>2</sub> for nonfullerene organic solar cells. Materials Horizons, 2019, 6, 1438-1443.	12.2	182
176	A review on catalyst development for dry reforming of methane to syngas: Recent advances. Renewable and Sustainable Energy Reviews, 2019, 108, 175-193.	16.4	450
177	Challenges in Determining the Location of Dopants, to Study the Influence of Metal Doping on the Photocatalytic Activities of ZnO Nanopowders. Nanomaterials, 2019, 9, 481.	4.1	27
178	Photocatalytic Water Purification with ZnO Thin Films in Demineralized as Well as Natural Waters. Physica Status Solidi (A) Applications and Materials Science, 2019, 216, 1800880.	1.8	4
179	Synthesis and Photocatalytic Activity of Fe <sub>3</sub> O <sub>4</sub> @WO <sub>3</sub> @CQD Multifunctional System. Journal of Inorganic and Organometallic Polymers and Materials, 2019, 29, 1297-1304.	3.7	3
180	Photocatalytic degradation of methylene blue with synthesized rGO/ZnO/Cu. Chemical Physics Letters, 2019, 719, 1-7.	2.6	37

#	ARTICLE	IF	CITATIONS
181	Innovative Seizure of Metal/Metal Oxide Nanoparticles in Water Purification: A Critical Review of Potential Risks. <i>Critical Reviews in Analytical Chemistry</i> , 2019, 49, 534-541.	3.5	8
182	Activation of Water on MnO <sub>x</sub> -Nanocluster-Modified Rutile (110) and Anatase (101) TiO <sub>2</sub> and the Role of Cation Reduction. <i>Frontiers in Chemistry</i> , 2019, 7, 67.	3.6	12
183	A sustainable multi-function biomorphic material for pollution remediation or UV absorption: Aerosol assisted preparation of highly porous ZnO-based materials from cork templates. <i>Journal of Environmental Chemical Engineering</i> , 2019, 7, 102936.	6.7	19
184	A type-II MoS <sub>2</sub> /ZnO heterostructure with enhanced photocatalytic activity. <i>Materials Letters</i> , 2019, 243, 183-186.	2.6	53
186	Synthesis and Application of Fe-Doped TiO <sub>2</sub> -Haloysite Nanotubes Composite and Their Potential Application in Water Treatment. <i>Advances in Materials Science and Engineering</i> , 2019, 2019, 1-15.	1.8	13
187	Synthesis, Characterization and Photocatalytic Activity of N-doped Cu <sub>2</sub> O/ZnO Nanocomposite on Degradation of Methyl Red. <i>Journal of Composites Science</i> , 2019, 3, 93.	3.0	18
188	Structural, Optical, Morphological Properties of ZnO Nanoparticle/ZnO Nanorods. <i>Journal of Physics: Conference Series</i> , 2019, 1294, 022030.	0.4	1
189	The Potential of Chitosan-TiO <sub>2</sub> Nanocomposite for Methyl Orange and Rhodamine B Removal. <i>Journal of Physics: Conference Series</i> , 2019, 1397, 012029.	0.4	0
190	Synthesis of ZnO nanoparticles in polyvinyl alcohol solutions using laser assisted synthesis in solution (LASiS) method. <i>Journal of Physics: Conference Series</i> , 2019, 1317, 012061.	0.4	0
191	Investigating the Photocatalytic Performances of Nanocomposites Containing Narrow-band-gap Copolymers and ZnO. <i>ChemistrySelect</i> , 2019, 4, 14214-14221.	1.5	9
192	Preparation of Electroconductive, Antibacterial, Photoactive Cotton Fabric Through Green Synthesis of ZnO/reduced Graphene Oxide Nanocomposite. <i>Fibers and Polymers</i> , 2019, 20, 2618-2624.	2.1	10
193	A zinc-based oxysulfide photocatalyst SrZn <sub>2</sub> S <sub>2</sub> O capable of reducing and oxidizing water. <i>Dalton Transactions</i> , 2019, 48, 15778-15781.	3.3	21
194	Metal-organic framework-derived heterojunctions as nanocatalysts for photocatalytic hydrogen production. <i>Inorganic Chemistry Frontiers</i> , 2019, 6, 3456-3467.	6.0	92
195	Sunlight-Driven Combustion Synthesis of Defective Metal Oxide Nanostructures with Enhanced Photocatalytic Activity. <i>ACS Omega</i> , 2019, 4, 20595-20605.	3.5	28
196	Evolution of native defects in ZnO nanorods irradiated with hydrogen ion. <i>Scientific Reports</i> , 2019, 9, 17393.	3.3	22
197	Core-shell nanowire arrays based on ZnO and Cu <sub>x</sub> O for water stable photocatalysts. <i>Scientific Reports</i> , 2019, 9, 17268.	3.3	27
198	Effect of Thickness on the Photocatalytic Properties of ZnO Coatings based on Nanoparticles. , 2019, , .		0
199	Bioinspired ZnO-Based Solar Photocatalysts for the Efficient Decontamination of Persistent Organic Pollutants and Hexavalent Chromium in Wastewater. <i>Catalysts</i> , 2019, 9, 974.	3.5	27

#	ARTICLE	IF	CITATIONS
200	Reduced Phosphomolybdate Hybrids as Efficient Visible-Light Photocatalysts for Cr(VI) Reduction. <i>Inorganic Chemistry</i> , 2019, 58, 16667-16675.	4.0	47
201	ZnO nanoparticles mediated by aqueous extracts of <i>Dovyalis caffra</i> fruits and the photocatalytic evaluations. <i>Materials Research Express</i> , 2019, 6, 125091.	1.6	20
202	Visible active natural hematite ore incorporated ZnO composite for efficient photodegradation of ciprofloxacin. <i>International Journal of Environmental Analytical Chemistry</i> , 2019, , 1-14.	3.3	7
203	Controlling the recombination of electron-hole pairs by changing the shape of ZnO nanorods via sol-gel method using water and their enhanced photocatalytic properties. <i>Korean Journal of Chemical Engineering</i> , 2019, 36, 2118-2124.	2.7	27
204	MoS <sub>2</sub> nanosheet incorporated $\text{Fe}_2\text{O}_3/\text{ZnO}$ nanocomposite with enhanced photocatalytic dye degradation and hydrogen production ability. <i>RSC Advances</i> , 2019, 9, 40357-40367.	3.6	60
205	High performance visible-light responsive Chl-Cu/ZnO catalysts for photodegradation of rhodamine B. <i>Applied Catalysis B: Environmental</i> , 2019, 241, 359-366.	20.2	65
206	ZnO nanoparticles immobilized on the surface of stones to study the removal efficiency of 4-nitroaniline by the hybrid advanced oxidation process (UV/ZnO/O <sub>3</sub> ). <i>Journal of Molecular Structure</i> , 2019, 1176, 766-776.	3.6	66
207	Designing zinc oxide nanostructures (nanoworms, nanoflowers, nanowalls, and nanorods) by pulsed laser ablation technique for gas sensing application. <i>Journal of the American Ceramic Society</i> , 2019, 102, 4367-4375.	3.8	17
208	Mechanism of enhanced photocatalytic activity of Cr-doped ZnO nanoparticles revealed by photoluminescence emission and electron spin resonance. <i>Semiconductor Science and Technology</i> , 2019, 34, 025013.	2.0	29
209	Photoactive and hydrophobic nano-ZnO/poly(alkyl siloxane) coating for the protection of sandstone. <i>Construction and Building Materials</i> , 2019, 199, 549-559.	7.2	20
210	Graphene Oxide and Derivatives: The Place in Graphene Family. <i>Frontiers in Physics</i> , 2019, 6, .	2.1	256
211	Modulated charge transport characteristics in solution-processed UV photodetector by incorporating localized built-in electric field. <i>Journal of Alloys and Compounds</i> , 2019, 774, 887-895.	5.5	5
212	Structural, optical, and electronic properties of metal oxide nanostructures. , 2019, , 59-102.		6
213	One-pot ultrasonic assisted sol-gel synthesis of spindle-like Nd and V codoped ZnO for efficient photocatalytic degradation of organic pollutants. <i>Separation and Purification Technology</i> , 2019, 212, 427-437.	7.9	47
214	Synthesis and surface modification of Zinc Nano rods using vermiwash of <i>Eudrilus eugeniae</i> and Functionalization to seed germination of green gram <i>Vigna radiata</i> . <i>Materials Research Express</i> , 2019, 6, 025409.	1.6	10
215	Modulation of callus growth and secondary metabolites in different <i>Thymus</i> species and <i>Zataria multiflora</i> micropropagated under ZnO nanoparticles stress. <i>Biotechnology and Applied Biochemistry</i> , 2019, 66, 316-322.	3.1	52
216	Recent Progress on Engineering Highly Efficient Porous Semiconductor Photocatalysts Derived from Metal-Organic Frameworks. <i>Nano-Micro Letters</i> , 2019, 11, 1.	27.0	364
217	Photocatalytic activity of ZnO nanopowders: The role of production techniques in the formation of structural defects. <i>Catalysis Today</i> , 2019, 328, 99-104.	4.4	26

#	ARTICLE	IF	CITATIONS
218	Ferromagnetism in Cu <sup>2+</sup> doped ZnO nanoparticles and their physical properties. Journal of Materials Science: Materials in Electronics, 2019, 30, 4014-4025.	2.2	8
219	Enhanced Thermocatalytic Activity of Porous Yellow ZnO Nanoflakes: Defect- and Morphology-Induced Perspectives. Chemistry - an Asian Journal, 2019, 14, 612-620.	3.3	6
220	Influence of fuel nature on dye adsorption efficiency of solution combustion derived zinc oxide nanoparticles: A comparative study. Materials Research Express, 2019, 6, 055512.	1.6	19
221	Photocatalytic oxidation of benzene by ZnO coated on glass plates under simulated sunlight. Chemical Papers, 2019, 73, 635-644.	2.2	19
222	Aqueous methylparaben degradation by dielectric barrier discharge induced non-thermal plasma combined with ZnO-rGO nanosheets. Separation and Purification Technology, 2019, 211, 832-842.	7.9	25
223	ZnO inverse opals with deposited Ag nanoparticles: Fabrication, characterization and photocatalytic activity under visible light irradiation. Journal of Photochemistry and Photobiology A: Chemistry, 2019, 371, 118-127.	3.9	22
224	Rutile phase dominant TiO <sub>2</sub> formed by thermal treatment and its high photocatalytic activity under narrow spectrum ultraviolet light emitting diodes. Materials Research Express, 2019, 6, 015049.	1.6	5
225	The effect of ZnO-based carbonaceous materials for degradation of benzoic pollutants: a review. International Journal of Environmental Science and Technology, 2019, 16, 1729-1740.	3.5	63
226	Effects of the Citric Acid Addition on the Morphology, Surface Area, and Photocatalytic Activity of LaFeO <sub>3</sub> Nanoparticles Prepared by Glucose-Based Gel Combustion Methods. Industrial & Engineering Chemistry Research, 2019, 58, 609-617.	3.7	15
227	MOF-derived C-doped ZnO composites for enhanced photocatalytic performance under visible light. Journal of Alloys and Compounds, 2019, 777, 109-118.	5.5	141
228	Nanostructured Stannic Oxides for White Light Emitting Diodes Provides Authentication for Latent Fingerprints Visualization under Diverse Environmental Conditions. ACS Sustainable Chemistry and Engineering, 2019, 7, 578-591.	6.7	22
229	A critical review on visible-light-response CeO <sub>2</sub> -based photocatalysts with enhanced photooxidation of organic pollutants. Catalysis Today, 2019, 335, 20-30.	4.4	262
230	Structural, optical and photocatalytic properties of zinc oxide nanoparticles obtained by simple plant extract mediated synthesis. Journal of Materials Science: Materials in Electronics, 2019, 30, 1927-1935.	2.2	29
231	Green Synthesis and Electrical Properties of p-CuO/n-ZnO Heterojunction Diodes. Journal of Inorganic and Organometallic Polymers and Materials, 2019, 29, 535-540.	3.7	57
232	Synthesizing, characterizing, and toxicity evaluating of Phycocyanin-ZnO nanorod composites: A back to nature approaches. Colloids and Surfaces B: Biointerfaces, 2019, 175, 221-230.	5.0	23
233	Graphitic carbon nitride (g-C <sub>3</sub> N <sub>4</sub> )-based photocatalysts for water disinfection and microbial control: A review. Chemosphere, 2019, 214, 462-479.	8.2	304
234	Effects of primary nanobuilding blocks on the photocatalytic performance of TiO <sub>2</sub> hierarchical hollow microspheres. Journal of Alloys and Compounds, 2019, 773, 352-360.	5.5	19
235	Elucidating the effects of different photoanode materials on electricity generation and dye degradation in a sustainable hybrid system of photocatalytic fuel cell and peroxi-coagulation process. Chemosphere, 2019, 214, 614-622.	8.2	35



#	ARTICLE	IF	CITATIONS
236	XAS studies of brain-sponge CNClZnO nanostructures using polyaniline as dual source for solar light photocatalysis. <i>Ceramics International</i> , 2019, 45, 1314-1321.	4.8	12
237	Carbon nitride, metal nitrides, phosphides, chalcogenides, perovskites and carbides nanophotocatalysts for environmental applications. <i>Environmental Chemistry Letters</i> , 2019, 17, 655-682.	16.2	51
238	Urban wastewater treatment by using Ag/ZnO and Pt/TiO <sub>2</sub> photocatalysts. <i>Environmental Science and Pollution Research</i> , 2019, 26, 4171-4179.	5.3	16
239	Controlling the surface chemistry of graphene oxide: Key towards efficient ZnO-GO photocatalysts. <i>Catalysis Today</i> , 2020, 357, 350-360.	4.4	50
240	Facile one-pot synthesis of gold/tin oxide quantum dots for visible light catalytic degradation of methylene blue: Optimization of plasmonic effect. <i>Journal of Alloys and Compounds</i> , 2020, 812, 152081.	5.5	25
241	Role of Fe(III) in aqueous solution or deposited on ZnO surface in the photoassisted degradation of rhodamine B and caffeine. <i>Chemosphere</i> , 2020, 241, 125009.	8.2	18
242	Correlation among oxygen vacancy and doping concentration in controlling the properties of cobalt doped ZnO nanoparticles. <i>Journal of Magnetism and Magnetic Materials</i> , 2020, 496, 165928.	2.3	68
243	Two-in-one ultraviolet persistent luminescent catalyst suitable for high concentration photodegradation. <i>Science of the Total Environment</i> , 2020, 699, 134342.	8.0	7
244	Comparative Study of Biological (Phoenix loureiroi Fruit) and Chemical Synthesis of Chitosan-Encapsulated Zinc Oxide Nanoparticles and their Biological Properties. <i>Arabian Journal for Science and Engineering</i> , 2020, 45, 15-28.	3.0	8
245	Fabrication of bifunctional nanocomposite for dye degradation. <i>Ceramics International</i> , 2020, 46, 2823-2828.	4.8	6
246	Nanoflakes of zinc oxide:cobalt oxide composites by pulsed laser fragmentation for visible light photocatalysis. <i>Applied Surface Science</i> , 2020, 501, 144223.	6.1	34
247	A heterogeneous Fenton reaction system of N-doped TiO <sub>2</sub> anchored on sepiolite activates peroxymonosulfate under visible light irradiation. <i>Chemical Engineering Journal</i> , 2020, 383, 123142.	12.7	53
248	Nanomaterials Developed for Removing Air Pollutants. , 2020, , 203-247.		1
249	Performance intensification of BzP photo-catalytic degradation through adding exogenous oxidant. <i>Optik</i> , 2020, 202, 163571.	2.9	27
250	Nanostructured Carbon Nitrides for CO <sub>2</sub> Capture and Conversion. <i>Advanced Materials</i> , 2020, 32, e1904635.	21.0	188
251	Hydrothermal assisted phytofabrication of zinc oxide nanoparticles with different nanoscale characteristics for the photocatalytic degradation of Rhodamine B. <i>Optik</i> , 2020, 202, 163607.	2.9	19
252	Z-scheme assisted ZnO/Cu <sub>2</sub> O-CuO photocatalysts to increase photoactive electrons in hydrogen evolution by water splitting. <i>Solar Energy Materials and Solar Cells</i> , 2020, 204, 110211.	6.2	61
253	Photodegradation of acid orange 7 from aqueous solution under visible light irradiation using nanosized ZnO/chitosan/graphene oxide composite. <i>International Journal of Environmental Analytical Chemistry</i> , 2020, 100, 912-921.	3.3	10



#	ARTICLE	IF	CITATIONS
254	The Influence of pH on Phase and Morphology of BiOI <sub>3</sub> Nanoplates Synthesized by Microwave-Assisted Method and Their Photocatalytic Activities. Journal of Inorganic and Organometallic Polymers and Materials, 2020, 30, 869-878.	3.7	7
255	Multi-doped ZnO Photocatalyst for Solar Induced Degradation of Indigo Carmine Dye and as an Antimicrobial Agent. Journal of Inorganic and Organometallic Polymers and Materials, 2020, 30, 1141-1152.	3.7	36
256	One step and fast preparation of VO <sub>x</sub> /g-C <sub>3</sub> N <sub>4</sub> photocatalyst via microwave heating for effective degradation of RhB under visible light. Journal of Physics and Chemistry of Solids, 2020, 136, 109122.	4.0	21
257	Metal and Non-metal Doped Metal Oxides and Sulfides. Environmental Chemistry for A Sustainable World, 2020, , 89-132.	0.5	8
258	Green Photocatalysts. Environmental Chemistry for A Sustainable World, 2020, , .	0.5	5
259	ZnO nanoparticles photocatalytic activity toward atmospheric toluene under simulated sunlight. Research on Chemical Intermediates, 2020, 46, 119-131.	2.7	9
260	Graphene oxide and chitosan co-modified ZnS as photocatalyst and adsorbent: preparation, characterisation, removal of acid orange 7, kinetic studies, and adsorption isotherms. International Journal of Environmental Analytical Chemistry, 2020, 100, 1362-1375.	3.3	5
261	Green Photocatalysts for Energy and Environmental Process. Environmental Chemistry for A Sustainable World, 2020, , .	0.5	8
262	Design and synthesis of porous M-ZnO/CeO <sub>2</sub> microspheres as efficient plasmonic photocatalysts for nonpolar gaseous molecules oxidation: Insight into the role of oxygen vacancy defects and M=Ag, Au nanoparticles. Applied Catalysis B: Environmental, 2020, 260, 118151.	20.2	110
263	MOF derived ZnO/C nanocomposite with enhanced adsorption capacity and photocatalytic performance under sunlight. Journal of Hazardous Materials, 2020, 385, 121599.	12.4	120
264	Solvent polarity resulted in different structures and photocatalytic abilities of Ag/ZnO composites. Journal of Sol-Gel Science and Technology, 2020, 93, 695-702.	2.4	6
265	Effective removal of organic pollution by using sonochemical prepared LaFeO <sub>3</sub> perovskite under visible light. Ultrasonics Sonochemistry, 2020, 61, 104848.	8.2	38
266	Morphologies controlled ZnO for inactivation of multidrug-resistant <i>Pseudomonas aeruginosa</i> in solar light. Nanotechnology, 2020, 31, 084002.	2.6	3
267	Characterization of ZnO-Cu <sub>2</sub> O crystal films by electrochemical codeposition. Journal of Solid State Electrochemistry, 2020, 24, 421-429.	2.5	5
268	Nanoscale zinc oxide based heterojunctions as visible light active photocatalysts for hydrogen energy and environmental remediation. Catalysis Reviews - Science and Engineering, 2020, 62, 346-405.	12.9	90
269	Suppressing the photocatalytic activity of ZnO nanoparticles by Al-doping for the application in sunscreen products. Materials Technology, 2020, 35, 349-355.	3.0	13
270	Photocatalytic producing dihydroxybenzenes from phenol enabled by gathering oxygen vacancies in ultrathin porous ZnO nanosheets. Applied Surface Science, 2020, 505, 144580.	6.1	30
271	Effect of Fe <sup>2+</sup> /Fe <sup>3+</sup> ratio on photocatalytic activities of Zn <sub>1-x</sub> Fe <sub>x</sub> O nanoparticles fabricated by the auto combustion method. Ceramics International, 2020, 46, 1-7.	4.8	30

#	ARTICLE	IF	CITATIONS
272	Influence of Ni dopant on surface morphology of nanostructured ZnO thin films grown by SILAR method. <i>Materials Research Innovations</i> , 2020, 24, 341-348.	2.3	4
273	High-yield synthesis of pure ZnO nanoparticles by one-step solid-state reaction approach for enhanced photocatalytic activity. <i>Journal of the Chinese Chemical Society</i> , 2020, 67, 1045-1053.	1.4	7
274	Rapid sunlight-driven mineralisation of dyes and fungicide in water by novel sulphur-doped graphene oxide/Ag <sub>3</sub> VO <sub>4</sub> nanocomposite. <i>Environmental Science and Pollution Research</i> , 2020, 27, 9604-9618.	5.3	19
275	Synthesized zinc oxide nano rods and flowers studies for optical, di-electrical and photocatalytic applications. <i>Optik</i> , 2020, 204, 164154.	2.9	8
276	A review on exploration of Fe <sub>2</sub> O <sub>3</sub> photocatalyst towards degradation of dyes and organic contaminants. <i>Journal of Environmental Management</i> , 2020, 258, 110050.	7.8	284
277	Enhanced photocatalytic degradation of tetracycline from aqueous solution by a novel magnetically separable FeNi <sub>3</sub> /SiO <sub>2</sub> /ZnO nano-composite under simulated sunlight: Efficiency, stability, and kinetic studies. <i>Journal of Molecular Liquids</i> , 2020, 301, 112434.	4.9	57
278	Nanoparticles: Synthesis, characteristics, and applications in analytical and other sciences. <i>Microchemical Journal</i> , 2020, 154, 104623.	4.5	116
279	Green synthesis using cherry and orange juice and characterization of TbFeO <sub>3</sub> ceramic nanostructures and their application as photocatalysts under UV light for removal of organic dyes in water. <i>Journal of Cleaner Production</i> , 2020, 252, 119765.	9.3	132
280	Application of ZnO nanostructures in ceramic and polymeric membranes for water and wastewater technologies: A review. <i>Chemical Engineering Journal</i> , 2020, 391, 123475.	12.7	125
281	Mineralogical characteristics and photocatalytic properties of natural sphalerite from China. <i>Journal of Environmental Sciences</i> , 2020, 89, 156-166.	6.1	9
282	(S,C) co-doped ZnO properties and enhanced photocatalytic activity. <i>Applied Surface Science</i> , 2020, 505, 144541.	6.1	31
283	Visible light photocatalytic activity of Mn-doped BiFeO <sub>3</sub> nanoparticles. <i>International Journal of Green Energy</i> , 2020, 17, 71-83.	3.8	19
284	A facile controllable preparation of highly porous carbon foam and its application in photocatalysis. <i>Materials Research Bulletin</i> , 2020, 122, 110697.	5.2	9
285	SnO <sub>2</sub> quantum dots decorated NiFe <sub>2</sub> O <sub>4</sub> nanoplates: 0D/2D heterojunction for enhanced visible-light-driven photocatalysis. <i>Materials Science in Semiconductor Processing</i> , 2020, 107, 104834.	4.0	40
286	A facile fabrication of Ag <sub>2</sub> O-Ag/ZnAl-oxides with enhanced visible-light photocatalytic performance for tetracycline degradation. <i>Applied Clay Science</i> , 2020, 185, 105413.	5.2	23
287	Porous organic polymers: a promising platform for efficient photocatalysis. <i>Materials Chemistry Frontiers</i> , 2020, 4, 332-353.	5.9	256
288	The photocatalytic phenol degradation mechanism of Ag-modified ZnO nanorods. <i>Journal of Materials Chemistry C</i> , 2020, 8, 3000-3009.	5.5	136
289	Impacts of morphological-controlled ZnO nanoarchitectures on aerobic microbial communities during real wastewater treatment in an aerobic-photocatalytic system. <i>Environmental Pollution</i> , 2020, 259, 113867.	7.5	6

#	ARTICLE	IF	CITATIONS
290	Photocatalytic degradation of malachite green dye using chitosan supported ZnO and Ce <sup>3+</sup> /ZnO nano-flowers under visible light. <i>Journal of Environmental Management</i> , 2020, 258, 110043.	7.8	205
291	Plasmonic Bi metal as a co-catalyst deposited on C-doped Bi <sub>6</sub> O <sub>6</sub> (OH) <sub>3</sub> (NO <sub>3</sub> ) <sub>3</sub> ·1.5H <sub>2</sub> O for efficient visible light photocatalysis. <i>Journal of Photochemistry and Photobiology A: Chemistry</i> , 2020, 389, 112290.	3.9	9
292	Fabrication of ternary Ag <sub>3</sub> PO <sub>4</sub> /Co <sub>3</sub> (PO <sub>4</sub> ) <sub>2</sub> /g-C <sub>3</sub> N <sub>4</sub> heterostructure with following Type II and Z-Scheme dual pathways for enhanced visible-light photocatalytic activity. <i>Journal of Hazardous Materials</i> , 2020, 389, 121907.	12.4	262
293	Photo catalytic reduction of Cr <sup>6+</sup> by ZnO decorated on reduced graphene oxide (rGO) Nanocomposites. <i>Materials Research Bulletin</i> , 2020, 122, 110705.	5.2	22
294	Exploration of a novel Type II 1D-ZnO nanorods/BiVO <sub>4</sub> heterojunction photocatalyst for water depollution. <i>Journal of Industrial and Engineering Chemistry</i> , 2020, 83, 303-314.	5.8	34
295	Electronic property enhancement of zinc oxide by surface decoration with carbon nanotubes: experimental and theoretical studies. <i>Applied Physics A: Materials Science and Processing</i> , 2020, 126, 1.	2.3	3
296	Synergistic Effect of Zinc Oxide Nanoparticles and Heat Stress on the Alleviation of Transcriptional Gene Silencing in <i>Arabidopsis thaliana</i> . <i>Bulletin of Environmental Contamination and Toxicology</i> , 2020, 104, 49-56.	2.7	16
297	Use mechanochemical activation to enhance interfacial contaminant removal: A review of recent developments and mainstream techniques. <i>Chemosphere</i> , 2020, 243, 125339.	8.2	15
298	Natural sunlight assisted photocatalytic degradation of methylene blue by spherical zinc oxide nanoparticles prepared by facile chemical co-precipitation method. <i>Optik</i> , 2020, 207, 163865.	2.9	45
299	In situ preparation of p-n BiOI@Bi <sub>5</sub> O <sub>7</sub> I heterojunction for enhanced PFOA photocatalytic degradation under simulated solar light irradiation. <i>Chemical Engineering Journal</i> , 2020, 391, 123530.	12.7	97
300	Fabrication of visible-light active BiFeWO <sub>6</sub> /ZnO nanocomposites with enhanced photocatalytic activity. <i>Colloids and Surfaces A: Physicochemical and Engineering Aspects</i> , 2020, 586, 124294.	4.7	22
301	DFT+U calculations for electronic, structural, and optical properties of ZnO wurtzite structure: A review. <i>Results in Physics</i> , 2020, 16, 102829.	4.1	112
302	One step approach for hybrid photocatalyst synthesis: Synergetic photocatalytic water pollutant degradation. <i>Journal of Alloys and Compounds</i> , 2020, 817, 152752.	5.5	6
303	Reduced graphene oxide modified zinc oxide composites synergistic photocatalytic activity under visible light irradiation. <i>Optik</i> , 2020, 207, 163778.	2.9	13
304	Waste-derived Materials: Opportunities in Photocatalysis. <i>Topics in Current Chemistry</i> , 2020, 378, 3.	5.8	18
305	Theoretical and experimental research of novel fluorine doped hierarchical Sn <sub>3</sub> O <sub>4</sub> microspheres with excellent photocatalytic performance for removal of Cr(VI) and organic pollutants. <i>Chemical Engineering Journal</i> , 2020, 391, 123607.	12.7	97
306	Insights into the antimicrobial mechanism of Ag and I incorporated ZnO nanoparticle derivatives under visible light. <i>Materials Science and Engineering C</i> , 2020, 107, 110220.	7.3	21
307	One-Pot Sonochemical Synthesis of ZnO Nanoparticles for Photocatalytic Applications, Modelling and Optimization. <i>Materials</i> , 2020, 13, 14.	2.9	59

#	ARTICLE	IF	CITATIONS
308	Ureolytic bacteria mediated synthesis of hairy ZnO nanostructure as photocatalyst for decolorization of dyes. <i>Materials Chemistry and Physics</i> , 2020, 243, 122619.	4.0	50
309	Effective Cocatalyst Pt/PtO Nanodots on La <sub>2</sub> O <sub>3</sub> Microspheres for Degradation of Methyl Orange. <i>Journal of Nanoscience and Nanotechnology</i> , 2020, 20, 3140-3147.	0.9	13
310	Effect of excitation wavelength and europium doping on the optical properties of nanoscale zinc oxide. <i>Journal of Materials Science: Materials in Electronics</i> , 2020, 31, 20033-20042.	2.2	11
311	Heterogeneous photodegradation of industrial dyes: An insight to different mechanisms and rate affecting parameters. <i>Journal of Environmental Chemical Engineering</i> , 2020, 8, 104364.	6.7	111
312	Zein films with ZnO and ZnO:Mg quantum dots as functional nanofillers: New nanocomposites for food package with UV-blocker and antimicrobial properties. <i>Polymer Testing</i> , 2020, 91, 106709.	4.8	23
313	Photo-degradation of noxious pollutants from water system using <i>Cornulaca monacantha</i> stem supported ZnFe <sub>2</sub> O <sub>4</sub> magnetic bio-nanocomposite. <i>Sustainable Chemistry and Pharmacy</i> , 2020, 18, 100290.	3.3	14
314	Synthesis of monetite micro particles from egg shell waste and study of its environmental applications: Fuel additive and catalyst. <i>Chemical Physics Letters</i> , 2020, 755, 137804.	2.6	4
315	Dysprosium doped double layered hydroxide as an efficient catalyst for photooxidation of pharmaceutical pollutants. <i>Journal of the Taiwan Institute of Chemical Engineers</i> , 2020, 113, 293-301.	5.3	7
316	Pollutants degradation and power generation by photocatalytic fuel cells: A comprehensive review. <i>Arabian Journal of Chemistry</i> , 2020, 13, 8458-8480.	4.9	60
317	Efficiency enhancement of silicon solar cells by silicon quantum dots embedded in ZnO films as down-shifting coating. <i>Journal of Materials Science: Materials in Electronics</i> , 2020, 31, 20561-20570.	2.2	1
318	In Situ Microscopy Study of ZnO Acid Etching Nanostructures. <i>Microscopy and Microanalysis</i> , 2020, 26, 1464-1466.	0.4	0
319	Fabrication of graphene nanosheets decorated by nitrogen-doped ZnO nanoparticles with enhanced visible photocatalytic activity for the degradation of Methylene Blue dye. <i>Journal of Molecular Liquids</i> , 2020, 317, 114112.	4.9	49
320	Enhancement of photocatalytic activity of synthesized Cobalt doped Zinc Oxide nanoparticles under visible light irradiation. <i>Optical Materials</i> , 2020, 109, 110400.	3.6	35
321	Degradation of Organic Cibacron Navy FN-B Dye by Photocatalysis Process Using ZnS. <i>IOP Conference Series: Materials Science and Engineering</i> , 2020, 737, 012189.	0.6	0
322	A Review on Green Synthesis of ZnO Nanoparticles Using <i>Coriandrum Sativum</i> Leaf Extract For Degrading Dyes in Textile Wastewater: A Prospect Towards Green Chemistry. <i>IOP Conference Series: Materials Science and Engineering</i> , 2020, 736, 042003.	0.6	9
323	From Passive Inorganic Oxides to Active Matters of Micro/Nanomotors. <i>Advanced Functional Materials</i> , 2020, 30, 2003195.	14.9	33
324	Morphology-dependent highly active microcrystalline stannous oxalate photocatalysts with selectively exposed facets and low specific surface areas. <i>Applied Surface Science</i> , 2020, 525, 146347.	6.1	7
325	Employed Silver Doping to Improved Photocatalytic Properties of ZnO Micro/Nanostructures. <i>Journal of Inorganic and Organometallic Polymers and Materials</i> , 2020, 30, 4533-4543.	3.7	13

#	ARTICLE	IF	CITATIONS
326	Direct 2D/2D Z-scheme SnNb <sub>2</sub> O <sub>6</sub> /ZnO hybrid photocatalyst with enhanced interfacial charge separation and high efficiency for pollutants degradation. Applied Surface Science, 2020, 528, 146938.	6.1	25
327	Nano-enabled technologies for wastewater remediation. , 2020, , 1-17.		2
328	Biosynthesis, structural, photoluminescence and photocatalytic performance of Mn/Mg dual doped ZnO nanostructures using Ocimum tenuiflorum leaf extract. Optik, 2020, 208, 164556.	2.9	16
329	Synthesis of ZnO nanoparticles by two different methods & comparison of their structural, antibacterial, photocatalytic and optical properties. Nano Express, 2020, 1, 010007.	2.4	109
330	Building heterogeneous nanostructures for photocatalytic ammonia decomposition. Nanoscale Advances, 2020, 2, 3610-3623.	4.6	29
331	Single-step fabrication of ZnO microflower thin films for highly efficient and reusable photocatalytic activity. Journal of Materials Science: Materials in Electronics, 2020, 31, 13578-13587.	2.2	10
332	Effect of lithium doping in the optical and structural properties of zinc oxide films by SILAR method. AIP Conference Proceedings, 2020, , .	0.4	0
333	Synthesis and Characterization of PVA-Assisted Metal Oxide Nanomaterials: Surface Area, Porosity, and Electrochemical Property Improvement. Journal of Nanomaterials, 2020, 2020, 1-14.	2.7	21
334	Zn-doped CdSe nanoparticles: Impact of synthesis conditions on photocatalytic activity. Environmental Technology and Innovation, 2020, 20, 101126.	6.1	10
335	Fabrication of a new photo-sensitized solar cell using TiO <sub>2</sub> ZnO Nanocomposite synthesized via a modified sol-gel Technique. IOP Conference Series: Materials Science and Engineering, 0, 928, 052036.	0.6	9
336	Preparation of ZrO <sub>2</sub> -Based Catalytic Fibers via the Assistance of Microfluidic Chips. Industrial & Engineering Chemistry Research, 2020, 59, 21592-21601.	3.7	3
337	Enhanced Photocatalytic Activity of Vertically-Aligned Transition Metal-Doped Zinc Oxide Nanorods Synthesized by a Facile Electrochemical Method. International Journal of Electrochemical Science, 2020, , 10731-10744.	1.3	1
338	Unveiling the Structure and Reactivity of Fatty-Acid Based (Nano)materials Thanks to Efficient and Scalable <sup>17</sup> O and <sup>18</sup> O-Isotopic Labeling Schemes. Journal of the American Chemical Society, 2020, 142, 21068-21081.	13.7	24
339	The optical and surface characterization of zinc oxide films deposited by spray pyrolysis. AIP Conference Proceedings, 2020, , .	0.4	0
340	Recent Advances in Zinc Oxide Nanostructures with Antimicrobial Activities. International Journal of Molecular Sciences, 2020, 21, 8836.	4.1	52
341	Rhodamine B Doped ZnO Monodisperse Microcapsules: Droplet-Based Synthesis, Dynamics and Self-Organization of ZnO Nanoparticles and Dye Molecules. Nanomaterials, 2020, 10, 2351.	4.1	4
342	Electrospun Ti-doped haematite fibres and their properties. Journal of Nanoparticle Research, 2020, 22, 1.	1.9	2
343	The structural, optical and surface morphological properties of zinc oxide layers grown by SILAR method. AIP Conference Proceedings, 2020, , .	0.4	0

#	ARTICLE	IF	CITATIONS
344	Optical and photocatalytic properties of ZnO and ZnS structures formed as controlled calcination products of l-cysteine assisted aqueous precipitation. <i>Materials Today Communications</i> , 2020, 25, 101573.	1.9	2
345	Effect of Zn precursor concentration in the synthesis of rGO/ZnO composites and their photocatalytic activity. <i>New Journal of Chemistry</i> , 2020, 44, 19858-19867.	2.8	12
346	Facile Preparation of ZnO Nanoparticles and Ag/ZnO Nanocomposite and Their Photocatalytic Activities under Visible Light. <i>International Journal of Photoenergy</i> , 2020, 2020, 1-14.	2.5	29
347	Advanced photocatalysts based on metal nanoparticle/metal-organic framework composites. <i>Nano Research</i> , 2021, 14, 2037.	10.4	95
348	Helium droplet assisted synthesis of plasmonic Ag@ZnO core@shell nanoparticles. <i>Nano Research</i> , 2020, 13, 2979-2986.	10.4	11
349	Evaluation of kinetic data for crystallization of Mn <sup>2+</sup> /Fe co-doped ZnO nanoparticles synthesized via sol-gel process. <i>Journal of Sol-Gel Science and Technology</i> , 2020, 96, 276-286.	2.4	2
350	Synthesis method, antibacterial and photocatalytic activity of ZnO nanoparticles for azo dyes in wastewater treatment: A review. <i>Inorganic Chemistry Communication</i> , 2020, 120, 108140.	3.9	218
351	ZnO decorated polydimethylsiloxane sponges as photocatalysts for effective removal of methylene blue dye. <i>Materials Chemistry and Physics</i> , 2020, 255, 123589.	4.0	19
352	A modified sol-gel synthesis to yield a stable Fe <sup>3+</sup> /ZnO photocatalyst: Degradation of water pollutants and mechanistic insights under UV and visible light. <i>Journal of Environmental Chemical Engineering</i> , 2020, 8, 104282.	6.7	30
353	Study of the optical properties of zinc incorporated onto eggshell using UV-vis diffuse reflectance spectroscopy. <i>Materials Today: Proceedings</i> , 2020, 31, 245-248.	1.8	1
354	Oxidation of Palm Oil Mill Effluent Using Hydrogen Peroxide and Catalysed by UV Light/Zinc Oxide. <i>IOP Conference Series: Materials Science and Engineering</i> , 2020, 736, 042025.	0.6	3
355	ZnO-embedded S-doped g-C <sub>3</sub> N <sub>4</sub> heterojunction: mediator-free Z-scheme mechanism for enhanced charge separation and photocatalytic degradation. <i>RSC Advances</i> , 2020, 10, 28365-28375.	3.6	54
356	Photocatalytic Degradation of Tetracycline by ZnO/β-Fe <sub>2</sub> O <sub>3</sub> Paramagnetic Nanocomposite Material. <i>Nanomaterials</i> , 2020, 10, 1458.	4.1	56
357	Microwave Hydrothermally Synthesized Metal-Organic Framework-5 Derived C-doped ZnO with Enhanced Photocatalytic Degradation of Rhodamine B. <i>Langmuir</i> , 2020, 36, 9658-9667.	3.5	36
358	Selective Visible-Light Photocatalytic Aerobic Oxidation of Alkenes to Epoxides with Pd/ZnO Nanoparticles. <i>ChemistrySelect</i> , 2020, 5, 8853-8857.	1.5	11
359	The ZnO-NiO nano-composite: A brief characterization, kinetic and thermodynamic study and study the Arrhenius model on the sulfasalazine photodegradation. <i>International Journal of Hydrogen Energy</i> , 2020, 45, 24749-24764.	7.1	94
360	Regulation of intrinsic physicochemical properties of metal oxide nanomaterials for energy conversion and environmental detection applications. <i>Journal of Materials Chemistry A</i> , 2020, 8, 17326-17359.	10.3	33
361	New Electrospun ZnO:MoO <sub>3</sub> Nanostructures: Preparation, Characterization and Photocatalytic Performance. <i>Nanomaterials</i> , 2020, 10, 1476.	4.1	11



#	ARTICLE	IF	CITATIONS
362	ZnO Photocatalysts Modified with Eu <sup>2+</sup> and Sm <sup>2+</sup> . Key Engineering Materials, 0, 850, 35-40.	0.4	2
363	Biomedical Waste Management by Using Nanophotocatalysts: The Need for New Options. Materials, 2020, 13, 3511.	2.9	28
364	A Cost-Effective, Aqueous-Solution-Processed Cathode Interlayer Based on Organosilica Nanodots for Highly Efficient and Stable Organic Solar Cells. Advanced Materials, 2020, 32, e2002973.	21.0	60
365	CuS-modified ZnO rod/reduced graphene oxide/CdS heterostructure for efficient visible-light photocatalytic hydrogen generation. International Journal of Hydrogen Energy, 2020, 45, 28394-28403.	7.1	27
366	Room-temperature ferromagnetism on ZnO nanoparticles doped with Cr: An experimental and theoretical analysis. Journal of Alloys and Compounds, 2020, 849, 156587.	5.5	33
367	Preparation of ZnO nanosheet-assembly film on zinc plate by cold plasma. Thin Solid Films, 2020, 712, 138274.	1.8	6
368	Ternary ZnCdSO composite photocatalyst for efficient dye degradation under visible light retaining Z-scheme of migration pathways for the photogenerated charge carriers. Solar Energy Materials and Solar Cells, 2020, 217, 110674.	6.2	24
369	Synthesis and photoluminescence properties of hybrid 1D core-shell structured nanocomposites based on ZnO/polydopamine. RSC Advances, 2020, 10, 29751-29758.	3.6	34
370	Novel photocatalyst and antibacterial agent; direct dual Z-scheme ZnO-CeO <sub>2</sub> -Yb <sub>2</sub> O <sub>3</sub> heterostructured nanocomposite. Solid State Sciences, 2020, 109, 106446.	3.2	54
371	Innovation in membrane fabrication: Magnetic induced photocatalytic membrane. Journal of the Taiwan Institute of Chemical Engineers, 2020, 113, 372-395.	5.3	12
372	Renewable Polysaccharides Micro/Nanostructures for Food and Cosmetic Applications. Molecules, 2020, 25, 4886.	3.8	13
373	Photodegradation of Methylene Blue and Rhodamine B Using Laser-Synthesized ZnO Nanoparticles. Materials, 2020, 13, 4357.	2.9	37
374	Interactions of Zinc Oxide Nanostructures with Mammalian Cells: Cytotoxicity and Photocatalytic Toxicity. International Journal of Molecular Sciences, 2020, 21, 6305.	4.1	69
375	A review on the role of nanomaterials in the removal of organic pollutants from wastewater. Reviews in Environmental Science and Biotechnology, 2020, 19, 751-778.	8.1	65
376	Functional Supported ZnO/Bi <sub>2</sub> MoO <sub>6</sub> Heterojunction Photocatalysts with 3D-Printed Fractal Polymer Substrates and Produced by Innovative Plasma-Based Immobilization Methods. ACS Applied Materials & Interfaces, 2020, 12, 43138-43151.	8.0	20
377	Fabrication of ZnO Nanoparticle-Decorated Nanofiber Mat with High Uniformity Protected by Constructing Tri-Layer Structure. Polymers, 2020, 12, 1859.	4.5	9
378	Multifunctional Magnetic Oxide Nanoparticle (MNP) Core-Shell: Review of Synthesis, Structural Studies and Application for Wastewater Treatment. Molecules, 2020, 25, 4110.	3.8	15
379	Strong Activity Enhancement of the Photocatalytic Degradation of an Azo Dye on Au/TiO <sub>2</sub> Doped with FeOx. Catalysts, 2020, 10, 933.	3.5	16



#	ARTICLE	IF	CITATIONS
380	Degradation of Acid Orange 7 Azo Dye in Aqueous Solution by a Catalytic-Assisted, Non-Thermal Plasma Process. <i>Catalysts</i> , 2020, 10, 888.	3.5	19
381	Zinc Oxide Nanostructures Synthesized by a Simple Hot Water Treatment Method for Photocatalytic Degradation of Organic Pollutants in Water. <i>MRS Advances</i> , 2020, 5, 2457-2465.	0.9	3
383	Pure and cerium-doped zinc oxides: Hydrothermal synthesis and photocatalytic degradation of methylene blue under visible light irradiation. <i>Journal of the Chinese Chemical Society</i> , 2020, 67, 1631-1643.	1.4	9
384	Development of Sustainable Heterogeneous Catalysts for the Photocatalytic Treatment of Effluents. <i>Sustainability</i> , 2020, 12, 7393.	3.2	16
385	Two-Electron-Two-Proton Transfer from Colloidal ZnO and TiO <sub>2</sub> Nanoparticles to Molecular Substrates. <i>Journal of Physical Chemistry Letters</i> , 2020, 11, 7687-7691.	4.6	20
386	UV-aided graphene oxide reduction by TiO <sub>2</sub> towards TiO <sub>2</sub> /reduced graphene oxide composites for dye-sensitized solar cells. <i>International Journal of Energy Research</i> , 2021, 45, 17220-17232.	4.5	24
387	Decomposition of Bis(acetylacetonate)zinc(II) by Slow Electrons. <i>Inorganic Chemistry</i> , 2020, 59, 12788-12792.	4.0	3
388	Template-Based Synthesis of Hollow Nanotubular ZnO Structures and Nonlinear Electrical Properties under Field-Induced Trap-Assisted Tunneling. <i>Journal of Physical Chemistry C</i> , 2020, 124, 28371-28386.	3.1	4
389	Photo-Transformation of Effluent Organic Matter by ZnO-Based Sunlight Irradiation. <i>Applied Sciences (Switzerland)</i> , 2020, 10, 9002.	2.5	3
390	Decoration of Zinc Oxide Nanorods into the Surface of Activated Carbon Obtained from Agricultural Waste for Effective Removal of Methylene Blue Dye. <i>Materials</i> , 2020, 13, 5667.	2.9	20
391	Photocatalytic Degradation of Quinoline Yellow over Ag <sub>3</sub> PO <sub>4</sub> . <i>Catalysts</i> , 2020, 10, 1461.	3.5	14
392	Investigation on the Mechanism and Inner Impetus of Photogenerated Charge Transfer in WO <sub>3</sub> /ZnO Heterojunction Photocatalysts. <i>Journal of Physical Chemistry C</i> , 2020, 124, 27916-27929.	3.1	38
393	Physics and chemistry of solution combustion synthesis of zinc oxide nanopowder from zinc nitrate-urea reagents. <i>AIP Conference Proceedings</i> , 2020, , .	0.4	2
394	Microwave-Assisted Solution Combustion Synthesis of Nanostructured Catalysts. <i>Sustainable Chemistry Series</i> , 2020, , 49-85.	0.1	0
395	The application of co-oxidant in order to enhancement the parabens photo-catalytic degradability. <i>Optik</i> , 2020, 224, 165667.	2.9	2
396	Study of Low Temperature Preparation of Al Doped ZnO Powder and its Photocatalytic Properties. <i>Key Engineering Materials</i> , 0, 860, 329-337.	0.4	1
397	Temperature and Salinity Effects on Photocatalytic Performance of Cerium Doped Zinc Oxide. <i>Solid State Phenomena</i> , 0, 307, 223-228.	0.3	2
398	Photocatalysis for Organic Wastewater Treatment: From the Basis to Current Challenges for Society. <i>Catalysts</i> , 2020, 10, 1260.	3.5	82

#	ARTICLE	IF	CITATIONS
399	Tailoring of Optical and Physical Properties of ZnO Films by Co-Doping Concentration. Materials Science Forum, 0, 1010, 346-351.	0.3	1
400	Wet chemical synthesis of CdS/ZnO nanoparticle/nanorod hetero-structure for enhanced visible light disposal of Cr(VI) and methylene blue. Colloids and Surfaces A: Physicochemical and Engineering Aspects, 2020, 607, 125489.	4.7	16
401	Fabrication of ZnO-SiO <sub>2</sub> Nanocomposite Materials Prepared by a Spray Pyrolysis for the Photocatalytic Activity under UV and Sunlight Irradiations. IOP Conference Series: Materials Science and Engineering, 2020, 778, 012105.	0.6	18
402	Morphology Related Defectiveness in ZnO Luminescence: From Bulk to Nano-Size. Nanomaterials, 2020, 10, 1983.	4.1	14
403	Dual roles of [NCN] <sup>2-</sup> on anatase TiO <sub>2</sub> : A fully occupied molecular gap state for direct charge injection into the conduction band and an interfacial mediator for the covalent formation of heterostructured g-C <sub>3</sub> N <sub>4</sub> /a-TiO <sub>2</sub> nanocomposite. Applied Catalysis B: Environmental, 2020, 273, 119036.	20.2	11
404	Highly efficient and Reusable ZnO microflower photocatalyst on stainless steel mesh under UV-Vis and natural sunlight. Optical Materials, 2020, 107, 110000.	3.6	48
405	Covalent organic framework photocatalysts: structures and applications. Chemical Society Reviews, 2020, 49, 4135-4165.	38.1	649
406	Photodegradation of Methylene Blue (MB) using Cerium-doped Zinc Oxide nanoparticles. Sadhana - Academy Proceedings in Engineering Sciences, 2020, 45, 1.	1.3	12
407	Surface Modification of Rutile TiO <sub>2</sub> with Alkaline-Earth Oxide Nanoclusters for Enhanced Oxygen Evolution. ACS Applied Nano Materials, 2020, 3, 6017-6033.	5.0	10
408	Photoreduction and Removal of Cadmium Ions over Bentonite Clay-Supported Zinc Oxide Microcubes in an Aqueous Solution. ACS Omega, 2020, 5, 13176-13184.	3.5	17
409	Examining the potential of BiCuSeO thin films for photoelectrochemical water splitting. Thin Solid Films, 2020, 708, 138101.	1.8	2
410	A dual surface inorganic molecularly imprinted Bi <sub>2</sub> WO <sub>6</sub> -CuO/Ag <sub>2</sub> O heterostructure with enhanced activity-selectivity towards the photocatalytic degradation of target contaminantst. Photochemical and Photobiological Sciences, 2020, 19, 943-955.	2.9	25
411	Novel method to synthesis ZnO nanostructures via irradiation zinc acetate with a nanosecond laser for photocatalytic applications. Journal of Materials Science: Materials in Electronics, 2020, 31, 9835-9845.	2.2	8
412	Exfoliated, mesoporous W <sub>18</sub> O <sub>49</sub> /g-C <sub>3</sub> N <sub>4</sub> composites for efficient photocatalytic H <sub>2</sub> evolution. Solid State Sciences, 2020, 106, 106298.	3.2	12
413	Enhanced visible-light-driven photocatalytic hydrogen evolution and NO photo-oxidation capacity of ZnO/g-C <sub>3</sub> N <sub>4</sub> with N dopant. Colloids and Surfaces A: Physicochemical and Engineering Aspects, 2020, 599, 124869.	4.7	28
414	Sonochemical synthesis and visible light induced photocatalytic property of reduced graphene oxide@ZnO hexagonal hollow rod nanocomposite. Journal of Alloys and Compounds, 2020, 836, 155377.	5.5	32
415	Bioinspired photocatalytic ZnO/Au nanopillar-modified surface for enhanced antibacterial and antiadhesive property. Chemical Engineering Journal, 2020, 398, 125575.	12.7	53
416	Effective promoting piezocatalytic property of zinc oxide for degradation of organic pollutants and insight into piezocatalytic mechanism. Journal of Colloid and Interface Science, 2020, 577, 290-299.	9.4	84

#	ARTICLE	IF	CITATIONS
417	High performing photocatalytic ZnO hollow sub-micro-spheres fabricated by microwave induced self-assembly approach. <i>Ceramics International</i> , 2020, 46, 19815-19821.	4.8	18
418	Highly Defective Dark Nano Titanium Dioxide: Preparation via Pulsed Laser Ablation and Application. <i>Materials</i> , 2020, 13, 2054.	2.9	27
419	Efficient photocatalysis triggered by thin carbon layers coating on photocatalysts: recent progress and future perspectives. <i>Science China Chemistry</i> , 2020, 63, 1416-1427.	8.2	31
420	Why do nanowires grow with their c-axis vertically-aligned in the absence of epitaxy?. <i>Scientific Reports</i> , 2020, 10, 6554.	3.3	11
421	A Facile Chemical Solution Route to Synthesize ZnO/Graphene Composite and the Improved Photocatalytic Property. <i>Journal of Nanoscience and Nanotechnology</i> , 2020, 20, 4480-4484.	0.9	2
422	Multifunctional properties of ZnO <sub>1-9</sub> Mn <sub>0.05</sub> M <sub>0.05</sub> O (M = Al, Bi, Sr, Ag) nanocrystals-structural and optical study: Enhance sunlight driven photocatalytic activity. <i>Ceramics International</i> , 2020, 46, 22345-22366.	4.8	23
423	Tuning of the morphological and electronic properties of In <sub>2</sub> S <sub>3</sub> nanosheets by cerium ion intercalation for optimizing photocatalytic activity. <i>CrystEngComm</i> , 2020, 22, 4758-4767.	2.6	16
424	Defect minimized Ag-ZnO microneedles for photocatalysis. <i>Environmental Science and Pollution Research</i> , 2020, 27, 37036-37043.	5.3	8
425	Preparation of high-performance Bi <sub>2</sub> O <sub>3</sub> photocatalysts and their photocatalytic activity. <i>Surface Innovations</i> , 2020, 8, 295-303.	2.3	5
426	A Review of Microwave Synthesis of Zinc Oxide Nanomaterials: Reactants, Process Parameters and Morphologies. <i>Nanomaterials</i> , 2020, 10, 1086.	4.1	217
427	Surface Engineering of Ceramic Nanomaterials for Separation of Oil/Water Mixtures. <i>Frontiers in Chemistry</i> , 2020, 8, 578.	3.6	14
428	Advances in thermocatalytic and photocatalytic techniques for the room/low temperature oxidative removal of formaldehyde in air. <i>Chemical Engineering Journal</i> , 2020, 399, 125759.	12.7	48
429	Preparation and characterization of positively surface charged zinc oxide nanoparticles against bacterial pathogens. <i>Microbial Pathogenesis</i> , 2020, 149, 104290.	2.9	22
430	Recent advances in the removal of persistent organic pollutants (POPs) using multifunctional materials: a review. <i>Environmental Pollution</i> , 2020, 265, 114908.	7.5	65
431	Structural, optical, electrical, and morphological studies of rGO anchored direct dual-Z-scheme ZnO-Sm <sub>2</sub> O <sub>3</sub> -Y <sub>2</sub> O <sub>3</sub> heterostructured nanocomposite: An efficient photocatalyst under sunlight. <i>Solid State Sciences</i> , 2020, 106, 106307.	3.2	47
432	Interfacial self-assembly of nanoZnO@multi-porphyrin array hybrids as binary light-sensitizers for photocurrent generation and photocatalytic degradation of organic pollutants. <i>Applied Surface Science</i> , 2020, 521, 146465.	6.1	9
433	Enhancing the photocatalytic efficiency of ZnO: Defects, heterojunction, and optimization. <i>Environmental Nanotechnology, Monitoring and Management</i> , 2020, 14, 100336.	2.9	45
434	Novel direct dual-Z-scheme ZnO-Er <sub>2</sub> O <sub>3</sub> -Nd <sub>2</sub> O <sub>3</sub> @reduced graphene oxide heterostructured nanocomposite: Synthesis, characterization and superior antibacterial and photocatalytic activity. <i>Materials Chemistry and Physics</i> , 2020, 253, 123249.	4.0	48

#	ARTICLE	IF	CITATIONS
435	Electrospun Highly Crystalline ZnO Nanofibers: Super-efficient and Stable Photocatalytic Hydrogen Production Activity. <i>ChemistrySelect</i> , 2020, 5, 6691-6696.	1.5	7
436	In-Depth Structural and Optical Analysis of Ce-modified ZnO Nanopowders with Enhanced Photocatalytic Activity Prepared by Microwave-Assisted Hydrothermal Method. <i>Catalysts</i> , 2020, 10, 551.	3.5	13
437	Photodegradation of methylene blue dye by powders of Ni-ZnO floweret consisting of petals of ZnO nanorod around Ni-rich core. <i>Materials Chemistry and Physics</i> , 2020, 253, 123394.	4.0	17
438	High-performance HTL-free perovskite solar cell: An efficient composition of ZnO NRs, RGO, and CuInS <sub>2</sub> QDs, as electron-transporting layer matrix. <i>Progress in Photovoltaics: Research and Applications</i> , 2020, 28, 956-970.	8.1	45
439	Evaluation of electrochemical properties of zinc oxide based semiconductor nanoparticles biosynthesized with <i>Mentha spicata</i> for optoelectronic applications. <i>Materials Letters</i> , 2020, 275, 128101.	2.6	12
440	A new synthesis methodology for SiO <sub>2</sub> gel-based nanostructures and their application for elimination of dye pollutants. <i>New Journal of Chemistry</i> , 2020, 44, 5386-5395.	2.8	6
441	PVDF/ZnO composite films for photocatalysis: A comparative study of solution mixing and melt blending methods. <i>Polymer Engineering and Science</i> , 2020, 60, 1146-1157.	3.1	16
442	The Potential of Pandanus amaryllifolius Leaves Extract in Fabrication of Dense and Uniform ZnO Microrods. <i>Micromachines</i> , 2020, 11, 299.	2.9	5
443	ZnO/Carbon xerogel photocatalysts by low-pressure plasma treatment, the role of the carbon substrate and its plasma functionalization. <i>Journal of Colloid and Interface Science</i> , 2020, 570, 312-321.	9.4	25
444	Growth and formation mechanism of shape-selective preparation of ZnO structures: correlation of structural, vibrational and optical properties. <i>Physical Chemistry Chemical Physics</i> , 2020, 22, 7329-7339.	2.8	23
445	Effect of dilution in a hydrothermal process and post-synthetic annealing on the tailoring of hierarchical ZnO nanostructures. <i>CrystEngComm</i> , 2020, 22, 3059-3069.	2.6	11
446	Permeability and Antifouling Augmentation of a Hybrid PVDF-PEG Membrane Using Nano-Magnesium Oxide as a Powerful Mediator for POME Decolorization. <i>Polymers</i> , 2020, 12, 549.	4.5	14
447	Enhanced ultraviolet light driven photocatalytic activity of ZnO particles incorporated by plasma electrolytic oxidation into Al <sub>2</sub> O <sub>3</sub> coatings co-doped with Ce <sup>3+</sup> . <i>Optical Materials</i> , 2020, 101, 109768.	3.6	12
448	N-Doped cotton-based porous carbon/ZnO NR arrays: highly efficient hybrid photo-catalysts. <i>CrystEngComm</i> , 2020, 22, 2472-2482.	2.6	9
449	Visible light-driven perovskite-based photocatalyst for wastewater treatment. , 2020, , 265-302.		2
450	Green Fabrication of Tannic Acid-Inspired Magnetic Composite Nanoparticles toward Cationic Dye Capture and Selective Degradation. <i>ACS Omega</i> , 2020, 5, 6566-6575.	3.5	11
451	Photocatalytic degradation and adsorption of phenol by solvent-controlled TiO <sub>2</sub> nanosheets assisted with H <sub>2</sub> O <sub>2</sub> and FeCl <sub>3</sub> : Kinetic, isotherm and thermodynamic analysis. <i>Journal of Molecular Liquids</i> , 2020, 308, 112941.	4.9	31
452	Use anger to guide your stock market decision-making: results from Pakistan. <i>Cogent Economics and Finance</i> , 2020, 8, 1733279.	2.1	6

#	ARTICLE	IF	CITATIONS
453	Preparation and Performance of Ultra-Fine Polypropylene Antibacterial Fibers via Melt Electrospinning. <i>Polymers</i> , 2020, 12, 606.	4.5	8
454	Visible-light photocatalysts: Prospects and challenges. <i>APL Materials</i> , 2020, 8, .	5.1	156
455	Role of Nanomaterials in the Treatment of Wastewater: A Review. <i>Water (Switzerland)</i> , 2020, 12, 495.	2.7	418
456	Nanomaterials for remediations of agrochemicals. , 2020, , 535-567.		1
457	Modeling and kinetic study of furfural degradation through the chemical surface modification of zinc oxide nanoparticles by magnesium. <i>Chemical Engineering Journal</i> , 2020, 393, 124677.	12.7	8
458	Nanomaterials in wastewater treatments. , 2020, , 185-206.		3
459	Simultaneous Controlled Seeded-Growth and Doping of ZnO Nanorods with Aluminum and Cerium: Feasibility Assessment and Effect on Photocatalytic Activity. <i>Crystal Growth and Design</i> , 2020, 20, 5508-5525.	3.0	18
460	Effect of ignition temperature and fuel amount on photocatalytic activity of solution combustion synthesized ZnO. <i>Ceramics International</i> , 2020, 46, 22419-22428.	4.8	9
461	Self-assembly of carbon nanotube/graphitic-like flake/BiOBr nanocomposite with 1D/2D/3D heterojunctions for enhanced photocatalytic activity. <i>Journal of Colloid and Interface Science</i> , 2020, 579, 862-871.	9.4	28
462	Adsorption behavior of guanine, adenine, thymine, and cytosine nucleobases of DNA on zinc oxide-graphene nanosensor: A DFT study. <i>Synthetic Metals</i> , 2020, 267, 116486.	3.9	8
463	Activity in the Photodegradation of 4-Nitrophenol of a Zn,Al Hydrotalcite-Like Solid and the Derived Alumina-Supported ZnO. <i>Catalysts</i> , 2020, 10, 702.	3.5	13
464	Facile fabrication of ZnO nanorods modified with RGO for enhanced photodecomposition of dyes. <i>Colloids and Surfaces A: Physicochemical and Engineering Aspects</i> , 2020, 603, 125247.	4.7	21
465	Recent advances in homojunction-based photocatalysis for sustainable environmental remediation and clean energy generation. <i>Applied Materials Today</i> , 2020, 20, 100741.	4.3	28
466	Photocatalytic performance of titanium dioxide and zinc oxide binary system on degradation of humic matter. <i>Journal of Photochemistry and Photobiology A: Chemistry</i> , 2020, 401, 112748.	3.9	16
467	Protective effect of the NAC and Sal on zinc oxide nanoparticles-induced reproductive and development toxicity in pregnant mice. <i>Food and Chemical Toxicology</i> , 2020, 143, 111552.	3.6	15
468	Immobilization of rGO/ZnO hybrid composites on the Zn substrate for enhanced photocatalytic activity and corrosion stability. <i>Journal of Alloys and Compounds</i> , 2020, 845, 156219.	5.5	35
469	Fully Conjugated Donor–Acceptor Covalent Organic Frameworks for Photocatalytic Oxidative Amine Coupling and Thioamide Cyclization. <i>ACS Catalysis</i> , 2020, 10, 8717-8726.	11.2	200
470	Band engineering of ZnO/Si nanowire arrays in Z-scheme heterojunction for efficient dye photodegradation. <i>Applied Surface Science</i> , 2020, 529, 147023.	6.1	14

#	ARTICLE	IF	CITATIONS
471	Ruthenium complexes based dye sensitized solar cells: Fundamentals and research trends. Solar Energy, 2020, 207, 59-76.	6.1	90
472	Engineering nanostructures of CuO-based photocatalysts for water treatment: Current progress and future challenges. Arabian Journal of Chemistry, 2020, 13, 8424-8457.	4.9	177
473	Role of Mn in biological, optical, and magnetic properties ZnO nano-particles. Applied Physics A: Materials Science and Processing, 2020, 126, 1.	2.3	34
474	Photocatalytic performance of single crystal ZnO nanorods and ZnO nanorods films under natural sunlight. Inorganic Chemistry Communication, 2020, 114, 107842.	3.9	21
475	Synthesis and photocatalytic study of Zn <sub>0.90</sub> Co <sub>0.10</sub> O and Zn <sub>0.90</sub> Co <sub>0.05</sub> M <sub>0.05</sub> O (M = Ca, Ba, Cr, Pb) nanocrystals: structural, optical and electrical investigations. Journal of Materials Research and Technology, 2020, 9, 4076-4096.	5.8	39
476	Photocatalytic activity of CuInS <sub>2</sub> nanoparticles synthesized via a simple and rapid microwave heating process. Materials Research Express, 2020, 7, 015074.	1.6	35
477	Monotectic growth evolution and raman scattering of self-assembled ZnO hierarchical micro-nanostructures. Materials Research Express, 2020, 7, 025014.	1.6	0
478	Enhanced photocatalytic activity of ZnO nanorods by surface treatment with HAuCl <sub>4</sub> : Synergic effects through an electron scavenging, plasmon resonance and surface hydroxylation. Materials Chemistry and Physics, 2020, 245, 122767.	4.0	10
479	Metal Oxide (ZnO and TiO <sub>2</sub> ) and Fe-Based Metal-Organic-Framework Nanoparticles on 3D-Printed Fractal Polymer Surfaces for Photocatalytic Degradation of Organic Pollutants. ACS Applied Nano Materials, 2020, 3, 2830-2845.	5.0	56
480	Mn-modified HfO <sub>2</sub> nanoparticles with enhanced photocatalytic activity. Ceramics International, 2020, 46, 13466-13473.	4.8	17
481	Photocatalysis of rhodamine B and methyl orange degradation under solar light on ZnO and Cu <sub>2</sub> O thin films. Reaction Kinetics, Mechanisms and Catalysis, 2020, 129, 1115-1130.	1.7	44
482	Fabricating ZnO/lignin-derived flower-like carbon composite with excellent photocatalytic activity and recyclability. Carbon, 2020, 162, 256-266.	10.3	74
483	Visible light active ZnO nanostructures prepared by simple co-precipitation method. Photonics and Nanostructures - Fundamentals and Applications, 2020, 39, 100781.	2.0	20
484	The influence of UV filter and Al/Ag moisture barrier layer on the outdoor stability of polymer solar cells. Solar Energy, 2020, 199, 308-316.	6.1	10
485	Low amount of Au nanoparticles deposited ZnO nanorods heterojunction photocatalysts for efficient degradation of p-nitrophenol. Journal of Sol-Gel Science and Technology, 2020, 94, 468-476.	2.4	12
486	Formation of surface defects by thermal shock method for the improved photocatalytic activity of ZnO nanoparticles. Journal of Asian Ceramic Societies, 2020, 8, 193-202.	2.3	9
487	Zn <sub>0.9</sub> Ce <sub>0.05</sub> M <sub>0.05</sub> O (M = Er, Y, V) nanocrystals: Structural and energy bandgap engineering of ZnO for enhancing photocatalytic and antibacterial activity. Ceramics International, 2020, 46, 14369-14383.	4.8	85
488	Photoluminescence investigations of ZnO micro/nanostructures. Materials Today Chemistry, 2020, 16, 100243.	3.5	17



#	ARTICLE	IF	CITATIONS
489	Synthesis of Eu <sup>3+</sup> -doped ZnO/Bi <sub>2</sub> O <sub>3</sub> heterojunction photocatalyst on graphene oxide sheets for visible light-assisted degradation of 2,4-dimethyl phenol and bacteria killing. Solid State Sciences, 2020, 102, 106164.	3.2	39
490	Synergistic effect of zinc oxide nanorods on the photocatalytic performance and the biological activity of graphene nano sheets. Heliyon, 2020, 6, e03283.	3.2	31
491	Synthesis of cubic and hexagonal ZnTiO <sub>3</sub> as catalyst support in steam reforming of methanol: Study of physical and chemical properties of copper catalysts on the H <sub>2</sub> and CO selectivity and coke formation. International Journal of Hydrogen Energy, 2020, 45, 9484-9495.	7.1	33
492	ZnO/ZnBi <sub>2</sub> O <sub>4</sub> nanocomposites with p-n heterojunction as durable visible-light-activated photocatalysts for efficient removal of organic pollutants. Journal of Alloys and Compounds, 2020, 826, 154229.	5.5	68
493	Toward the development of polyethylene photocatalytic degradation. Journal of Polymer Engineering, 2020, 40, 181-191.	1.4	39
494	Construction of ZnO/CdS three-dimensional hierarchical photoelectrode for improved photoelectrochemical performance. Renewable Energy, 2020, 153, 241-248.	8.9	37
495	Metal oxides nanoparticles via sol-gel method: a review on synthesis, characterization and applications. Journal of Materials Science: Materials in Electronics, 2020, 31, 3729-3749.	2.2	314
496	Study of morphological and electrical properties of the ZnO/p-Si hetero-junction: Application to sensing efficiency of low concentration of ethanol vapor at room temperature. Materials Science in Semiconductor Processing, 2020, 109, 104926.	4.0	9
497	Fabrication of vertically aligned ferromagnetic ZnO nanopillar arrays on sapphire substrates by polymer-assisted deposition. AIP Advances, 2020, 10, 015337.	1.3	3
498	Zn/ZnO Heterostructure for the Application of MO Degradation and NO Removal. Catalysis Letters, 2020, 150, 1985-1992.	2.6	11
499	Oxygen defect-rich In-doped ZnO nanostructure for enhanced visible light photocatalytic activity. Materials Chemistry and Physics, 2020, 244, 122672.	4.0	39
500	Sustainable microbial cell nanofactory for zinc oxide nanoparticles production by zinc-tolerant probiotic Lactobacillus plantarum strain TA4. Microbial Cell Factories, 2020, 19, 10.	4.0	58
501	Bismuth sulphide decorated ZnO nanorods heterostructure assembly via controlled SILAR cationic concentration for enhanced photoelectrochemical cells. Materials Research Express, 2020, 7, 025510.	1.6	3
502	Different morphologies of ZnO via solution combustion synthesis: The role of fuel. Materials Research Bulletin, 2020, 125, 110784.	5.2	22
503	One-pot green synthesis of ZnO-CuO nanocomposite and their enhanced photocatalytic and antibacterial activity. Advances in Natural Sciences: Nanoscience and Nanotechnology, 2020, 11, 015009.	1.5	25
504	Photodegradation of organic pollutants using heterojunctions: A review. Journal of Environmental Chemical Engineering, 2020, 8, 103666.	6.7	138
505	Photocatalytic Performance of Electrospun Silk Fibroin/ZnO Mats to Remove Pesticide Residues from Water under Natural Sunlight. Catalysts, 2020, 10, 110.	3.5	12
506	Cytotoxicity, Antioxidant, Antibacterial, and Photocatalytic Activities of ZnO-CdS Powders. Materials, 2020, 13, 182.	2.9	14



#	ARTICLE	IF	CITATIONS
507	Eco-friendly and cost-effective synthesis of ZnO nanopowders by Tapioca-assisted sol-gel route. <i>Ceramics International</i> , 2020, 46, 10835-10842.	4.8	24
508	Recent developments in MnO <sub>2</sub> -based photocatalysts for organic dye removal: a review. <i>Environmental Science and Pollution Research</i> , 2020, 27, 5759-5778.	5.3	113
509	Synthesis of a flower-like SnO/ZnO nanostructure with high catalytic activity and stability under natural sunlight. <i>Journal of Alloys and Compounds</i> , 2020, 826, 154122.	5.5	80
510	DC electrical conductivity and liquefied petroleum gas sensing application of polythiophene/zinc oxide nanocomposite. <i>Materialia</i> , 2020, 9, 100599.	2.7	32
511	Nano Zinc Oxide Induced Fetal Mice Growth Restriction, Based on Oxide Stress and Endoplasmic Reticulum Stress. <i>Nanomaterials</i> , 2020, 10, 259.	4.1	22
512	Promotional Effect of Cu <sub>2</sub> S/ZnS Nanograins as a Shell Layer on ZnO Nanorod Arrays for Boosting Visible Light Photocatalytic H <sub>2</sub> Evolution. <i>Journal of Physical Chemistry C</i> , 2020, 124, 3610-3620.	3.1	23
513	Mainstream avenues for boosting graphitic carbon nitride efficiency: towards enhanced solar light-driven photocatalytic hydrogen production and environmental remediation. <i>Journal of Materials Chemistry A</i> , 2020, 8, 10571-10603.	10.3	80
514	ZnO/CuSCN Nano-Heterostructure as a Highly Efficient Field Emitter: a Combined Experimental and Theoretical Investigation. <i>ACS Omega</i> , 2020, 5, 6715-6724.	3.5	12
515	Preparation of Ti-heteropolyacid/TiO <sub>2</sub> and its rapid photocatalytic degradation of X-3B. <i>Journal of Materials Science: Materials in Electronics</i> , 2020, 31, 3166-3171.	2.2	2
516	Photo-assisted mineralisation of titan yellow dye using ZnO nanorods synthesised via environmental benign route. <i>SN Applied Sciences</i> , 2020, 2, 1.	2.9	17
517	Zinc oxide-based nanomaterials for environmental applications. , 2020, , 73-107.		6
518	Enhanced photocatalytic activity of g-C <sub>3</sub> N <sub>4</sub> quantum dots/Bi <sub>3.64</sub> Mo <sub>0.36</sub> O <sub>6.55</sub> nanospheres composites. <i>Journal of Solid State Chemistry</i> , 2020, 287, 121347.	2.9	94
519	Synthesis of novel heterostructured ZnO-CdO-CuO nanocomposite: Characterization and enhanced sunlight driven photocatalytic activity. <i>Materials Chemistry and Physics</i> , 2020, 249, 122983.	4.0	109
520	Performance optimization of transparent and conductive Zn <sub>1-x</sub> Al <sub>x</sub> O thin films for opto-electronic devices: An experimental & first-principles investigation. <i>Vacuum</i> , 2020, 177, 109369.	3.5	14
521	The green synthesis of PdO/Pd anchored on hierarchical ZnO microflowers with a synthetic effect for the efficient catalytic reduction of 4-nitrophenol. <i>New Journal of Chemistry</i> , 2020, 44, 7035-7041.	2.8	9
522	Self-Aligned Hierarchical ZnO Nanorod/NiO Nanosheet Arrays for High Photon Extraction Efficiency of GaN-Based Photonic Emitter. <i>Micromachines</i> , 2020, 11, 346.	2.9	4
523	Hydrogen production from aqueous triethanolamine solution using Eosin Y-sensitized ZnO photocatalyst doped with platinum. <i>International Journal of Hydrogen Energy</i> , 2020, 45, 11097-11107.	7.1	22
524	Microwave heating preparation of phosphorus doped g-C <sub>3</sub> N <sub>4</sub> and its enhanced performance for photocatalytic H <sub>2</sub> evolution in the help of Ag <sub>3</sub> PO <sub>4</sub> nanoparticles. <i>International Journal of Hydrogen Energy</i> , 2020, 45, 14354-14367.	7.1	195

#	ARTICLE	IF	CITATIONS
525	Different phototoxicities of ZnO nanoparticle on stream functioning. <i>Science of the Total Environment</i> , 2020, 725, 138340.	8.0	6
526	Surface plasma Ag-decorated Bi <sub>5</sub> O <sub>7</sub> I microspheres uniformly distributed on a zwitterionic fluorinated polymer with superfunctional antifouling property. <i>Applied Catalysis B: Environmental</i> , 2020, 271, 118920.	20.2	46
527	Surfactant free stable cobalt oxide nanocolloid in water by pulsed laser fragmentation and its thin films for visible light photocatalysis. <i>Colloids and Surfaces A: Physicochemical and Engineering Aspects</i> , 2020, 594, 124657.	4.7	16
528	Photocatalytic and antimicrobial activity of electrospun ZnO:Ag nanostructures. <i>Journal of Alloys and Compounds</i> , 2020, 834, 155144.	5.5	33
529	Sulfur-Doped g-C <sub>3</sub> N <sub>4</sub> and BiPO <sub>4</sub> Nanorod Hybrid Architectures for Enhanced Photocatalytic Hydrogen Evolution under Visible Light Irradiation. <i>ACS Applied Energy Materials</i> , 2020, 3, 5024-5030.	5.1	38
530	Embedding Sodium Ions in Graphitic Carbon Nitride Vacancies for Visible Light Photocatalytic H <sub>2</sub> Evolution. <i>ACS Applied Nano Materials</i> , 2020, 3, 4663-4669.	5.0	20
531	Sunlight driven decomposition of toxic organic compound, coumarin, p-nitrophenol, and photo reduction of Cr(VI) ions, using a bridge structure of Au@CNT@TiO <sub>2</sub> nanocomposite. <i>Applied Catalysis B: Environmental</i> , 2020, 272, 118991.	20.2	80
532	Photocatalytic degradation of Rhodamine dyes using zinc oxide nanoparticles. <i>Materials Today: Proceedings</i> , 2021, 38, 809-815.	1.8	53
533	Photocatalysis of xenobiotic organic compounds in greywater using zinc oxide nanoparticles: a critical review. <i>Water and Environment Journal</i> , 2021, 35, 190-217.	2.2	15
534	Preparation and photocatalytic activity of visible light-responsive zinc oxide/activated carbon fiber composites. <i>Journal of Dispersion Science and Technology</i> , 2021, 42, 846-857.	2.4	4
535	Facile Synthesis of Zn Doped g-C <sub>3</sub> N <sub>4</sub> for Enhanced Visible Light Driven Photocatalytic Hydrogen Production. <i>Topics in Catalysis</i> , 2021, 64, 65-72.	2.8	27
536	Copper Spinel Ferrite Superparamagnetic Nanoparticles as a Novel Radiotherapy Enhancer Effect in Cancer Treatment. <i>Journal of Cluster Science</i> , 2021, 32, 657-663.	3.3	20
537	Improved photocatalytic activity of surface charge functionalized ZnO nanoparticles using aniline. <i>Journal of Materials Science and Technology</i> , 2021, 76, 1-10.	10.7	32
538	Solvent accommodation effect on dispersibility of metal oxide nanoparticle with chemisorbed organic shell. <i>Journal of Colloid and Interface Science</i> , 2021, 587, 574-580.	9.4	19
539	Enhanced photocatalytic activity of Mg-doped ZnO thin films prepared by sol-gel method. <i>Surface Engineering</i> , 2021, 37, 775-783.	2.2	25
540	ZnO as photocatalyst: An approach to waste water treatment. <i>Materials Today: Proceedings</i> , 2021, 46, 6399-6403.	1.8	30
541	High-index crystal plane of ZnO nanopyramidal structures: Stabilization, growth, and improved photocatalytic performance. <i>Applied Surface Science</i> , 2021, 536, 147326.	6.1	17
542	Boron doping induced charge transfer switching of a C <sub>3</sub> N <sub>4</sub> /ZnO photocatalyst from Z-scheme to type II to enhance photocatalytic hydrogen production. <i>Applied Catalysis B: Environmental</i> , 2021, 282, 119538.	20.2	303

#	ARTICLE	IF	CITATIONS
543	Synthesis and characterization of Sr-doped ZnO nanoparticles for photocatalytic applications. Journal of Alloys and Compounds, 2021, 853, 157000.	5.5	85
544	Cu <sub>2</sub> BaSnS <sub>4</sub> novel quaternary quantum dots for enhanced photocatalytic applications. Materials Today Communications, 2021, 26, 101675.	1.9	5
545	Morphology engineering of ZnO nanostructures for enhanced photocatalytic efficiency of In(OH) <sub>3</sub> /ZnO nanocomposite. Applied Surface Science, 2021, 535, 147657.	6.1	16
546	Recent developments in zinc-based two-cation oxide spinels: From synthesis to applications. Ceramics International, 2021, 47, 2949-2962.	4.8	27
547	Rapid photodecolorization of methyl orange and rhodamine B using zinc oxide nanoparticles mediated by pullulan at different calcination conditions. Journal of Nanostructure in Chemistry, 2021, 11, 187-202.	9.1	27
548	Facile preparation of ZnO:g-C <sub>3</sub> N <sub>4</sub> heterostructures and their application in amiloride photodegradation and CO <sub>2</sub> photoreduction. Journal of Alloys and Compounds, 2021, 856, 156798.	5.5	21
549	A low temperature processable tin oxide interlayer via amine-modification for efficient and stable organic solar cells. Journal of Energy Chemistry, 2021, 56, 496-503.	12.9	25
550	Deposition of ZnS dots onto nanosheets of cobalt-doped ZnOâ€“Zn(OH) <sub>2</sub> and their photocatalytic activity. Journal of Physics and Chemistry of Solids, 2021, 148, 109702.	4.0	14
551	2-Methylimidazole-modulated UiO-66 as an effective photocatalyst to degrade Rhodamine B under visible light. Journal of Materials Science, 2021, 56, 1577-1589.	3.7	7
552	rGO-ZnO nanocomposites as efficient photocatalyst for degradation of 4-BP and DEP using high temperature refluxing method in in-situ condition. Journal of Hazardous Materials, 2021, 406, 124300.	12.4	37
553	Bismuth oxychloride-based materials for the removal of organic pollutants in wastewater. Chemosphere, 2021, 273, 128576.	8.2	236
554	Facile synthesis of Ag <sub>2</sub> O/ZnO/rGO heterojunction with enhanced photocatalytic activity under simulated solar light: Kinetics and mechanism. Journal of Hazardous Materials, 2021, 403, 124011.	12.4	103
555	Hydrothermal synthesis of W-doped BiOCl nanoplates for photocatalytic degradation of rhodamine B under visible light. Journal of Physics and Chemistry of Solids, 2021, 149, 109804.	4.0	39
556	Study of structural and optical properties of ZnO nanoparticles synthesized by an eco-friendly tapioca-assisted route. Materials Chemistry and Physics, 2021, 258, 123926.	4.0	20
557	F-doped ZnO nano- and meso-crystals with enhanced photocatalytic activity in diclofenac degradation. Science of the Total Environment, 2021, 762, 143066.	8.0	37
558	Structure and magnetic properties of magnetic iron oxide/zinc oxide core/shell nanocomposites: Effect of ZnO coating. Materials Today Communications, 2021, 26, 101733.	1.9	8
559	Tuning ZnO/GO p-n heterostructure with carbon interlayer supported on clay for visible-light catalysis: Removal of steroid estrogens from water. Chemical Engineering Journal, 2021, 420, 127668.	12.7	31
560	A ring-locking strategy to enhance the chemical and photochemical stability of Aâ€“Dâ€“A-type non-fullerene acceptors. Journal of Materials Chemistry A, 2021, 9, 1080-1088.	10.3	52

#	ARTICLE	IF	CITATIONS
561	Improvement of p-CuO/n-Si Heterojunction Solar Cell Performance Through Nitrogen Plasma Treatment. <i>Journal of Electronic Materials</i> , 2021, 50, 1720-1725.	2.2	5
562	Design and application of metal-organic frameworks and derivatives as heterogeneous Fenton-like catalysts for organic wastewater treatment: A review. <i>Environment International</i> , 2021, 146, 106273.	10.0	117
563	Advances in designing heterojunction photocatalytic materials. <i>Chinese Journal of Catalysis</i> , 2021, 42, 710-730.	14.0	182
564	Comparative study of chemically synthesized and low temperature bio-inspired <i>Musa acuminata</i> peel extract mediated zinc oxide nanoparticles for enhanced visible-photocatalytic degradation of organic contaminants in wastewater treatment. <i>Journal of Hazardous Materials</i> , 2021, 406, 124779.	12.4	40
565	Hydrothermally derived co, Ni co-doped ZnO nanorods; structural, optical, and morphological study. <i>Optical Materials</i> , 2021, 111, 110606.	3.6	54
566	Photocatalytic properties of coating materials enriched with bentonite/ZnO/CuO nanocomposite. <i>Materials Chemistry and Physics</i> , 2021, 260, 124150.	4.0	19
567	Stability improvement of Cu( $\text{ZnS}$ )-doped ZnS/ZnO photodetectors prepared with a facile solution-processing method. <i>Inorganic Chemistry Frontiers</i> , 2021, 8, 311-318.	6.0	21
568	Size-dependent effects of ZnO nanoparticles on the photocatalytic degradation of phenol in a water solution. <i>Applied Surface Science</i> , 2021, 541, 148416.	6.1	57
569	A comparative study between thermal etching and liquid exfoliation of bulk graphitic carbon nitride to nanosheets for the photocatalytic degradation of a model environmental pollutant, Rhodamine B. <i>Journal of Materials Science: Materials in Electronics</i> , 2021, 32, 687-706.	2.2	15
570	Novel ZnO tetrapod-reduced graphene oxide nanocomposites for enhanced photocatalytic degradation of phenolic compounds and MB dye. <i>Journal of Molecular Liquids</i> , 2021, 327, 114814.	4.9	65
571	TiO <sub>2</sub> Synthesis by the Pechini's Method and Application for Diclofenac Photodegradation. <i>Photochemistry and Photobiology</i> , 2021, 97, 32-39.	2.5	5
572	Effects of different valence states of Mo and point vacancies on magneto-optical properties of ZnO. <i>Physica B: Condensed Matter</i> , 2021, 601, 412485.	2.7	5
573	Direct Z-scheme heterojunction of ZnO/MoS <sub>2</sub> nanoarrays realized by flowing-induced piezoelectric field for enhanced sunlight photocatalytic performances. <i>Applied Catalysis B: Environmental</i> , 2021, 285, 119785.	20.2	124
574	The assembly of novel Ag-based NP@MOFs mesoporous spherical composites and their enhanced catalytic performance in photodegradation and chemical conversion of CO <sub>2</sub> with epoxide. <i>Journal of Solid State Chemistry</i> , 2021, 296, 121889.	2.9	10
575	Cu-doped ZnO synthesis by ionothermal method: Morphology and optical properties. <i>Optical Materials</i> , 2021, 111, 110679.	3.6	13
576	Photocatalytic activity of solution combustion synthesized ZnO powders by using a mixture of DTAB and citric acid fuels. <i>Journal of Physics and Chemistry of Solids</i> , 2021, 151, 109895.	4.0	2
577	Doping Lanthanide Ions in Colloidal Semiconductor Nanocrystals for Brighter Photoluminescence. <i>Chemical Reviews</i> , 2021, 121, 1425-1462.	47.7	94
578	Ligand-Programmed Consecutive Symmetry Break(s) in Nanoparticle Based Materials Showing Emergent Phenomena: Transitioning from Sixfold to Threefold Symmetry in Anisotropic ZnO Colloids. <i>Advanced Functional Materials</i> , 2021, 31, 2009104.	14.9	5

#	ARTICLE	IF	CITATIONS
579	Highly efficient synergetic piezo/photocatalytic degradation in novel $\text{M}_{0.5}\text{Bi}_{2.5}\text{Nb}_2\text{O}_9$ (M=Li, Na, K) ferroelectric nanosheets. <i>Ceramics International</i> , 2021, 47, 8573-8583.	4.8	10
580	Zero-to-one (or more) nanoarchitectonics: how to produce functional materials from zero-dimensional single-element unit, fullerene. <i>Materials Advances</i> , 2021, 2, 582-597.	5.4	30
581	Enhanced photocatalytic activity of $\text{Ho}^{3+}$ doped ZnO NPs synthesized by modified sol-gel method: An experimental and theoretical investigation. <i>Journal of Alloys and Compounds</i> , 2021, 856, 158217.	5.5	33
582	Fabrication of single crystal fiber-like ZnO/polyvinyl alcohol (PVA) films using the spray-drying approach. <i>Materials Letters</i> , 2021, 285, 129059.	2.6	0
583	Plasmon induced hot electron generation in two dimensional carbonaceous nanosheets decorated with Au nanostars: enhanced photocatalytic activity under visible light. <i>Materials Chemistry Frontiers</i> , 2021, 5, 1448-1467.	5.9	50
584	Photocatalytic degradation of 3-methyl-4-nitrophenol over Ag/AgCl-decorated/[MOYI]-coated/ZnO nanostructures: Material characterization, photocatalytic performance, and in-vivo toxicity assessment of the photoproducts. <i>Environmental Technology and Innovation</i> , 2021, 21, 101212.	6.1	16
585	Rare earth metal co-doped $\text{ZnO}_{\text{A}}\text{La}_{0.05}\text{M}_{0.05}\text{O}$ (M = Yb, Sm, Nd) nanocrystals; energy gap tailoring, structural, photocatalytic and antibacterial studies. <i>Materials Science in Semiconductor Processing</i> , 2021, 122, 105485.	4.0	46
586	An integrated strategy for achieving oil-in-water separation, removal, and anti-oil/dye/bacteria-fouling. <i>Chemical Engineering Journal</i> , 2021, 413, 127493.	12.7	89
587	Photocatalytic treatment of natural waters. Reality or hype? The case of cyanotoxins remediation. <i>Water Research</i> , 2021, 188, 116543.	11.3	88
588	Photocatalytic performance improvement by utilizing GO_MWCNTs hybrid solution on sand/ZnO/TiO <sub>2</sub> -based photocatalysts to degrade methylene blue dye. <i>Environmental Science and Pollution Research</i> , 2021, 28, 6966-6979.	5.3	13
589	Defect-induced visible-light-driven photocatalytic and photoelectrochemical performance of $\text{ZnO}/\text{CeO}_2$ nanoheterojunctions. <i>Journal of Alloys and Compounds</i> , 2021, 858, 157730.	5.5	54
590	A critical review on modulation of $\text{NiMoO}_4$ -based materials for photocatalytic applications. <i>Journal of Environmental Management</i> , 2021, 278, 111562.	7.8	27
591	Pyridinic N- $\pi$ -reduced graphene oxide and ZnO composite synergistically enhance photocatalytic performance. <i>Environmental Science and Pollution Research</i> , 2021, 28, 5398-5406.	5.3	4
592	Biosynthesis, characterization and photocatalytic activity of ZnO nanoparticles using extracts of <i>Justicia spicigera</i> for the degradation of methylene blue. <i>Journal of Molecular Structure</i> , 2021, 1225, 129101.	3.6	63
593	Recent advances in advanced oxidation processes for removal of contaminants from water: A comprehensive review. <i>Chemical Engineering Research and Design</i> , 2021, 146, 220-256.	5.6	141
594	Visible light-driven photocatalytic degradation of methylene blue dye over bismuth-doped cerium oxide mesoporous nanoparticles. <i>Environmental Science and Pollution Research</i> , 2021, 28, 4147-4155.	5.3	22
595	Energy profiles by DFT methods for CO and NO catalytic adsorption over ZnO surfaces. <i>Catalysis Today</i> , 2021, 360, 38-45.	4.4	16
596	A green synthesized recyclable ZnO/MIL-101(Fe) for Rhodamine B dye removal via adsorption and photo-degradation under UV and visible light irradiation. <i>Environmental Technology (United Kingdom)</i> 42(10) 1183-1194. 10.1080/09593330.2021.1981111	0.78431428	10

#	ARTICLE	IF	CITATIONS
597	An Overview on the Photocatalytic Application of Transition Metalâ€ZnO Nano-Photocomposites for Degradation of Textile Effluents in Water. Lecture Notes in Civil Engineering, 2021, , 239-245.	0.4	0
598	Microbial mediated synthesis of ZnO nanoparticles derived from Lactobacillus spp: Characterizations, antimicrobial and biocompatibility efficiencies. Sensors International, 2021, 2, 100104.	8.4	35
599	Polyacrylonitrile/clay nanofibrous nanocomposites for efficient adsorption of Cr (VI) ions. Journal of Polymer Research, 2021, 28, 1.	2.4	10
600	Facile fabrication of Zn-doped SnO <sub>2</sub> nanoparticles for enhanced photocatalytic dye degradation performance under visible light exposure. Advanced Composites and Hybrid Materials, 2021, 4, 114-126.	21.1	63
601	Niobate-based perovskites: Characterization, preparation, and photocatalytic properties. , 2021, , 341-356.		0
602	Semiconductor @ sensitizer composites for enhanced photoinduced processes. , 2021, , 183-209.		1
603	Synthesis, characterization, and applications of photocatalysts containing carbon species. , 2021, , 451-488.		0
604	UCPs/Zn <sub>2</sub> GeO <sub>4</sub> :Mn <sup>2+</sup> /g-C <sub>3</sub> N <sub>4</sub> heterojunction engineered injectable thermosensitive hydrogel for oxygen independent breast cancer neoadjuvant photodynamic therapy. Biomaterials Science, 2021, 9, 2124-2136.	5.4	9
605	Nanotechnologies for wastewater treatment. , 2021, , 1-12.		0
606	Applications of Photochemical Oxidation in Textile Industry. , 2021, , 1-30.		1
607	Visible whispering gallery mode lasing via Li <sup>+</sup> ion doped ZnO microspheres. Materials Today: Proceedings, 2021, 45, 3754-3761.	1.8	0
608	Zinc-based nanostructures for sustainable applications in agroecology: A note from the editor. , 2021, , 1-10.		0
609	Mechanism of nanotoxicity in Chlorella vulgaris exposed to zinc and iron oxide. Toxicology Reports, 2021, 8, 724-731.	3.3	25
610	Phytofabrication of nanoparticles through plant as nanofactories. , 2021, , 153-169.		0
611	Salicylic Acid Boosts the TiO <sub>2</sub> and ZnO-Mediated Photodegradation of Paracetamol. Materials Research, 2021, 24, .	1.3	0
612	Heterogeneous photocatalytic activation of persulfate ions with novel ZnO/AgFeO <sub>2</sub> nanocomposite for contaminants degradation under visible light. Journal of Materials Science: Materials in Electronics, 2021, 32, 4272-4289.	2.2	15
613	Industrial applications of mesoporous particles as a photocatalytic agent. , 2021, , 591-605.		0
614	Recent advances on TiO <sub>2</sub> photocatalysis for wastewater degradation: fundamentals, commercial TiO <sub>2</sub> materials, and photocatalytic reactors. , 2021, , 25-65.		2



#	ARTICLE	IF	CITATIONS
615	Effect of Anionic Amphiphiles on the Morphology of Hexagonal Plate-like ZnO Particles. Journal of Oleo Science, 2021, 70, 919-925.	1.4	2
616	Luminescence nanomaterials for photocatalysis. , 2021, , 209-240.		1
617	Synthesis and Characterization of Zinc Oxide Nanoparticles and Their Impact on Plants. Nanotechnology in the Life Sciences, 2021, , 33-93.	0.6	15
618	Effect of sonication on ZnO and ZnO-Fe catalyst for colour and COD removal from Methylene Blue solution. IOP Conference Series: Earth and Environmental Science, 2021, 646, 012054.	0.3	0
619	An overview: recent development of semiconductor/graphene nanocomposites for photodegradation of phenol and phenolic compounds in aqueous solution. Journal of Asian Ceramic Societies, 2021, 9, 1-23.	2.3	15
620	Solvent-Free Mechanochemical Synthesis of ZnO Nanoparticles by High-Energy Ball Milling of $\mu$ -Zn(OH) <sub>2</sub> Crystals. Nanomaterials, 2021, 11, 238.	4.1	33
621	Potential of advanced photocatalytic technology for biodiesel production from waste oil. , 2021, , 49-76.		3
622	Nanostructured Photocatalysts for Degradation of Environmental Pollutants. , 2021, , 823-863.		0
623	Synthesis, characterization and photocatalytic activities of Al-doped ZnO for degradation of methyl orange dye under UV light irradiation. Journal of the Australian Ceramic Society, 2021, 57, 479-488.	1.9	11
624	Current progress on 3D graphene-based photocatalysts: From synthesis to photocatalytic hydrogen production. International Journal of Hydrogen Energy, 2021, 46, 9324-9340.	7.1	44
625	Enhancement the Phenylmethyl ester photo degradability in the presence of O <sub>3</sub> and H <sub>2</sub> O <sub>2</sub> . Optik, 2021, 228, 166204.	2.9	12
626	Biofilms and nanoparticles: applications in agriculture. Folia Microbiologica, 2021, 66, 159-170.	2.3	21
627	UV-light photocatalytic degradation of non-ionic surfactants using ZnO nanoparticles. International Journal of Environmental Science and Technology, 2022, 19, 173-188.	3.5	13
628	Synthesis and study of the composition of hollow microspheres of composition NiO and NiO / Ni for thermoelectrochemical energy converters of low-potential temperature gradients of thermal aggregates into electricity. Novye Ogneupory (new Refractories), 2021, , 49-53.	0.1	0
629	The investigation of removal performances of UV/ZnO, UV/ZnO/H <sub>2</sub> O <sub>2</sub> and UV/ZnO/O <sub>3</sub> processes in the degradation of Butoben and Phenylmethyl ester from aqueous solution. Optik, 2021, 228, 166208.	2.9	10
630	Variation of Green Synthesis Techniques in Fabrication of Zinc Oxide Nanoparticles – A Mini Review. IOP Conference Series: Materials Science and Engineering, 2021, 1051, 012079.	0.6	4
631	Fabrication and application of ZnO-Ag nanocomposite materials prepared by gas-phase methods. IOP Conference Series: Materials Science and Engineering, 2021, 1053, 012023.	0.6	5
632	Solid-State Synthesis of Direct Z-Scheme Cu <sub>2</sub> O/WO <sub>3</sub> Nanocomposites with Enhanced Visible-Light Photocatalytic Performance. Catalysts, 2021, 11, 293.	3.5	23



#	ARTICLE	IF	CITATIONS
633	Rice-Like ZnO Architecture: An Eminent Electrode Material for High-Performance Ultracapacitor Application. <i>Journal of Inorganic and Organometallic Polymers and Materials</i> , 2021, 31, 1992-2002.	3.7	5
634	Preparation of Ga <sub>2</sub> O <sub>3</sub> /ZnO/WO <sub>3</sub> double S-scheme heterojunction composite nanofibers by electrospinning method for enhancing photocatalytic activity. <i>Journal of Materials Science: Materials in Electronics</i> , 2021, 32, 7307-7318.	2.2	15
635	Synthesis and applications of ZnO nanostructures (ZONs): a review. <i>Critical Reviews in Solid State and Materials Sciences</i> , 2022, 47, 99-141.	12.3	80
636	Comparative efficacy of biogenic zinc oxide nanoparticles synthesized by <i>Pseudochrobactrum</i> sp. C5 and chemically synthesized zinc oxide nanoparticles for catalytic degradation of dyes and wastewater treatment. <i>Environmental Science and Pollution Research</i> , 2021, 28, 28307-28318.	5.3	29
637	Evaluation of TiO <sub>2</sub> and ZnO atomic layer deposition coated polyamide 66 fabrics for photocatalytic activity and antibacterial applications. <i>Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films</i> , 2021, 39, .	2.1	12
638	<i>in-situ</i> synthesis of ZnO modified g-C <sub>3</sub> N <sub>4</sub> composite: a potential photocatalyst and adsorbent for waste water remediation. <i>Materials Research Innovations</i> , 2022, 26, 65-75.	2.3	8
639	Adsorption and photocatalytic activity of biosynthesised ZnO nanoparticles using Aloe Vera leaf extract. <i>Nano Express</i> , 2021, 2, 010039.	2.4	10
640	Influence of Ni / NiO Ratio on the Performance of Thermoelectrochemical Waste Heat Harvester Based on Hollow Microspheres. <i>IOP Conference Series: Materials Science and Engineering</i> , 2021, 1079, 052070.	0.6	0
641	Synthesis and Study of the Composition of Hollow Microspheres of NiO and NiO/Ni Composition for Thermoelectrochemical Energy Converters of Low-Potential Temperature Gradients of Thermal Units Into Electricity. <i>Refractories and Industrial Ceramics</i> , 2021, 61, 715-719.	0.6	5
642	Oxygen vacancies induced room temperature ferromagnetism and enhanced dielectric properties in Co and Mn co-doped ZnO nanoparticles. <i>Journal of Materials Science: Materials in Electronics</i> , 2021, 32, 9463-9474.	2.2	28
643	Cupric oxide (CuO)/zinc oxide (ZnO) heterojunction diode with low turn-on voltage. <i>Results in Physics</i> , 2021, 22, 103891.	4.1	18
644	Structural, optical and photocatalytic properties of cuboid ZnO particles. <i>Journal of Materials Research and Technology</i> , 2021, 11, 112-120.	5.8	10
645	Colloidal CdS sensitized nano-ZnO/chitosan hydrogel with fast and efficient photocatalytic removal of congo red under solar light irradiation. <i>International Journal of Biological Macromolecules</i> , 2021, 174, 52-60.	7.5	35
646	Significant Enhancement of Illumination Stability of Nonfullerene Organic Solar Cells via an Aqueous Polyethylenimine Modification. <i>Journal of Physical Chemistry Letters</i> , 2021, 12, 2607-2614.	4.6	41
647	Nickel doped zinc oxide with improved photocatalytic activity for Malachite Green Dye degradation and parameters affecting the degradation. <i>Journal of Materials Science: Materials in Electronics</i> , 2021, 32, 8733-8745.	2.2	26
648	Plant-Mediated Biosynthesis and Photocatalysis Activities of Zinc Oxide Nanoparticles: A Prospect towards Dyes Mineralization. <i>Journal of Nanotechnology</i> , 2021, 2021, 1-15.	3.4	51
649	Fabrication and Characterization of High-Quality UV Photodetectors Based ZnO Nanorods Using Traditional and Modified Chemical Bath Deposition Methods. <i>Nanomaterials</i> , 2021, 11, 677.	4.1	29
650	Solution-Processed Organic and ZnO Field-Effect Transistors in Complementary Circuits. <i>Electronic Materials</i> , 2021, 2, 60-71.	1.9	4

#	ARTICLE	IF	CITATIONS
651	S-scheme heterojunction ZnO/g-C <sub>3</sub> N <sub>4</sub> shielding polyester fiber composites for the degradation of MB. Semiconductor Science and Technology, 2021, 36, 045025.	2.0	15
652	Construction of ZnIn <sub>2</sub> S <sub>4</sub> /ZnO heterostructures with enhanced photocatalytic decomposition and hydrogen evolution under blue LED irradiation. International Journal of Hydrogen Energy, 2021, 46, 10281-10292.	7.1	39
653	Co <sup>2+</sup> -Tuned Tin Oxide Interfaces for Enhanced Stability of Organic Solar Cells. Langmuir, 2021, 37, 3173-3179.	3.5	7
654	Influence of Ni <sup>2+</sup> ions on the structural, morphological, photoluminescence, photo-catalytic and anti-bacterial studies of Cd <sub>0.9</sub> Zn <sub>0.1</sub> S nanostructures. Journal of Materials Science: Materials in Electronics, 2021, 32, 14310-14327.	2.2	4
656	Nanophotocatalysis for the Removal of Pharmaceutical Residues from Water Bodies: State of Art and Recent Trends. Current Analytical Chemistry, 2021, 18, 288-308.	1.2	5
657	Fabrication of ZnO interface layer from a novel aqueous sol-gel precursor solution for organic solar cells. Synthetic Metals, 2021, 274, 116737.	3.9	7
658	Green Biosynthesis of CdS NPs and CdS/Fe <sub>3</sub> O <sub>4</sub> NCs by Hawthorn Plant Extract for Photodegradation of Methyl Orange Dye and Antibacterial Applications. Journal of Cluster Science, 2022, 33, 1223-1238.	3.3	7
659	Raman spectroscopy study of Ga-doped ZnO ceramics: An estimative of the structural disorder degree. Physica B: Condensed Matter, 2021, 606, 412726.	2.7	11
660	Green Synthesis and Applications of ZnO and TiO <sub>2</sub> Nanostructures. Molecules, 2021, 26, 2236.	3.8	60
661	Enhancement in the photocatalytic and antimicrobial properties of ZnO nanoparticles by structural variations and energy bandgap tuning through Fe and Co co-doping. Ceramics International, 2021, 47, 11109-11121.	4.8	70
662	Afterglow-Catalysis and Self-Reporting of Pollutant Degradation by Ethylenediaminetetraacetic Acid Disodium-Etched Cr:ZnGa <sub>2</sub> O <sub>4</sub> . Journal of Physical Chemistry C, 2021, 125, 9096-9106.	3.1	7
664	Effect of ZnO Nanoparticles on Hydrophobicity, Biological and Mechanical Properties of Side-by-Side Bicomponent PP Fibers. Fibers and Polymers, 2021, 22, 1607-1622.	2.1	0
665	Synthesis of amine modified ZnO nanoparticles and their photocatalytic activities in micellar solutions under UV irradiation. Journal of Industrial and Engineering Chemistry, 2021, 96, 390-396.	5.8	33
666	Modification of NiTiO <sub>3</sub> visible light-driven photocatalysts by Nb doping and NbO <sub>x</sub> heterojunction: Oxygen vacancy in the Nb-doped NiTiO <sub>3</sub> structure. Journal of Alloys and Compounds, 2021, 861, 158636.	5.5	21
667	Preparation of PANI Modified ZnO Composites via Different Methods: Structural, Morphological and Photocatalytic Properties. Water (Switzerland), 2021, 13, 1025.	2.7	21
668	Characterization and photocatalytic activity of ZnO nanoflowers synthesized using Bridelia retusa leaf extract. Applied Nanoscience (Switzerland), 2023, 13, 493-502.	3.1	22
669	Photocatalytic activity of polyaniline and neutral polyaniline for degradation of methylene blue and malachite green dyes under UV Light. Polymer Bulletin, 2021, 78, 2849-2865.	3.3	24
670	Evaluation of Sonocatalytic and Photocatalytic Processes Efficiency for Degradation of Humic Compounds Using Synthesized Transition-Metal-Doped ZnO Nanoparticles in Aqueous Solution. Journal of Chemistry, 2021, 2021, 1-12.	1.9	3

#	ARTICLE	IF	CITATIONS
671	Advancing Graphitic Carbon Nitride-Based Photocatalysts toward Broadband Solar Energy Harvesting. , 2021, 3, 663-697.		63
672	Ternary ZnO/CuO/Zeolite composite obtained from volcanic ash for photocatalytic CO <sub>2</sub> reduction and H <sub>2</sub> O decomposition. Journal of Physics and Chemistry of Solids, 2021, 151, 109917.	4.0	16
673	Photocatalytic Behaviour of Zinc Oxide Nanostructures on Surface Activation of Polymeric Fibres. Polymers, 2021, 13, 1227.	4.5	43
674	Sunlight-induced photocatalytic degradation of various dyes and bacterial inactivation using CuO-MgO-ZnO nanocomposite. Environmental Science and Pollution Research, 2021, 28, 42243-42260.	5.3	52
675	Facile Controlling of the Physical Properties of Zinc Oxide and Its Application to Enhanced Photocatalysis. Journal of Analytical Methods in Chemistry, 2021, 2021, 1-12.	1.6	21
676	Room Temperature Syntheses of ZnO and Their Structures. Symmetry, 2021, 13, 733.	2.2	11
677	Preliminary Study of ZnO/GO Composite Preparation as Photocatalyst Material for Degradation Methylene Blue under Low UV-Light Irradiation. Materials Science Forum, 0, 1028, 319-325.	0.3	0
678	Synthesizing pyridinic-N dominate-doped graphene/BiVO <sub>4</sub> nanocomposite as a superior photocatalyst for degradation under visible-irradiation. Optical Materials, 2021, 114, 110922.	3.6	13
679	Palladium and silver nanoparticles embedded on zinc oxide nanostars for photocatalytic degradation of pesticides and herbicides. Chemical Engineering Journal, 2021, 410, 128434.	12.7	63
680	Biosynthesis of Zinc Oxide Nanomaterials from Plant Extracts and Future Green Prospects: A Topical Review. Advanced Sustainable Systems, 2021, 5, 2000266.	5.3	28
681	Supercritical Carbon Dioxide-Based Processes in Photocatalytic Applications. Molecules, 2021, 26, 2640.	3.8	5
682	Integrated Temperature Controlling Platform to Synthesize ZnO Nanoparticles and its Deposition on Al-Foil for Biosensing. IEEE Sensors Journal, 2021, 21, 9538-9545.	4.7	15
683	Two- and three-dimensional zinc oxide nanostructures and its photocatalytic dye degradation performance study. Journal of Materials Research, 2021, 36, 1573-1583.	2.6	20
684	Effect of Cu and N co-doping in ZnO crystals through thermal processing on energy-level distribution. Bulletin of Materials Science, 2021, 44, 1.	1.7	2
685	Nano Synthesis and Characterization of Co and Mn Co-doped ZnO by Solution Combustion Technique. Journal of Superconductivity and Novel Magnetism, 2021, 34, 1507-1516.	1.8	5
686	Research on the Sustainable Heterogeneous Catalyst Development for Photocatalytic Treatment of Phenol. Sustainability, 2021, 13, 4670.	3.2	1
687	Metal Oxide-Based Photocatalytic Paper: A Green Alternative for Environmental Remediation. Catalysts, 2021, 11, 504.	3.5	43
688	An Efficiency of 16.46% and a $\times 10^8$ Lifetime of Over 4000 h for the PM6:Y6 Inverted Organic Solar Cells Enabled by Surface Acid Treatment of the Zinc Oxide Electron Transporting Layer. ACS Applied Materials & Interfaces, 2021, 13, 17869-17881.	8.0	80

#	ARTICLE	IF	CITATIONS
689	In situ synthesis of CdS/ZnS composite nanoparticles from ZIF-8 for visible light disposal of Cr(VI). Journal of Sol-Gel Science and Technology, 2021, 99, 211-219.	2.4	4
690	Photocatalytic Technology for Palm Oil Mill Effluent (POME) Wastewater Treatment: Current Progress and Future Perspective. Materials, 2021, 14, 2846.	2.9	19
691	Dual role of activated carbon as fuel and template for solution combustion synthesis of porous zinc oxide powders. Journal of the American Ceramic Society, 2021, 104, 4624-4636.	3.8	2
692	Ag <sup>13</sup> -AgI/Bi <sub>2</sub> O <sub>2</sub> CO <sub>3</sub> /Bi S-scheme heterojunction with enhanced photocatalyst performance. Separation and Purification Technology, 2021, 263, 118389.	7.9	53
693	A study on the effect of nano-ZnO on hygroscopic characteristics of PP/Wood flour composites. Plastics, Rubber and Composites, 2021, 50, 516-523.	2.0	2
694	Zinc Oxide-Based Acetone Gas Sensors for Breath Analysis: A Review. Chemistry - an Asian Journal, 2021, 16, 1519-1538.	3.3	55
695	A critical review on the formation, fate and degradation of the persistent organic pollutant hexachlorocyclohexane in water systems and waste streams. Chemosphere, 2021, 271, 129866.	8.2	64
696	Enhanced multi functionality of semi-refined iota carrageenan as food packaging material by incorporating SiO <sub>2</sub> and ZnO nanoparticles. Heliyon, 2021, 7, e06963.	3.2	28
697	One-Step Construction of Multi-Walled CNTs Loaded with Alpha-Fe <sub>2</sub> O <sub>3</sub> Nanoparticles for Efficient Photocatalytic Properties. Materials, 2021, 14, 2820.	2.9	7
698	Photocatalytic degradation of palm oil mill secondary effluent in presence of zinc oxide nanoparticles. Environmental Nanotechnology, Monitoring and Management, 2021, 15, 100413.	2.9	3
699	Band Gap Reduction in Ferroelectric BaTiO <sub>3</sub> Through Heterovalent Cu-Te Co-Doping for Visible-Light Photocatalysis. Frontiers in Chemistry, 2021, 9, 682979.	3.6	14
700	Degradation of Titan Yellow Using ZnO/Ag Embedded with Fe <sub>3</sub> O <sub>4</sub> Nanoparticles Under Visible Light-Induced. Key Engineering Materials, 0, 884, 54-59.	0.4	1
701	Ag <sub>2</sub> CO <sub>3</sub> nanoparticles decorated g-C <sub>3</sub> N <sub>4</sub> as a high-efficiency catalyst for photocatalytic degradation of organic contaminants. Journal of Materials Science: Materials in Electronics, 2021, 32, 14464-14476.	2.2	4
702	High-efficiency TiO <sub>2</sub> /ZnO nanocomposites photocatalysts by sol-gel and hydrothermal methods. Journal of Sol-Gel Science and Technology, 2021, 99, 92-100.	2.4	32
703	Self-Asymmetric Yolk-Shell Photocatalytic ZnO Micromotors. ChemPhotoChem, 2021, 5, 933-939.	3.0	11
704	Optimization Method of the Solvothermal Parameters Using Box-Behnken Experimental Design-The Case Study of ZnO Structural and Catalytic Tailoring. Nanomaterials, 2021, 11, 1334.	4.1	8
705	Porous ZnO Nanostructures Synthesized by Microwave Hydrothermal Method for Energy Harvesting Applications. , 0, , .		3
706	Facile Cetyltrimethylammonium Bromide (CTAB)-assisted Synthesis of Calcium Bismuthate Nanoflakes with Solar Light Photocatalytic Performance. Current Nanoscience, 2021, 17, 315-326.	1.2	9

#	ARTICLE	IF	CITATIONS
707	Role of surface oxygen vacancies in zinc oxide/graphitic carbon nitride composite for adjusting energy band structure to promote visible-light-driven photocatalytic activity. Applied Surface Science, 2021, 562, 150106.	6.1	21
708	Ag@ZnO/MWCNT ternary nanocomposite as an active and stable catalyst for the 4-nitrophenol reduction in water. Nanotechnology, 2021, 32, 315713.	2.6	8
709	Wastewater remediation with ZnO photocatalysts: Green synthesis and solar concentration as an economically and environmentally viable route to application. Journal of Environmental Management, 2021, 286, 112226.	7.8	54
710	Nanoparticles of ZnO and Mg-doped ZnO: Synthesis, characterization and efficient removal of methyl orange (MO) from aqueous solution. Ceramics International, 2021, 47, 15668-15681.	4.8	18
711	Europium (Eu <sup>3+</sup> ) - doped ZnO nanostructures: Synthesis, characterization, and photocatalytic, chemical sensing and preliminary assessment of magnetic properties. Ceramics International, 2021, 47, 17023-17033.	4.8	11
712	Chalcogen-doped zinc oxide nanoparticles for photocatalytic degradation of Rhodamine B under the irradiation of ultraviolet light. Materials Today Chemistry, 2021, 20, 100464.	3.5	23
713	Biosynthesis Microwave-Assisted of Zinc Oxide Nanoparticles with Ziziphus jujuba Leaves Extract: Characterization and Photocatalytic Application. Nanomaterials, 2021, 11, 1682.	4.1	26
714	A review of clay based photocatalysts: Role of phyllosilicate mineral in interfacial assembly, microstructure control and performance regulation. Chemosphere, 2021, 273, 129723.	8.2	57
715	Doping with Chemically Hard Elements to Improve Photocatalytic Properties of ZnO Nanostructures. Journal of Cluster Science, 2022, 33, 1943-1950.	3.3	8
716	Red-emission analysis, Judd–Ofelt intensity parameters and laser properties of CdMgZnO:xEu <sup>3+</sup> nanocrystals: the effects of Eu <sup>3+</sup> concentration. Journal Physics D: Applied Physics, 2021, 54, 345108.	2.8	4
717	Tailoring the Performance of ZnO for Oxygen Evolution by Effective Transition Metal Doping. ChemSusChem, 2021, 14, 3064-3073.	6.8	9
719	Hierarchically Nanostructured ZnO with Enhanced Photocatalytic Activity. ECS Journal of Solid State Science and Technology, 2021, 10, 071004.	1.8	0
720	Z-Scheme Core–Shell <i>meso</i> -TiO <sub>2</sub> @ZnIn <sub>2</sub> S <sub>4</sub> /Ti <sub>3</sub> C <sub>2</sub> MXene Enhances Visible Light-Driven CO <sub>2</sub> -to-CH <sub>4</sub> Selectivity. Industrial & Engineering Chemistry Research, 2021, 60, 8720-8732.	3.7	39
721	Photocatalytic Performance of ZnO-Graphene Oxide Composites towards the Degradation of Vanillic Acid under Solar Radiation and Visible-LED. Nanomaterials, 2021, 11, 1576.	4.1	21
722	In situ assembly of ZnO/graphene oxide on synthetic molecular receptors: Towards selective photoreduction of Cr(VI) via interfacial synergistic catalysis. Chemical Engineering Journal, 2021, 414, 128914.	12.7	37
723	Fabrication of 3D Bi <sub>5</sub> O <sub>7</sub> I/Bi <sub>5</sub> O <sub>3</sub> heterojunction material with enhanced photocatalytic activity towards tetracycline antibiotics. Separation and Purification Technology, 2021, 265, 118522.	7.9	52
724	Spectroelectrochemistry and photoelectrochemistry of electrodeposited ZnO nanorods. Electrochemical Science Advances, 2022, 2, e2100035.	2.8	2
725	Monitoring the advanced oxidation of paracetamol using ZnO films via capillary electrophoresis. Journal of Water Process Engineering, 2021, 41, 102051.	5.6	7

#	ARTICLE	IF	CITATIONS
726	Visible light-activated ZnO nanoparticles for microbial control of wheat crop. Journal of Photochemistry and Photobiology B: Biology, 2021, 219, 112206.	3.8	19
727	Recent advance of graphene/semiconductor composite nanocatalysts: Synthesis, mechanism, applications and perspectives. Chemical Engineering Journal, 2021, 414, 128795.	12.7	42
728	Effort of ionic radius on doped style of silver and copper/zinc oxide nanorods for photodegradation of methylene blue. Environmental Technology (United Kingdom), 2021, , 1-9.	2.2	0
729	Crystallographic, Energy Gap, Photoluminescence and Photo-Catalytic Investigation of Cu Doped Cd <sub>0.9</sub> Zn <sub>0.1</sub> S Nanostructures by Co-precipitation Method. Journal of Inorganic and Organometallic Polymers and Materials, 0, , 1.	3.7	1
731	Supported-Metal Oxide Nanoparticles-Potential Photocatalysts. , 0, , .		3
732	Eco-Friendly Colloidal Aqueous Sol-Gel Process for TiO <sub>2</sub> Synthesis: The Peptization Method to Obtain Crystalline and Photoactive Materials at Low Temperature. Catalysts, 2021, 11, 768.	3.5	16
733	Effect of 3d-transition metals doped in ZnO monolayers on the CO <sub>2</sub> electrochemical reduction to valuable products: first principles study. Applied Surface Science, 2021, 550, 149380.	6.1	21
734	Electrospun Nanosystems Based on PHBV and ZnO for Ecological Food Packaging. Polymers, 2021, 13, 2123.	4.5	17
735	Facile production of three-dimensional chitosan fiber embedded with zinc oxide as recoverable photocatalyst for organic dye degradation. International Journal of Biological Macromolecules, 2021, 181, 150-159.	7.5	11
736	Progress of 3d metal-doped zinc oxide nanoparticles and the photocatalytic properties. Arabian Journal of Chemistry, 2021, 14, 103175.	4.9	33
737	Fabrication of graphitic carbon nitride-based nanocomposites photocatalyst for degradation of organic pollutants: A Review. IOP Conference Series: Earth and Environmental Science, 2021, 796, 012010.	0.3	0
738	Development of all-inorganic lead halide perovskites for carbon dioxide photoreduction. Renewable and Sustainable Energy Reviews, 2021, 145, 111047.	16.4	28
739	Columnar nitrogen-doped ZnO nanostructured thin films obtained through atomic layer deposition. Nanotechnology, 2021, 32, 405704.	2.6	2
740	Synthesis and characterization of novel ZnO/NiCr <sub>2</sub> O <sub>4</sub> nanocomposite for water purification by degradation of tetracycline and phenol under visible light irradiation. Materials Research Bulletin, 2021, 139, 111247.	5.2	30
741	One Step In-Situ Synthesis of Zinc Oxide Nanoparticles for Multifunctional Cotton Fabrics. Materials, 2021, 14, 3956.	2.9	10
742	Dielectric Properties of ZnO-Based Nanocomposites and Their Potential Applications. International Journal of Optics, 2021, 2021, 1-20.	1.4	44
743	High-Visible-Light Photocatalytic Activity of ZnO@Au Nanocomposites Synthesized by a Controlled Hydrothermal Method. Physica Status Solidi (A) Applications and Materials Science, 2021, 218, 2100150.	1.8	5
744	Photocatalytic degradation of selected pharmaceuticals using green fabricated zinc oxide nanoparticles. Advanced Powder Technology, 2021, 32, 2398-2409.	4.1	26



#	ARTICLE	IF	CITATIONS
745	Rational design of kaolinite-based photocatalytic materials for environment decontamination. Applied Clay Science, 2021, 208, 106098.	5.2	30
746	Ultrafast one step direct injection flame synthesis of zinc oxide nanoparticles and fabrication of p-Si/n-ZnO photodiode and characterization. Physica B: Condensed Matter, 2021, 612, 412971.	2.7	17
747	Photocatalysis with the Use of ZnO Nanostructures as a Method for the Purification of Aquatic Environments from Dyes. Journal of Water Chemistry and Technology, 2021, 43, 281-288.	0.6	10
748	Recent progress for silver nanowires conducting film for flexible electronics. Journal of Nanostructure in Chemistry, 2021, 11, 323-341.	9.1	88
749	Oxygen-vacancy engineering approach to bismuth basic nitrate/g-C <sub>3</sub> N <sub>4</sub> heterostructure for efficiently photocatalytic hydrogen evolution. International Journal of Hydrogen Energy, 2021, 46, 25832-25842.	7.1	12
750	Preparation of core-shell structured Fe <sub>3</sub> O <sub>4</sub> @Sn-MOF composite and photocatalytic performance. Journal of Alloys and Compounds, 2021, 870, 159339.	5.5	21
751	Selective volatile organic compound gas sensor based on carbon nanotubes functionalized with ZnO nanoparticles. Journal of Vacuum Science and Technology B: Nanotechnology and Microelectronics, 2021, 39, .	1.2	4
752	Bimetallic nanoparticles grafted ZnO hierarchical structures as efficient visible light driven photocatalyst: An experimental and theoretical study. Journal of Molecular Structure, 2021, 1236, 130355.	3.6	12
753	In Situ Liquid-Phase Growth Strategies of g-C <sub>3</sub> N <sub>4</sub> /Solar-Driven Heterogeneous Catalysts for Environmental Applications. Solar Rrl, 2021, 5, 2100233.	5.8	16
754	Facile one-step deposition of ZnO-graphene nanosheets hybrid photoanodes for enhanced photoelectrochemical water splitting. Journal of Alloys and Compounds, 2021, 870, 159430.	5.5	17
755	Enhancing Singlet Oxygen Photocatalysis with Plasmonic Nanoparticles. ACS Applied Materials & Interfaces, 2021, 13, 35606-35616.	8.0	22
756	Punica granatum mediated green synthesis of cauliflower-like ZnO and decorated with bovine bone-derived hydroxyapatite for expeditious visible light photocatalytic antibacterial, antibiofilm and antioxidant activities. Journal of Environmental Chemical Engineering, 2021, 9, 105736.	6.7	37
757	Oil spill degradation using floating magnetic simulated solar light-driven nano photocatalysts of Fe <sub>3</sub> O <sub>4</sub> -ZnO supported on lightweight minerals. Journal of Environmental Chemical Engineering, 2021, 9, 105268.	6.7	16
758	Enhanced photocatalytic performance of CuFeO <sub>2</sub> -ZnO heterostructures for methylene blue degradation under sunlight. Journal of Materials Science: Materials in Electronics, 2021, 32, 22256-22269.	2.2	5
759	Photocatalytic performance of a nickel ferrite/chitosan/bismuth(III) oxyiodide nanocomposite for metronidazole degradation under simulated sunlight illumination. Journal of Environmental Chemical Engineering, 2021, 9, 105619.	6.7	25
760	An investigation of transition metal doped TiO <sub>2</sub> photocatalysts for the enhanced photocatalytic decoloration of methylene blue dye under visible light irradiation. Journal of Environmental Chemical Engineering, 2021, 9, 105254.	6.7	66
761	The synergistic effect of O <sub>3</sub> and H <sub>2</sub> O <sub>2</sub> on the Butyl p-hydroxybenzoate photo-catalytic degradability by UVC/ZnO: Efficiency, kinetic, pathway, mechanism. Optik, 2021, 239, 166673.	2.9	5
762	High efficiency photocatalytic degradation of Ambroxol over Mn doped TiO <sub>2</sub> : Experimental designs, identification of transformation products, mineralization and mechanism. Science of the Total Environment, 2021, 780, 146451.	8.0	16

#	ARTICLE	IF	CITATIONS
763	Boosting photocatalytic activity of g-C <sub>3</sub> N <sub>4</sub> /nano-sized ZnO fabricated in CO <sub>2</sub> -saturated solutions. Materials Letters, 2021, 296, 129894.	2.6	7
764	Surface microenvironment engineering of black V <sub>2</sub> O <sub>5</sub> nanostructures for visible light photodegradation of methylene blue. Journal of Alloys and Compounds, 2021, 871, 159615.	5.5	26
765	Structural and Optical Properties Investigation of Graphene Oxide coated ZnO nanorods for Enhanced Photocatalytic Effect. , 2021, , .		3
766	Microplasma-assisted electrochemical synthesis of ZnO nanostructures for photocatalytic and antibacterial applications. Physica Scripta, 2021, 96, 125801.	2.5	5
767	Synthesis and Characterization of Sr-Doped ZnSe Nanoparticles for Catalytic and Biological Activities. Water (Switzerland), 2021, 13, 2189.	2.7	22
768	Sol-gel fabrication of Ag-Coated ZnO quantum dots nanocomposites with excellent photocatalytic activity. Optical Materials, 2021, 118, 111235.	3.6	8
769	Photocatalytic Nanofiber Membranes for the Degradation of Micropollutants and Their Antimicrobial Activity: Recent Advances and Future Prospects. Membranes, 2021, 11, 678.	3.0	23
770	Recent advances and emerging trends in (BiO) <sub>2</sub> CO <sub>3</sub> based photocatalysts for environmental remediation: A review. Surfaces and Interfaces, 2021, 25, 101273.	3.0	12
771	Oxidative degradation of p-chlorophenol by ferrate(VI): Kinetics, intermediates and pathways. Journal of Environmental Chemical Engineering, 2021, 9, 105810.	6.7	15
772	Fabrication of biomass-derived polymer with dopamine and Ag nanoaggregates: Prevention of the biofilm of bacteria and catalytic degradation of organic dyes. European Polymer Journal, 2021, 157, 110635.	5.4	11
773	Anisotropic ZnO nanostructures and their nanocomposites as an advanced platform for photocatalytic remediation. Journal of Hazardous Materials, 2021, 415, 125651.	12.4	31
774	Latest advanced oxidative processes applied for the removal of endocrine disruptors from aqueous media – A critical report. Journal of Environmental Chemical Engineering, 2021, 9, 105748.	6.7	26
775	Optimising processing conditions for the functionalisation of photocatalytic glazes by ZnO nanoparticle deposition. Materiales De Construccion, 2021, 71, e261.	0.7	0
776	Pulsed response theory prediction of ZnO nanocluster polarizabilities: A benchmark study. Chemical Physics Letters, 2021, 778, 138746.	2.6	1
777	Titanium Dioxide-Based Photocatalysts for Degradation of Emerging Contaminants including Pharmaceutical Pollutants. Applied Sciences (Switzerland), 2021, 11, 8674.	2.5	34
778	Exploring the effect of BN and B-N bridges on the photocatalytic performance of semiconductor heterojunctions: Enhancing carrier transfer mechanism. Applied Materials Today, 2021, 24, 101095.	4.3	5
779	Nano synthesis of ZnO–TiO <sub>2</sub> composites by sol-gel method and evaluation of their antibacterial, optical and photocatalytic activities. Results in Materials, 2021, 11, 100199.	1.8	17
780	Self-Assembly of Porphyrin Nanofibers on ZnO Nanoparticles for the Enhanced Photocatalytic Performance for Organic Dye Degradation. ACS Omega, 2021, 6, 23203-23210.	3.5	18

#	ARTICLE	IF	CITATIONS
781	A progress review on the modification of CZTS(e)-based thin-film solar cells. Journal of Industrial and Engineering Chemistry, 2022, 105, 83-110.	5.8	35
782	Visible-Light Active Sulfur-Doped Titania Nanoparticles Immobilized on a Silica Matrix: Synthesis, Characterization and Photocatalytic Degradation of Pollutants. Nanomaterials, 2021, 11, 2543.	4.1	4
783	Effect of g-C <sub>3</sub> N <sub>4</sub> on structural, optical, and photocatalytic properties of hexagonal cylinder-like twinned ZnO microcrystals prepared by the hydrothermal method. Journal of Materials Science: Materials in Electronics, 2021, 32, 24095-24106.	2.2	5
784	Photocatalytic water purification with graphitic C <sub>3</sub> N <sub>4</sub> -based composites: Enhancement, mechanisms, and performance. Applied Materials Today, 2021, 24, 101118.	4.3	13
785	Single-route delaminated clay composites for efficient visible-light photo-mineralization of antibiotic-resistant bacteria and associated genes in water. Applied Catalysis B: Environmental, 2021, 292, 120143.	20.2	16
786	One-pot solvothermal synthesis of heterogeneous Bi/Bi <sub>2</sub> WO <sub>6</sub> /BiOBr composite with high adsorption and photocatalytic performance. Journal of Materials Science: Materials in Electronics, 2021, 32, 26480.	2.2	0
787	Crystalline ZnO Photocatalysts Prepared at Ambient Temperature: Influence of Morphology on p-Nitrophenol Degradation in Water. Catalysts, 2021, 11, 1182.	3.5	14
788	Novel 3D hierarchical nanostructure of Fe <sub>3</sub> O <sub>4</sub> /ZnO hybrid composites for enhanced solar light photocatalytic performance. Journal of Materials Science: Materials in Electronics, 2021, 32, 25018-25032.	2.2	4
789	CuWO <sub>4</sub> /CuS heterojunction photocatalyst for the application of visible-light-driven photodegradation of dye pollutions. Journal of Alloys and Compounds, 2022, 893, 162181.	5.5	25
790	Photocatalysts synthesized via plant mediated extracts for degradation of organic compounds: A review of formation mechanisms and application in wastewater treatment. Sustainable Chemistry and Pharmacy, 2021, 22, 100453.	3.3	11
791	Green Synthesis of Triangular ZnO Nanoparticles Using Azadirachta indica Leaf Extract and Its Shape Dependency for Significant Antimicrobial Activity: Joint Experimental and Theoretical Investigation. Journal of Cluster Science, 2022, 33, 2517-2530.	3.3	9
792	State-of-the-art and prospects of Zn-containing layered double hydroxides (Zn-LDH)-based materials for photocatalytic water remediation. Chemosphere, 2021, 278, 130367.	8.2	34
793	Highly Porous SnO <sub>2</sub> /TiO <sub>2</sub> Heterojunction Thin-Film Photocatalyst Using Gas-Flow Thermal Evaporation and Atomic Layer Deposition. Catalysts, 2021, 11, 1144.	3.5	9
794	Improve photocatalytic performance of ZnO through coordination of ZnO/ZnIn <sub>2</sub> S <sub>4</sub> heterojunction and graphene oxide. European Physical Journal Plus, 2021, 136, 1.	2.6	1
795	TiO <sub>2</sub> /Polyethersulphone films for photocatalytic degradation of acetaminophen in aqueous solution. Journal of Molecular Liquids, 2021, 338, 116692.	4.9	21
796	SWOT analysis of photocatalytic materials towards large scale environmental remediation. Current Opinion in Chemical Engineering, 2021, 33, 100696.	7.8	51
797	The enhanced photocatalytic activity of ZnO nanorods/CuO nanourchins composite prepared by chemical bath precipitation. Materials Science and Engineering B: Solid-State Materials for Advanced Technology, 2021, 271, 115262.	3.5	26
798	A direct dual Z-scheme 3DOM SnS <sub>2</sub> @ZnS/ZrO <sub>2</sub> composite with excellent photocatalytic degradation and hydrogen production performance. Chemosphere, 2021, 279, 130882.	8.2	31

#	ARTICLE	IF	CITATIONS
799	Recent advances on Bi <sub>2</sub> WO <sub>6</sub> -based photocatalysts for environmental and energy applications. Chinese Journal of Catalysis, 2021, 42, 1413-1438.	14.0	208
800	Synthesis and characterisation of ammonia intercalated zinc hydroxide chloride hydrate: a potential photocatalyst for methyl orange degradation under sunlight. Materials Research Innovations, 0, , 1-10.	2.3	0
801	Optimisation study for photocatalytic degradation of methylene blue using TiO <sub>2</sub> supported on Agar-Agar and doped with silver. International Journal of Environmental Analytical Chemistry, 0, , 1-16.	3.3	1
802	Optimization and modeling of efficient photocatalytic TiO <sub>2</sub> -ZnO composite preparation parameters by response surface methodology. Journal of Environmental Chemical Engineering, 2021, 9, 106417.	6.7	12
803	Influence of precursor ions on the structural morphological and optical properties of ZnO nanostructure and cytotoxicity on murine NIH 3T3 cells. Chemical Papers, 0, , 1.	2.2	2
804	Nitrogenated CQD decorated ZnO nanorods towards rapid photodegradation of rhodamine B: A combined experimental and theoretical approach. Applied Surface Science, 2021, 563, 150315.	6.1	25
805	Multifunctional ZnO nanoparticles bio-fabricated from Canna indica L. flowers for seed germination, adsorption, and photocatalytic degradation of organic dyes. Journal of Hazardous Materials, 2021, 420, 126586.	12.4	90
806	Antiviral nanoparticles for sanitizing surfaces: A roadmap to self-sterilizing against COVID-19. Nano Today, 2021, 40, 101267.	11.9	68
807	Hydro/solvothermally synthesized visible light driven modified SnO <sub>2</sub> heterostructure as a photocatalyst for water remediation: A review. Environmental Advances, 2021, 5, 100081.	4.8	6
808	Novel, facile and first time synthesis of zinc oxide nanoparticles using leaves extract of Citrus reticulata for photocatalytic and antibacterial activity. Optik, 2021, 243, 167495.	2.9	14
809	Optimal preparation of catalytic Metal-organic framework derivatives and their efficient application in advanced oxidation processes. Chemical Engineering Journal, 2021, 421, 127817.	12.7	53
810	Enhancement in carrier separation of ZnO-H <sub>2</sub> O <sub>3</sub> -Sm <sub>2</sub> O <sub>3</sub> heterostructured nanocomposite with rGO and PANI supported direct dual Z-scheme for antimicrobial inactivation and sunlight driven photocatalysis. Advanced Powder Technology, 2021, 32, 3770-3787.	4.1	46
811	Lanthanide ions doped ZnO based photocatalysts. Separation and Purification Technology, 2021, 274, 118853.	7.9	26
812	Improve thermal performance of Simulated-Body-Fluid as a solution with an ion concentration close to human blood plasma, by additive Zinc Oxide and its composites: ZnO/Carbon Nanotube and ZnO/Hydroxyapatite. Journal of Molecular Liquids, 2021, 342, 117457.	4.9	13
813	A synergistic effect between S-scheme heterojunction and Noble-metal free cocatalyst to promote the hydrogen evolution of ZnO/CdS/MoS <sub>2</sub> photocatalyst. Chemical Engineering Journal, 2021, 424, 130368.	12.7	90
814	Synthesis and properties of ZnO on nonwoven PET fiber. Chemical Physics, 2021, 551, 111335.	1.9	2
815	Alkali influence on ZnO and Ag-doped ZnO nanostructures formation using the microwave-assisted hydrothermal method for fungicidal inhibition. Journal of Physics and Chemistry of Solids, 2021, 158, 110234.	4.0	9
816	Recent progress in Tungsten disulphide based Photocatalyst for Hydrogen Production and Environmental Remediation. Chemical Engineering Journal, 2021, 424, 130393.	12.7	25

#	ARTICLE	IF	CITATIONS
817	Photocatalytic performance of coupled semiconductor ZnO–CuO nanocomposite coating prepared by a facile brass anodization process. <i>Materials Science in Semiconductor Processing</i> , 2021, 135, 106083.	4.0	38
818	Advancement in upconversion nanoparticles based NIR-driven photocatalysts. <i>Renewable and Sustainable Energy Reviews</i> , 2021, 151, 111631.	16.4	47
819	Coordination-driven self-assembly of nanoZnO hybrids with tripodal zinc terpyridyl-viologen complex multilayers and their photochromic properties. <i>Colloids and Surfaces A: Physicochemical and Engineering Aspects</i> , 2021, 629, 127456.	4.7	1
820	Synthesis of novel ZnO/Geopolymer nanocomposite photocatalyst for degradation of congo red dye under visible light. <i>Environmental Nanotechnology, Monitoring and Management</i> , 2021, 16, 100521.	2.9	4
821	Visible light responsive rutile TiO <sub>2</sub> photocatalysts mixed with cement: Enhancement effect driven by TiO <sub>2</sub> /cement interfaces. <i>Applied Surface Science</i> , 2021, 570, 151136.	6.1	12
822	Design of 3D-supramolecular metal organic framework of zinc as photocatalyst for the degradation of methylene blue through advanced oxidation process. <i>Journal of Molecular Structure</i> , 2021, 1245, 131039.	3.6	11
823	Synthesis of CdS/GO modified ZnO heterostructure for visible light dye degradation applications. <i>Applied Surface Science</i> , 2021, 570, 151260.	6.1	18
824	Sonocatalytic degradation of amoxicillin from aquaculture effluent by zinc oxide nanoparticles. <i>Environmental Nanotechnology, Monitoring and Management</i> , 2021, 16, 100513.	2.9	5
825	UV induced photocatalytic and antibacterial studies of zinc oxide nanoflowers prepared via casein assisted low-temperature method. <i>Optik</i> , 2021, 247, 168034.	2.9	2
826	Photocatalytic activity of Sn-doped ZnO synthesized via peroxide route. <i>Journal of Physics and Chemistry of Solids</i> , 2022, 160, 110340.	4.0	12
827	Green Method, Optical and Structural Characterization of ZnO Nanoparticles Synthesized Using Leaves Extract of <i>M. oleifera</i> . <i>Journal of Renewable Materials</i> , 2022, 10, 833-847.	2.2	3
828	ZnO-CdO nanocomposites incorporated with graphene oxide nanosheets for efficient photocatalytic degradation of bisphenol A, thymol blue and ciprofloxacin. <i>Journal of Hazardous Materials</i> , 2022, 424, 127332.	12.4	25
829	Synthesis of carbon dots with high photocatalytic reactivity by tailoring heteroatom doping. <i>Journal of Colloid and Interface Science</i> , 2022, 605, 330-341.	9.4	30
830	Hierarchical ZnO nano-spines grown on a carbon fiber seed layer for efficient VOC removal and airborne virus and bacteria inactivation. <i>Journal of Hazardous Materials</i> , 2022, 424, 127262.	12.4	24
831	Elimination of rhodamine B from textile wastewater using nanoparticle photocatalysts: A review for sustainable approaches. <i>Chemosphere</i> , 2022, 287, 132162.	8.2	95
832	Advances of nanomaterials for air pollution remediation and their impacts on the environment. <i>Chemosphere</i> , 2022, 287, 132083.	8.2	53
833	Oxygen defects-induced charge transfer in Bi <sub>7</sub> O <sub>9</sub> I <sub>3</sub> for enhancing oxygen activation and visible-light degradation of BPA. <i>Chemosphere</i> , 2022, 286, 131783.	8.2	17
834	Synthesis of a novel ZnAl <sub>2</sub> O <sub>4</sub> /CuS nanocomposite and its characterization for photocatalytic degradation of acid red 1 under UV illumination. <i>Journal of Alloys and Compounds</i> , 2021, 889, 161708.	5.5	21

#	ARTICLE	IF	CITATIONS
835	Toxicity evaluation and oxidative stress response of fumaronitrile, a persistent organic pollutant (POP) of industrial waste water on tilapia fish ( <i>Oreochromis mossambicus</i> ). <i>Environmental Research</i> , 2022, 204, 112030.	7.5	23
836	Seed priming with zinc oxide nanoparticles downplayed ultrastructural damage and improved photosynthetic apparatus in maize under cobalt stress. <i>Journal of Hazardous Materials</i> , 2022, 423, 127021.	12.4	122
837	TiO <sub>2</sub> based Z-scheme photocatalysts for energy and environmental applications. , 2021, , 257-282.		1
838	Applications of Photochemical Oxidation in Textile Industry. , 2021, , 1975-2003.		1
839	ZnO in solar cell and ultraviolet detectors. , 2021, , 319-350.		1
840	A review on the use of DFT for the prediction of the properties of nanomaterials. <i>RSC Advances</i> , 2021, 11, 27897-27924.	3.6	62
841	Preparation of ZnO/two-layer self-doped black TiO <sub>2</sub> nanotube arrays and their enhanced photochemical properties. <i>RSC Advances</i> , 2021, 11, 2307-2314.	3.6	9
842	Enzymes and phytochemicals from neem extract robustly tuned the photocatalytic activity of ZnO for the degradation of malachite green (MG) in aqueous media. <i>Research on Chemical Intermediates</i> , 2021, 47, 1581-1599.	2.7	16
843	Geopolymer coating paste on concrete for photocatalytic performance. <i>AIP Conference Proceedings</i> , 2021, , .	0.4	5
844	Nanoparticles of two ZnO Precursors as an Encapsulating Matrix of Mangiferin: Associated Studies to Cytotoxic Effects on Liver Cancer Cells Hep-G2 and Healthy Lung Cell Beas-2B. <i>Journal of Cluster Science</i> , 2022, 33, 163-171.	3.3	5
845	Sulfur precursor and citric acid effect on SnS <sub>2</sub> nanoparticles and their influence on the photodegradation activity of selected organic compounds. <i>Environmental Science and Pollution Research</i> , 2021, 28, 18234-18245.	5.3	6
846	Oxyhalides-based photocatalysts: the case of bismuth oxyhalides. , 2021, , 441-474.		1
847	Facile synthesis of silver decorated reduced graphene oxide@zinc oxide as ternary nanocomposite: an efficient photocatalyst for the enhanced degradation of organic dye under UV–visible light. <i>Journal of Materials Science</i> , 2021, 56, 7434-7450.	3.7	17
848	Non-noble metallic Cu with three different roles in a Cu doped ZnO/Cu/g-C <sub>3</sub> N <sub>4</sub> heterostructure for enhanced Z-scheme photocatalytic activity. <i>New Journal of Chemistry</i> , 2021, 45, 13499-13511.	2.8	17
849	Microscopic Study of Bovine Serum Albumin Adsorption on Zinc Oxide (0001) Surface. <i>Physica Status Solidi (A) Applications and Materials Science</i> , 2021, 218, 2000558.	1.8	4
850	Band Gap Tuning of Photo Fenton-like Fe <sub>3</sub> O <sub>4</sub> /C Catalyst through Oxygen Vacancies for Advanced Visible Light Photocatalysis. <i>Materials Advances</i> , 0, , .	5.4	15
854	Nanotechnology's application in Type 1 diabetes. <i>Wiley Interdisciplinary Reviews: Nanomedicine and Nanobiotechnology</i> , 2020, 12, e1645.	6.1	7
855	Materials for Solar Cell Applications: An Overview of TiO <sub>2</sub> , ZnO, Upconverting Organic and Polymer-Based Solar Cells. , 2020, , 55-78.		6



#	ARTICLE	IF	CITATIONS
856	Applications of Algal Nanoparticles in Agriculture. , 2019, , 265-280.		1
857	Preparation of Carbon-Based Photo-catalyst for Degradation of Phenols. Green Energy and Technology, 2021, , 293-323.	0.6	2
858	Evaluation of Au@ZnO, ZnO/Ag <sub>2</sub> CO <sub>3</sub> and Ag@TiO <sub>2</sub> as Photocatalyst for Wastewater Treatment. Topics in Catalysis, 2020, 63, 1286-1301.	2.8	11
859	Response of bioaerosol cells to photocatalytic inactivation with ZnO and TiO <sub>2</sub> impregnated onto Perlite and Poraver carriers. Frontiers of Environmental Science and Engineering, 2021, 15, 43.	6.0	9
860	Role of Photocatalysts in Organic Pollutants Degradation. , 2020, , .		1
861	Mesoporous rGO@ZnO composite: Facile synthesis and excellent water treatment performance by pesticide adsorption and catalytic oxidative dye degradation. Chemical Engineering Research and Design, 2020, 160, 254-263.	5.6	21
862	Activated carbon immobilized WO <sub>3</sub> nanocuboids: Adsorption/photocatalysis synergy for the enhanced removal of organic pollutants. Inorganic Chemistry Communication, 2020, 121, 108215.	3.9	25
863	A novel synthesis of porous TiO <sub>2</sub> nanotubes and sequential application to dye contaminant removal and Cr(VI) visible light catalytic reduction. Journal of Environmental Chemical Engineering, 2020, 8, 104061.	6.7	34
864	A novel tubular up-flow magnetic film photocatalytic system optimized by main factors control for efficient removal of chlorophenols wastewater. Journal of Hazardous Materials, 2020, 398, 122963.	12.4	12
865	Microwave induced synthesis of ZnO nanorods and their efficacy as a drug carrier with profound anticancer and antibacterial properties. Toxicology Reports, 2019, 6, 176-185.	3.3	59
866	Understanding and Improving Photocatalytic Activity of Pd-Loaded BiVO <sub>4</sub> Microspheres: Application to Visible Light-Induced Suzuki-Miyaura Coupling Reaction. ACS Applied Materials & Interfaces, 2021, 13, 1714-1722.	8.0	16
867	Enhancing Sunlight Control of Interfacial Magnetism by Introducing the ZnO Layer for Electron Harvesting. ACS Applied Materials & Interfaces, 2021, 13, 2018-2024.	8.0	6
868	ZnO Nanoparticles for Quantum-Dot-Based Light-Emitting Diodes. ACS Applied Nano Materials, 2020, 3, 5203-5211.	5.0	60
869	Synthesis of Poly(vinyl alcohol)-Aided ZnO/Mn <sub>2</sub> O <sub>3</sub> Nanocomposites for Acid Orange-8 Dye Degradation: Mechanism and Antibacterial Activity. ACS Omega, 2021, 6, 954-964.	3.5	42
870	Carpogenic ZnO nanoparticles: amplified nanophotocatalytic and antimicrobial action. IET Nanobiotechnology, 2019, 13, 150-159.	3.8	19
871	Antioxidant activity and antifungal fractional inhibitory concentration indices of zinc oxide nanoparticles in combination with carbendazim, mancozeb, and thiram. Micro and Nano Letters, 2019, 14, 1037-1040.	1.3	5
872	Structure, microstructure, optical and photocatalytic properties of Mn-doped ZnO nanoparticles. Materials Research Express, 2020, 7, 015079.	1.6	54
873	Fabrication of Highly Active Ag <sub>3</sub> PO <sub>4</sub> /ZnO/Diatomite for Visible Light Photocatalytic Degradation of Tetracycline Hydrochloride. Russian Journal of Applied Chemistry, 2020, 93, 1615-1627.	0.5	4

#	ARTICLE	IF	CITATIONS
874	A Review on Enhancing the Antibacterial Activity of ZnO: Mechanisms and Microscopic Investigation. Nanoscale Research Letters, 2020, 15, 190.	5.7	185
875	Nano zinc oxide – An alternate zinc supplement for livestock. Veterinary World, 2020, 13, 121-126.	1.7	11
876	Removal of Pharmaceutical Contaminants in Wastewater Using Nanomaterials: A Comprehensive Review. Current Drug Metabolism, 2019, 20, 483-505.	1.2	36
877	Synthesis, Characterization, and Photocatalytic Performance of ZnO–Graphene Nanocomposites: A Review. Journal of Composites Science, 2021, 5, 4.	3.0	21
878	Cerium oxide nanoparticles for color removal of indigo carmine and methylene blue solutions. AIMS Materials Science, 2020, 7, 468-485.	1.4	23
879	Summary on Adsorption and Photocatalysis for Pollutant Remediation: Mini Review. Journal of Encapsulation and Adsorption Sciences, 2018, 08, 225-255.	0.3	83
880	Formation of double-cone-shaped ZnO mesocrystals by addition of ethylene glycol to ZnO dissolved choline chloride–urea deep eutectic solvents and observation of their manners of growth. CrystEngComm, 2021, 23, 8367-8378.	2.6	1
881	Photocatalytic Efficiency of Bi-Based Aurivillius Compounds: Critical Review and Discernment of the Factors Involved. , 2021, , 137-165.		1
882	Mesoporous TiO <sub>2</sub> Implanted ZnO QDs for the Photodegradation of Tetracycline: Material Design, Structural Characterization and Photodegradation Mechanism. Catalysts, 2021, 11, 1205.	3.5	6
883	EPR Investigation on Electron Transfer of 2D/3D g-C <sub>3</sub> N <sub>4</sub> /ZnO S–Scheme Heterojunction for Enhanced CO <sub>2</sub> Photoreduction. Advanced Sustainable Systems, 2022, 6, 2100264.	5.3	112
884	Auto combustion synthesis and characterization of Co doped ZnO nanoparticles with boosted photocatalytic performance. Physica B: Condensed Matter, 2022, 625, 413459.	2.7	19
885	Enhanced Photo-Catalytic and Antibacterial Properties of Ni-Doped Cd <sub>0.9</sub> Zn <sub>0.1</sub> S Nanostructures. Journal of Inorganic and Organometallic Polymers and Materials, 2021, 32, 1-14.	3.7	6
886	Progress in the application of surface engineering methods in immobilizing TiO <sub>2</sub> and ZnO coatings for environmental photocatalysis. Catalysis Reviews - Science and Engineering, 2023, 65, 822-873.	12.9	16
887	La-Doped ZnTiO <sub>3</sub> /TiO <sub>2</sub> Nanocomposite Supported on Ecuadorian Diatomaceous Earth as a Highly Efficient Photocatalyst Driven by Solar Light. Molecules, 2021, 26, 6232.	3.8	16
888	Highly impressive activation of persulfate ions by novel ZnO/CuCo<math display="inline">\frac{1}{2}</math> photocatalytic sorption processes for the removal of pollutants from wastewater using polymer metal oxide nanocomposites and associated environmental risks. Environmental Nanotechnology, Monitoring and Management, 2021, 16, 100596.	6.1	15
889	Photocatalytic sorption processes for the removal of pollutants from wastewater using polymer metal oxide nanocomposites and associated environmental risks. Environmental Nanotechnology, Monitoring and Management, 2021, 16, 100596.	2.9	11
890	Characteristic and photocatalytic performance of magnetic photocatalyst Î <sup>2</sup> -Bi <sub>2</sub> O <sub>3</sub> /MnxZn1-â <sup>x</sup> Fe <sub>2</sub> O <sub>4</sub> synthesized by hydrothermal and calcination method. Functional Materials Letters, 0, , .	1.2	0
891	Modifications of conventional organic membranes with photocatalysts for antifouling and self-cleaning properties applied in wastewater filtration and separation processes: A review. Separation Science and Technology, 2022, 57, 1471-1500.	2.5	11

#	ARTICLE	IF	CITATIONS
892	Influence of Physical Dimension and Morphological-Dependent Antibacterial Characteristics of ZnO Nanoparticles Coated on Orthodontic NiTi Wires. BioMed Research International, 2021, 2021, 1-9.	1.9	8
893	Ethylene participates in zinc oxide nanoparticles induced biochemical, molecular and ultrastructural changes in rice seedlings. Ecotoxicology and Environmental Safety, 2021, 226, 112844.	6.0	27
894	ZnO QD covalently coated, GSH/pH dual-responsive drug delivery system for chemotherapeutic/ionic synergistic therapy. Journal of Drug Delivery Science and Technology, 2021, 66, 102908.	3.0	2
895	Facile synthesis of hierarchical porous ZIF-8@TiO <sub>2</sub> for simultaneous adsorption and photocatalytic decomposition of crystal violet. Environmental Nanotechnology, Monitoring and Management, 2021, 16, 100598.	2.9	9
896	Novel ZnO/CuBiS <sub>2</sub> nanocomposites with p-n heterojunctions for persulfate-promoted photocatalytic mitigation of pollutants under visible light. Surfaces and Interfaces, 2021, 27, 101518.	3.0	8
897	CHARACTERIZATION-PERFORMANCE OF ZnO AND ZnO/ZnFe <sub>2</sub> O <sub>4</sub> CATALYST USING ARTIFICIAL AND SOLAR LIGHT FOR MERCURY (II) REDUCTION. Brazilian Journal of Chemical Engineering, 2019, 36, 797-810.	1.3	1
898	Evolution of ZnO-Based Photocatalyst for the Degradation of Pollutants. Environmental Chemistry for A Sustainable World, 2020, , 109-139.	0.5	3
899	Fabrication and photocatalytic properties of porous ZnO architectures. Micro and Nano Letters, 2019, 14, 1244-1248.	1.3	2
900	Experimental Investigations on the Surface Hardness of Synthesized Polystyrene/ZnO Nanocomposites. Lecture Notes in Mechanical Engineering, 2020, , 345-352.	0.4	1
901	Diklofenak'ın Fotokimyasal Oksidasyon Prosesleri ile Arıtılabilirliğinin Araştırılması. El-Cezeri Journal of Science and Engineering, 0, , .	0.1	0
902	The Study of Photoactive Materials. Reviews and Advances in Chemistry, 2020, 10, 73-111.	0.5	1
903	Transition metal incorporated, modified bismuth oxide (Bi <sub>2</sub> O <sub>3</sub> ) nano photo catalyst for deterioration of rosaniline hydrochloride dye as resource for environmental rehabilitation. Journal of the Indian Chemical Society, 2021, 98, 100225.	2.8	17
904	Hybrid nanostructures of Ag/Au-ZnO synthesized by pulsed laser ablation/irradiation in liquid. Surfaces and Interfaces, 2021, 27, 101561.	3.0	6
905	Recyclable and Photocatalytic Properties of ZnFe <sub>2</sub> O <sub>4</sub> /ZnO for Wastewater Treatment and Disinfection. ChemistrySelect, 2020, 5, 15167-15174.	1.5	5
906	Microwave Assisted ZnO Nanoparticles by Simple Precipitation Method: A Novel Approach. International Journal of Nanoscience, 2021, 20, 2150010.	0.7	2
907	Adsorption kinetics of methyl blue using metal-modified barium lanthanum titanate as an effective absorbent. Materials Chemistry and Physics, 2022, 276, 125363.	4.0	10
908	Current advancements on the fabrication, modification, and industrial application of zinc oxide as photocatalyst in the removal of organic and inorganic contaminants in aquatic systems. Journal of Hazardous Materials, 2022, 424, 127416.	12.4	93
909	Adsorption of ZnO nanoclusters on Si terminated (111) surface. AIP Conference Proceedings, 2020, , .	0.4	0

#	ARTICLE	IF	CITATIONS
910	Effects of Rare Earth (Ce, Er, Eu) Doping on Structural and Optical Properties of ZnO Aerogels Synthesized in Supercritical Isopropanol. , 2020, , 63-70.		0
911	Enhanced photocatalytic degradation of tetracycline by RGO-ZnO composite. AIP Conference Proceedings, 2020, , .	0.4	0
912	Synthesis, characterization and antibacterial activity of ZnO nanoparticles. AIP Conference Proceedings, 2020, , .	0.4	0
913	Room Temperature Photoluminescence and Optical Parameters of Micro Rods ZnO Thin Films Deposited on Silicon Substrates. Research & Development in Material Science, 2020, 12, .	0.1	0
914	Growth of ZnO nanorods on different substrates using hydrothermal method. Malaysian Journal of Fundamental and Applied Sciences, 2020, 16, 154-157.	0.8	1
915	Graphene Oxide Supported Cubic ZnO for Enhanced Photodecomposition of Dyes. ChemistrySelect, 2021, 6, 11381-11391.	1.5	2
916	Application of Some Graphene Derivatives to Increase the Efficiency of Stem Cell Therapy. Current Stem Cell Research and Therapy, 2022, 17, 294-300.	1.3	1
917	Catalytic hydrogen evolution reaction on surfaces of metal-nanoparticle-coated zinc-based oxides by first-principles calculations. International Journal of Hydrogen Energy, 2022, 47, 40768-40776.	7.1	3
918	Sunlight-driven photocatalysis of dissolved organic matter: Tracking by excitation emission matrix-parallel factor analysis and optimization using response surface methodology. Environmental Engineering Research, 0, , .	2.5	2
919	Role of Ammonia on the Growth Mechanism of ZnO Films Deposited at Ambient Temperature. ECS Journal of Solid State Science and Technology, 2020, 9, 103002.	1.8	3
920	Zinc Oxide as a Multifunctional Material: From Biomedical Applications to Energy Conversion and Electrochemical Sensing. Environmental Chemistry for A Sustainable World, 2021, , 251-305.	0.5	3
921	Microwave-assisted synthesized porous clay heterostructure-Zn/Si from montmorillonite for citronellal conversion into isopulegol. Materials Research Express, 2020, 7, 105006.	1.6	4
922	Atomic layer deposition ZnO on porous Al <sub>2</sub> O <sub>3</sub> nanofibers film. Journal of Physics: Conference Series, 2020, 1679, 022072.	0.4	0
923	Noble metal enhanced photocatalytic activity of heterostructured TiO <sub>2</sub> spheres with tunable interiors and shells. Functional Materials Letters, 2020, 13, 2050039.	1.2	2
924	A Review for Potential Applications of Zeolite-Based Nanocomposites in Removal of Heavy Metals and Escherichia coli from Drinking Water. Nanotechnologies in Russia, 2020, 15, 686-700.	0.7	3
925	Organic building blocks at inorganic nanomaterial interfaces. Materials Horizons, 2022, 9, 61-87.	12.2	18
926	Cold plasma treatment of ZnO:Er nano- and microrods: The effect on luminescence and defects creation. Journal of Alloys and Compounds, 2022, 895, 162671.	5.5	16
927	Ab initio study of the electronic, optical, and water-splitting properties of Fe-doped ZnO monolayer. Physica E: Low-Dimensional Systems and Nanostructures, 2022, 137, 115059.	2.7	5

#	ARTICLE	IF	CITATIONS
928	SiO <sub>2</sub> Capped-ZnO nanorods for enhanced random laser emission. Optics and Laser Technology, 2022, 147, 107633.	4.6	10
929	Solvothermal Synthesis of ZnO Nanoparticles for Photocatalytic Degradation of Methyl Orange and p-Nitrophenol. Water (Switzerland), 2021, 13, 3224.	2.7	16
930	Construction of layered embedding dual Z-Scheme Bi <sub>2</sub> O <sub>2</sub> CO <sub>3</sub> /g-C <sub>3</sub> N <sub>4</sub> /Bi <sub>2</sub> O <sub>3</sub> : Tetracycline degradation pathway, toxicity analysis and mechanism insight. Separation and Purification Technology, 2022, 282, 120096.	7.9	23
931	Flower-like SnO <sub>2</sub> Nanoparticle Biofabrication Using Pometia pinnata Leaf Extract and Study on Its Photocatalytic and Antibacterial Activities. Nanomaterials, 2021, 11, 3012.	4.1	12
932	Investigations of Mn introduced structural modifications on Ni-doped ZnO diluted magnetic semiconductors and improved magnetic and antibacterial properties. Journal of Molecular Structure, 2022, 1251, 132060.	3.6	8
933	Regenerated cellulose membrane incorporating photocatalytic zinc oxide as a bifunctional membrane for decoloration of methylene blue. Polymers for Advanced Technologies, 0, , .	3.2	2
934	Photocatalytic degradation of methylene blue by ZnO seed layers and 1D nanorods. Materials Today: Proceedings, 2022, 58, 882-885.	1.8	4
935	Integrated photo-absorption and improved charge transport kinetics in atomically thin MoSe <sub>2</sub> -incorporated nanostructured ZnO photo-anodes for dye-sensitized solar cells. Applied Physics A: Materials Science and Processing, 2021, 127, 1.	2.3	2
936	Fabrication and Characterization of Cobalt-Pigmented Anodized Zinc for Photocatalytic Application. , 0, , .		2
937	Effect of the Type of Heterostructures on Photostimulated Alteration of the Surface Hydrophilicity: TiO <sub>2</sub> /BiVO <sub>4</sub> vs. ZnO/BiVO <sub>4</sub> Planar Heterostructured Coatings. Catalysts, 2021, 11, 1424.	3.5	5
938	Role of Metal and Metal Oxides for the Removal of Water Pollutants. Environmental Chemistry for A Sustainable World, 2022, , 99-130.	0.5	0
939	The fabrication of Ti <sub>4</sub> O <sub>7</sub> particle composite modified PbO <sub>2</sub> coating electrode and its application in the electrochemical oxidation degradation of organic wastewater. Journal of Alloys and Compounds, 2022, 897, 162742.	5.5	12
940	Synthesis, characterization of novel ZnO/CuO nanoparticles, and the applications in photocatalytic performance for rhodamine B dye degradation. Environmental Science and Pollution Research, 2022, 29, 22576-22588.	5.3	33
941	Layered g-C <sub>3</sub> N <sub>4</sub> /TiO <sub>2</sub> nanocomposites for efficient photocatalytic water splitting and CO <sub>2</sub> reduction: a review. Materials Today Energy, 2022, 23, 100904.	4.7	38
942	Effect of Mg <sup>2+</sup> ions substitution on phase formation, structural, morphological, and optical properties of Zn <sub>0.1</sub> xMgxO structure. Journal of Materials Science: Materials in Electronics, 2022, 33, 861.	2.2	3
943	Synthesis and characterization of Bi <sub>2</sub> SiO <sub>5</sub> -coated Ag/AgBr photocatalyst with highly efficient decontamination of organic pollutants. Applied Surface Science, 2022, 578, 152074.	6.1	18
944	Morphology engineering of type-II heterojunction nanoarrays for improved sonophotocatalytic capability. Ultrasonics Sonochemistry, 2021, 81, 105849.	8.2	31
945	Modern nanoscience: Convergence of AI, robotics, and colloidal synthesis. Applied Physics Reviews, 2021, 8, .	11.3	18

#	ARTICLE	IF	CITATIONS
946	Synthesis, optical and structural characterisation of ZnS nanoparticles derived from Zn(ii) dithiocarbamate complexes. Open Chemistry, 2021, 19, 1134-1147.	1.9	6
947	Effect of silica concentration on the ZnO-SiO <sub>2</sub> nanocomposites characteristics synthesized by spray pyrolysis method. AIP Conference Proceedings, 2021, , .	0.4	0
948	A comparative study of 0D and 1D Ce-ZnO nanocatalysts in photocatalytic decomposition of organic pollutants. RSC Advances, 2021, 11, 36078-36088.	3.6	5
949	Mineralization of Recalcitrant Pollutants from Wastewater by Solar Nano-photocatalysis. Chemistry in the Environment, 2021, , 357-390.	0.4	0
950	Green Method, Optical and Structural Characterization of ZnO Nanoparticles Synthesized Using Leaves Extract of M. oleifera. Journal of Renewable Materials, 2022, 10, 833-847.	2.2	3
951	Energy Storage, Photocatalytic and Electrochemical Nitrite Sensing of Ultrasound-Assisted Stable Ta <sub>2</sub> O <sub>5</sub> Nanoparticles. Topics in Catalysis, 0, , 1.	2.8	28
952	Influence of nanoscale defects on the improvement of photocatalytic activity of Ag/ZnO. Materials Characterization, 2022, 185, 111718.	4.4	13
953	Zn <sub>1-x</sub> CoxO vs Ag-ZnO photoanodes design via combustion: Characterization and application in photoelectrocatalysis. Colloids and Surfaces A: Physicochemical and Engineering Aspects, 2022, 638, 128261.	4.7	6
954	Interfacial effect of mono (Cu, Ni) and bimetallic (Cu@Ni) decorated ZnO nanoparticles on the sunlight assisted photocatalytic activity. Materials Chemistry and Physics, 2022, 278, 125669.	4.0	7
955	Silver doped zinc oxide nanostructures with antibacterial properties against GFP-expressing antibiotic resistant Escherichia coli. Materials Letters, 2022, 309, 131469.	2.6	4
956	Recent progress on visible-light-driven metal and non-metal doped ZnO nanostructures for photocatalytic degradation of organic pollutants. Materials Science in Semiconductor Processing, 2022, 140, 106390.	4.0	138
957	Donor-acceptor type two-dimensional porphyrin-based covalent organic framework for visible-light-driven heterogeneous photocatalysis. Chemical Engineering Journal, 2022, 432, 134288.	12.7	56
958	A compendium and meta-analysis of flatband potentials for TiO <sub>2</sub> , ZnO, and SnO <sub>2</sub> semiconductors in aqueous media. Chemical Physics Reviews, 2022, 3, .	5.7	9
959	MoS <sub>2</sub> @ZnO nanocomposites for photocatalytic energy conversion and solar applications. Physica B: Condensed Matter, 2022, 628, 413569.	2.7	10
960	Induction of a piezo-potential improves photocatalytic hydrogen production over ZnO/ZnS/MoS <sub>2</sub> Heterostructures. Nano Energy, 2022, 93, 106867.	16.0	41
961	Fouling control in a submerged membrane reactor: Aeration vs membrane oscillations. Chemical Engineering Journal, 2022, 432, 134399.	12.7	16
962	Facile nanostructured zinc oxide coating technique for antibacterial and antifouling air filters with low pressure drop. Journal of Colloid and Interface Science, 2022, 612, 496-503.	9.4	10
963	MOF derived nano-materials: A recent progress in strategic fabrication, characterization and mechanistic insight towards divergent photocatalytic applications. Coordination Chemistry Reviews, 2022, 456, 214392.	18.8	86



#	ARTICLE	IF	CITATIONS
964	Defect emission photoluminescence peak tuning by encapsulation of Au-NPs on ZnO mesoporous nanosponges. <i>Journal of Luminescence</i> , 2022, 244, 118695.	3.1	13
965	Inactivation of Salmonella in steamed fish cake using an in-package combined treatment of cold plasma and ultraviolet-activated zinc oxide. <i>Food Control</i> , 2022, 135, 108772.	5.5	12
966	Noble Metal Modified (002)-Oriented ZnO Hollow Spheres for the Degradation of a Broad Range of Pollutants. <i>SSRN Electronic Journal</i> , 0, , .	0.4	0
967	The Fluorescence Detection of Phenolic Compounds in <i>Plicosepalus curviflorus</i> Extract Using Biosynthesized ZnO Nanoparticles and Their Biomedical Potential. <i>Plants</i> , 2022, 11, 361.	3.5	7
968	Synthesis, characterization, and photocatalytic activity of ZnO nanoparticles using water extract of waste coconut husk. <i>Environmental Science and Pollution Research</i> , 2022, 29, 42837-42848.	5.3	9
969	Large-scale materials for visible light photocatalysis. , 2022, , 511-533.		0
970	ZnO hollow pitchfork: coupled photo-piezocatalytic mechanism for antibiotic and pesticide elimination. <i>Catalysis Science and Technology</i> , 2022, 12, 812-822.	4.1	18
971	Enhanced Photocatalytic Activity of ZnOâ€CdS Composite Nanostructures towards the Degradation of Rhodamine B under Solar Light. <i>Catalysts</i> , 2022, 12, 84.	3.5	22
972	Biomedical application of ZnO nanoscale materials. , 2022, , 407-435.		2
973	Influence of aqueous chloride and bromide ions on bisphenol A degradation efficiency with zinc oxide nanoparticles. <i>Sustainable Environment Research</i> , 2022, 32, .	4.2	0
974	Green synthesis of ZrO <sub>2</sub> nanoparticles and nanocomposites for biomedical and environmental applications: a review. <i>Environmental Chemistry Letters</i> , 2022, 20, 1309-1331.	16.2	77
975	Photocatalytic degradation of methylene blue using ZnO supported on wood waste-derived activated carbon (ZnO/AC). <i>Materials Today: Proceedings</i> , 2022, 57, 1315-1321.	1.8	9
976	Effect of Aluminum Doping Ratios on the Properties of Aluminum-Doped Zinc Oxide Films Deposited by Mist Chemical Vapor Deposition Method Applying for Photocatalysis. <i>Nanomaterials</i> , 2022, 12, 195.	4.1	9
977	Sunlight Control of Ferromagnetic Damping in Photovoltaic/Ferromagnetic Heterostructures. <i>Advanced Functional Materials</i> , 2022, 32, 2111652.	14.9	8
978	Hydrothermal Synthesis and Structures of Unknown Intermediate Phase Zn(HCO <sub>3</sub> ) <sub>2</sub> ·H <sub>2</sub> O Nanoflakes and Final ZnO Nanorods. <i>Inorganic Chemistry</i> , 2022, 61, 2669-2678.	4.0	2
979	Construction of Z-scheme WO <sub>3</sub> -Cu <sub>2</sub> O nanorods array heterojunction for efficient photocatalytic degradation of methylene blue. <i>Inorganic Chemistry Communication</i> , 2022, 138, 109248.	3.9	11
980	Hydrothermal synthesis of In <sub>2</sub> O <sub>3</sub> â€ZnO nanocomposite and their enhanced photocatalytic properties. <i>Applied Physics A: Materials Science and Processing</i> , 2022, 128, 1.	2.3	2
981	Integrating ZnO/CdS Schottky junction for remarkably enhanced photocatalytic performance under solar spectrum. <i>Applied Nanoscience (Switzerland)</i> , 2022, 12, 1613-1626.	3.1	4

#	ARTICLE	IF	CITATIONS
982	Green synthesis of nanomaterials for photocatalytic application. , 2022, , 373-398.		1
983	ZnO-based heterostructures as photocatalysts for hydrogen generation and depollution: a review. Environmental Chemistry Letters, 2022, 20, 1047-1081.	16.2	68
984	Use of nanotechnology for wastewater treatment: potential applications, advantages, and limitations. , 2022, , 223-272.		4
985	Insight into the Growth Mechanism and Photocatalytic Behavior of Tubular Hierarchical ZnO Structures: An Integrated Experimental and Theoretical Approach. Inorganic Chemistry, 2022, 61, 2962-2979.	4.0	10
986	Shape-controlled synthesis of zinc nanostructures mediating macromolecules for biomedical applications. Biomaterials Research, 2022, 26, 4.	6.9	29
987	Effect of doping with sulfur atoms on the electronic and photocatalytic properties of the ZnO(101̂3/40) surface: A DFT+U study. Computational Condensed Matter, 2022, 31, e00654.	2.1	0
988	Superhydrophobic ball clay based ceramic hollow fibre membrane via universal spray coating method for membrane distillation. Separation and Purification Technology, 2022, 288, 120574.	7.9	18
989	Synthesis and characterization of high-performance ZnO/graphene quantum dot composites for photocatalytic degradation of metronidazole. Journal of the Taiwan Institute of Chemical Engineers, 2022, 131, 104180.	5.3	17
990	Study of the optical properties of TiO2 semiconductor nanoparticles synthesized using Salvia rosmarinus and its effect on photocatalytic activity. Optical Materials, 2022, 124, 112039.	3.6	23
991	Facile synthesis and characterization of ZnFe2O4/ZnO nanocomposite: An insight into structure and formation. Radiation Physics and Chemistry, 2022, 193, 109977.	2.8	1
992	Enhanced photocatalytic activity of chemically deposited ZnO nanowires using doping and annealing strategies for water remediation. Applied Surface Science, 2022, 582, 152323.	6.1	15
993	Optical, structural and photocatalytic properties of rare earth element Gd3+ doped MgO nanocrystals. Chemical Physics Letters, 2022, 792, 139384.	2.6	3
994	Prediction of electronic properties of novel ZnSâ€ZnO-recycled expanded polystyrene nanocomposites by DFT. Heliyon, 2022, 8, e08903.	3.2	4
995	In situ-grown ZnO particles on g-C3N4 layers: a direct Z-scheme-driven photocatalyst for the degradation of dye and pharmaceutical pollutants under solar irradiation. Journal of Materials Science: Materials in Electronics, 2022, 33, 9774-9784.	2.2	12
996	Study of photocatalytic degradation efficiency of rGO/ZnO nano-photocatalyst and their performance analysis using scanning Kelvin probe. Journal of Environmental Chemical Engineering, 2022, 10, 107293.	6.7	22
997	Always-on photocatalytic antibacterial facemask with mini UV-LED array. Materials Today Sustainability, 2022, 18, 100117.	4.1	7
998	Treatability study of synthesized silica nanoparticles to reduce pollution load of industrial wastewater. International Journal of Environmental Science and Technology, 2022, 19, 6183-6200.	3.5	4
999	Strategies to Enhance ZnO Photocatalyst's Performance for Water Treatment: A Comprehensive Review. Chemical Record, 2022, 22, e202100299.	5.8	40

#	ARTICLE	IF	CITATIONS
1000	ZnO-based heterostructure constructed using HKUST-1 for enhanced visible-light photocatalytic hydrogen evolution. Applied Catalysis A: General, 2022, 633, 118533.	4.3	9
1001	Recent Progress in the Synthesis and Applications of Composite Photocatalysts: A Critical Review. Small Methods, 2022, 6, e2101395.	8.6	69
1002	Hierarchically Porous ZnO/g-C <sub>3</sub> N <sub>4</sub> S-Scheme Heterojunction Photocatalyst for Efficient H <sub>2</sub> O <sub>2</sub> Production. Langmuir, 2021, 37, 14114-14124.	3.5	165
1004	Evaluation of thermal properties of different shaped BiOCl dispersed PMMA nanocomposites. Materials Today: Proceedings, 2022, 54, 927-932.	1.8	0
1005	On the interface reactions and stability of nonfullerene organic solar cells. Chemical Science, 2022, 13, 4714-4739.	7.4	32
1006	Synthesis and characterization of electrical properties of nanostructured zinc oxide film prepared by spray coated seed layer based hydrothermal method. IOP Conference Series: Materials Science and Engineering, 2022, 1219, 012016.	0.6	0
1007	Solution based process of ZnO nanostructured thin films: A review. IOP Conference Series: Materials Science and Engineering, 2022, 1219, 012014.	0.6	0
1008	Doped zinc oxide nanoceramics for the enhancement of optoelectronic properties. , 2022, , 147-165.		1
1009	Energy-levels well-matched direct Z-scheme ZnNiNdO/CdS heterojunction for elimination of diverse pollutants from wastewater and microbial disinfection. Environmental Science and Pollution Research, 2022, 29, 50317-50334.	5.3	25
1010	Promotional Effects of Nd <sub>2</sub> O <sub>3</sub> Doped Ni/Al <sub>2</sub> O <sub>3</sub> –Y <sub>2</sub> O <sub>3</sub> Catalysts on Oxygen Vacancy and Coking-Resistant in Dry Reforming of Methane. Catalysis Letters, 2023, 153, 19-31.	2.6	6
1011	Evaluation of photocatalytic and corrosion properties of green synthesized zinc oxide nanoparticles. Journal of Materials Science: Materials in Electronics, 2022, 33, 9722.	2.2	8
1012	An Instantaneous Recombination Rate Method for the Analysis of Interband Recombination Processes in ZnO Crystals. Materials, 2022, 15, 1515.	2.9	5
1013	Multifunctional finishing of cotton using zinc oxide and silicon dioxide nanoparticles along with DMDHEU. Research Journal of Textile and Apparel, 2022, ahead-of-print, .	1.1	1
1014	Covalent Triazine Frameworks(CTFs) for Photocatalytic Applications. Chemical Research in Chinese Universities, 2022, 38, 310-324.	2.6	10
1015	Dielectric investigations of pristine and modified ZnO nanoparticles for energy storage devices. Journal of Materials Science: Materials in Electronics, 2022, 33, 9905-9917.	2.2	7
1016	Formation, antimicrobial activity, and biomedical performance of plant-based nanoparticles: a review. Environmental Chemistry Letters, 2022, 20, 2531-2571.	16.2	39
1017	Facile Low-Cost Synthesis of Highly Photocatalytically Active Zinc Oxide Powders. Frontiers in Materials, 2022, 9, .	2.4	7
1018	One pot synthesis of Ag-Au/ZnO nanocomposites: a multi-junction component for sunlight photocatalysis. Energy Sources, Part A: Recovery, Utilization and Environmental Effects, 2022, 44, 758-770.	2.3	1

#	ARTICLE	IF	CITATIONS
1019	Biosynthesized Bimetallic (ZnOSnO <sub>2</sub> ) Nanoparticles for Photocatalytic Degradation of Organic Dyes and Pharmaceutical Pollutants. <i>Catalysts</i> , 2022, 12, 334.	3.5	9
1020	Facile one-pot synthesis of a BiOBr/Bi <sub>2</sub> WO <sub>6</sub> heterojunction with enhanced visible-light photocatalytic activity for tetracycline degradation. <i>Chinese Journal of Chemical Engineering</i> , 2023, 53, 222-231.	3.5	6
1021	Efficient defect control of zinc vacancy in undoped ZnO microtubes for optoelectronic applications. <i>Journal of Applied Physics</i> , 2022, 131, .	2.5	5
1022	Synthesis and characterization of ZnO NRs with spray coated GO for enhanced photocatalytic activity. <i>Ceramics International</i> , 2022, 48, 18238-18245.	4.8	17
1023	Enhanced Photocatalytic Properties of Surfactants Modified ZnO Particles Synthesized Directly via Sonochemistry Technique. <i>ChemistrySelect</i> , 2022, 7, .	1.5	6
1024	Bio-Assisted Preparation of Nano Zinc Oxide and Its Behavior Towards Textile Azo Pollutants. <i>High Energy Chemistry</i> , 2022, 56, 101-108.	0.9	1
1025	Improved luminescence and photocatalytic properties of Sm <sup>3+</sup> -doped ZnO nanoparticles via modified solâ€“gel route: A unified experimental and DFT+U approach. <i>Journal of Rare Earths</i> , 2023, 41, 550-560.	4.8	13
1026	Hydrothermal Synthesis of Cd <sub>0.5</sub> /Zn <sub>0.5</sub> S/ZnO Heterojunctions with Controlled pH and Enhanced Photocatalytic Hydrogen Production Activity. <i>ACS Applied Energy Materials</i> , 2022, 5, 3502-3513.	5.1	18
1027	Synthesis and structure of amorphous SiO <sub>2</sub> /ZnO composites with potential application for azo dye degradation. <i>Materials Today: Proceedings</i> , 2022, 61, 1272-1279.	1.8	6
1028	Porous ZnO Microspheres Grafted with Poly( <i>N</i> -isopropylacrylamide) via SI-ATRP: Reversible Temperature-â€“Controlled Switching of Photocatalysis**. <i>ChemistrySelect</i> , 2022, 7, .	1.5	2
1029	Free-Standing ZnO:Mo Nanorods Exposed to Hydrogen or Oxygen Plasma: Influence on the Intrinsic and Extrinsic Defect States. <i>Materials</i> , 2022, 15, 2261.	2.9	7
1030	Tunable visible emission in nanostructured thin films and bulk ZnO. <i>Journal of Sol-Gel Science and Technology</i> , 2022, 102, 447-453.	2.4	1
1031	Noble metal modified (002)-oriented ZnO hollow spheres for the degradation of a broad range of pollutants. <i>Journal of Environmental Chemical Engineering</i> , 2022, 10, 107655.	6.7	8
1032	One-â€“step synthesis of <sc>ZnS</sc> / <sc>ZnO</sc> using <sc>HMDA</sc> as precursor and active part for high photocatalytic hydrogen production. <i>Journal of Chemical Technology and Biotechnology</i> , 0, , .	3.2	2
1033	Bi-based visible light-driven nano-photocatalyst: the design, synthesis, and its application in pollutant governance and energy development. <i>Nano Today</i> , 2022, 43, 101432.	11.9	45
1034	Enhanced in vitro antibacterial activity of ZnO and Mn-â€“Mg co-doped ZnO nanoparticles: investigation of synthesis, characterization, and impact of dopant. <i>Applied Physics A: Materials Science and Processing</i> , 2022, 128, 1.	2.3	6
1035	Interface engineering of ZnO/In <sub>2</sub> O <sub>3</sub> Z-scheme heterojunction with yolk-shell structure for efficient photocatalytic hydrogen evolution. <i>Applied Surface Science</i> , 2022, 592, 153306.	6.1	19
1036	Photocatalytic Degradation of 1,4-Dioxane and Malachite Green over Zinc Oxide/Cellulose Nanofiber Using UVA/B from Direct Sunlight and a Continuous Flow Reactor. <i>ACS ES&amp;T Water</i> , 2022, 2, 786-797.	4.6	4

#	ARTICLE	IF	CITATIONS
1037	Solvent-assisted synthesis of CoC <sub>2</sub> O <sub>4</sub> nanorods for enhanced charge transfer in dual catalytic activity: Photocatalysis and electrocatalytic oxygen evolution. <i>Materials Chemistry and Physics</i> , 2022, 282, 125948.	4.0	5
1038	Fabrication of a magnetic retrievable dual Z-scheme g-C <sub>3</sub> N <sub>4</sub> /BiVO <sub>4</sub> /CoFe <sub>2</sub> O <sub>4</sub> composite photocatalyst with significantly enhanced activity for the degradation of rhodamine B and hydrogen evolution under visible light. <i>Diamond and Related Materials</i> , 2022, 125, 109004.	3.9	23
1039	Biosynthesis of zinc oxide nanoparticles using <i>Euphorbia milii</i> leaf constituents: Characterization and improved photocatalytic degradation of methylene blue dye under natural sunlight. <i>Journal of the Indian Chemical Society</i> , 2022, 99, 100436.	2.8	12
1040	Potential of deep eutectic solvent in photocatalyst fabrication methods for water pollutant degradation: A review. <i>Journal of Environmental Chemical Engineering</i> , 2022, 10, 107422.	6.7	15
1041	Visible-light driven photocatalytic performance of eco-friendly cobalt-doped ZnO nanoarrays: Influence of morphology, cobalt doping, and photocatalytic efficiency. <i>Spectrochimica Acta - Part A: Molecular and Biomolecular Spectroscopy</i> , 2022, 274, 121103.	3.9	18
1042	A novel metal-organic framework-derived ZnO@ZIF-8 adsorbent with high efficiency for Pb (II) from solution: Performance and mechanisms. <i>Journal of Molecular Liquids</i> , 2022, 356, 119057.	4.9	15
1043	Fabrication of Bi <sub>2</sub> Sn <sub>2</sub> O <sub>7</sub> @MIL-100(Fe) composite photocatalyst with enhanced superoxide-radical-dominated photocatalytic activity for ciprofloxacin degradation. <i>Journal of Molecular Structure</i> , 2022, 1258, 132657.	3.6	16
1044	In-situ construction of ZnO/Sb <sub>2</sub> MoO <sub>6</sub> nano-heterostructure for efficient visible-light photocatalytic conversion of N <sub>2</sub> to NH <sub>3</sub> . <i>Surfaces and Interfaces</i> , 2022, 30, 101844.	3.0	8
1045	Facile synthesis of AgIO <sub>3</sub> /BiOI/O <sub>3</sub> Z-scheme binary heterojunction with enhanced photocatalytic performance for diverse persistent organic pollutants degradation. <i>Applied Surface Science</i> , 2022, 588, 152966.	6.1	22
1046	Visible-light-triggered persulfate activation by CuCo <sub>2</sub> S <sub>4</sub> modified ZnO photocatalyst for degradation of tetracycline hydrochloride. <i>Colloids and Surfaces A: Physicochemical and Engineering Aspects</i> , 2022, 642, 128640.	4.7	19
1047	Comprehensive characterization of glycerol/ZnO green nanofluids for advances in multifunctional soft material technologies. <i>Journal of Molecular Liquids</i> , 2022, 355, 118925.	4.9	14
1048	Long-term effect of weather in Dfb climate subtype on properties of hydrophobic coatings on sandstone. <i>Journal of Building Engineering</i> , 2022, 52, 104383.	3.4	1
1049	Size-dependent spectroscopic insight into the steady-state and time-resolved optical properties of ZnO photocatalysts. <i>Materials Science in Semiconductor Processing</i> , 2022, 145, 106644.	4.0	11
1050	Precisely engineered type II ZnO-CuS based heterostructure: A visible light driven photocatalyst for efficient mineralization of organic dyes. <i>Applied Surface Science</i> , 2022, 590, 153053.	6.1	18
1051	Janus Aluminum Oxysulfide Al <sub>2</sub> OS: A promising 2D direct semiconductor photocatalyst with strong visible light harvesting. <i>Applied Surface Science</i> , 2022, 589, 152997.	6.1	21
1052	Nano-remediation technologies for the sustainable mitigation of persistent organic pollutants. <i>Environmental Research</i> , 2022, 211, 113060.	7.5	47
1053	Halides and oxyhalides-based photocatalysts for abatement of organic water contaminants – An overview. <i>Environmental Research</i> , 2022, 212, 113149.	7.5	12
1054	Synthesis of Photoactive ZnO@SnO <sub>2</sub> @Ag(AgCl) Nanomaterials for Medical and Ecological Applications and Study of Their Structure and Properties. <i>Optics and Spectroscopy (English Translation of Optika i Spektroskopiya)</i> , 2022, 107, 1074314.	0.78	1

#	ARTICLE	IF	CITATIONS
1055	Nanoscale Confinement of Photo-Injected Electrons at Hybrid Interfaces. Journal of Physical Chemistry Letters, 2021, 12, 11951-11959.	4.6	1
1056	Excellent visible light photocatalytic degradation and mechanism insight of Co <sup>2+</sup> -doped ZnO nanoparticles. Applied Physics A: Materials Science and Processing, 2022, 128, 1.	2.3	7
1057	Studies on the photocatalytic activity molybdenum doped cadmium selenide nanoparticles towards indigo carmine dye degradation under solar light. Phosphorus, Sulfur and Silicon and the Related Elements, 2022, 197, 192-199.	1.6	1
1058	Influencing Factors in the Synthesis of Photoactive Nanocomposites of ZnO/SiO <sub>2</sub> -Porous Heterostructures from Montmorillonite and the Study for Methyl Violet Photodegradation. Nanomaterials, 2021, 11, 3427.	4.1	8
1059	Cerium-, Europium- and Erbium-Modified ZnO and ZrO <sub>2</sub> for Photocatalytic Water Treatment Applications: A Review. Catalysts, 2021, 11, 1520.	3.5	11
1060	Design and characterization of single bilayer ZnO/Al <sub>2</sub> O <sub>3</sub> film by ultrasonically spray pyrolysis and its application in photocatalysis. Superlattices and Microstructures, 2021, , 107113.	3.1	3
1061	Variation of pH and Composite Dosage on the Photocatalytic Activity for ZnO/epoxy Nanocomposites. Iraqi Journal of Physics, 2021, 19, 33-40.	0.4	2
1062	Fabrication of ZnO Nanobrushes by H <sub>2</sub> â€C <sub>2</sub> H <sub>2</sub> Plasma Etching for H <sub>2</sub> Sensing Applications. ACS Applied Materials & Interfaces, 2021, 13, 61758-61769.	8.0	9
1063	Hierarchical ZnO Nanosheet-Reduced Graphene Oxide Composites for Photocatalytic Ethylene Oxidation. ACS Applied Nano Materials, 2022, 5, 1828-1835.	5.0	14
1064	Lead-free hybrid perovskite photocatalysts: surface engineering, charge-carrier behaviors, and solar-driven applications. Journal of Materials Chemistry A, 2022, 10, 12296-12316.	10.3	29
1065	The effect of Mn and Co dual-doping on the structural, optical, dielectric and magnetic properties of ZnO nanostructures. RSC Advances, 2022, 12, 11923-11932.	3.6	31
1066	Surface modification of <sc>ZnO</sc> quantum dots coated polylactic acid knitted fabric for photocatalytic application. Journal of Applied Polymer Science, 2022, 139, .	2.6	6
1067	Green synthesis and characterization of Ag-doped ZnO nanofibers for photodegradation of MB, RhB and MO dye molecules. Journal of the Korean Ceramic Society, 2022, 59, 655-670.	2.3	19
1068	Preparation of separable MnFe <sub>2</sub> O <sub>4</sub> /ZnO/CQDs as a visible light photocatalyst for Gentamicin treatment. Materials Chemistry and Physics, 2022, 286, 126123.	4.0	8
1069	Recent advances in ZnO-based photosensitizers: Synthesis, modification, and applications in photodynamic cancer therapy. Journal of Colloid and Interface Science, 2022, 621, 440-463.	9.4	13
1070	Structural and optical properties of ZnO nanorods: The effect of concentration and pH of the growth solution. Optical Materials, 2022, 127, 112295.	3.6	3
1073	Recent Advances in the Application and Mechanism of Carbon Dots/Metalâ€Organic Frameworks Hybrids in Photocatalysis and the Detection of Environmental Pollutants. Chemistry - an Asian Journal, 2022, 17, .	3.3	5
1074	Photocatalytic Degradation of Methylene Blue, Rhodamine B, Methyl Orange and Eriochrome Black T Dyes by Modified ZnO Nanocatalysts: A Concise Review. SSRN Electronic Journal, 0, , .	0.4	1



#	ARTICLE	IF	CITATIONS
1075	Synthesis of photocatalytic pore size-tuned ZnO molecular foams. Journal of Materials Chemistry A, 2022, 10, 11542-11552.	10.3	7
1076	Zinc oxide nanostructures. , 2022, , 235-262.		4
1077	Wo3@Zno Nanoarrays Photoanode for Photoelectrochemical Production of H2o2. SSRN Electronic Journal, 0, , .	0.4	0
1078	Hydrogen Production as a Clean Energy Carrier through Heterojunction Semiconductors for Environmental Remediation. Energies, 2022, 15, 3222.	3.1	10
1079	Microstructural study and crystallite size analysis of chemically grown bougainvillea flower-like zinc oxide nanostructures. Materials Today: Proceedings, 2022, , .	1.8	0
1080	2D Covalent Organic Frameworks as Photocatalysts for Solar Energy Utilization. Macromolecular Rapid Communications, 2022, 43, e2200108.	3.9	17
1081	Recent progress in zinc oxide nanomaterials and nanocomposites: From synthesis to applications. Ceramics International, 2022, 48, 22609-22628.	4.8	19
1082	A critical view of the contributions of photoelectrochemical technology to pharmaceutical degradation. Journal of Environmental Chemical Engineering, 2022, 10, 107859.	6.7	5
1083	Hierarchical Hollow Zinc Oxide Nanocomposites Derived from Morphologyâ€Tunable Coordination Polymers for Enhanced Solar Hydrogen Production. Angewandte Chemie, 2022, 134, .	2.0	4
1084	Highâ€Efficiency Adsorptive Removal of Phenol from Aqueous Solution Using Natural Red Clay and ZnO Nanoparticles. ChemistrySelect, 2022, 7, .	1.5	0
1085	Fabrication and Catalytic Efficiency of ZnO/PVP Nanocatalysts: A Tremendous Applicant for Methyl Orange Dye Degradation in Aqueous Medium. Journal of Nano Research, 0, 73, 121-138.	0.8	0
1086	Hierarchical Hollow Zinc Oxide Nanocomposites Derived from Morphologyâ€Tunable Coordination Polymers for Enhanced Solar Hydrogen Production. Angewandte Chemie - International Edition, 2022, 61, .	13.8	26
1087	Effective photocatalytic degradation of organic dyes using ZNC/rGO nanocomposite photocatalyst derived from ZIF-8/rGO thermolysis for water treatment. Journal of Photochemistry and Photobiology A: Chemistry, 2022, 430, 114001.	3.9	14
1088	Ru(N^N)<sub>3</sub>â€Metalloligand Pillared Zr<sub>6</sub>â€Organic Layers for Aerobic Photooxidation. European Journal of Inorganic Chemistry, 2022, 2022, .	2.0	2
1089	Advances in Nanomaterial-Based Platforms to Combat COVID-19: Diagnostics, Preventions, Therapeutics, and Vaccine Developments. ACS Applied Bio Materials, 2022, 5, 2431-2460.	4.6	37
1090	Preparation and Photocatalytic Activity of Hexagonal Plate-like ZnO Particles Using Anionic Surfactants. Journal of Oleo Science, 2022, , .	1.4	1
1091	Solar reclamation of groundwater and agro-wastewater polluted with pesticide residues using binary semiconductors and persulfates for their reuse in crop irrigation. , 2022, , 267-293.		1
1092	Natural solar activation of modified zinc oxides with rare earth elements (Ce, Yb) and Fe for the simultaneous disinfection and decontamination of urban wastewater. Chemosphere, 2022, 303, 135017.	8.2	4

#	ARTICLE	IF	CITATIONS
1093	Photocatalytic degradation of MB by novel and environmental ZnO/Bi <sub>2</sub> WO <sub>6</sub> -CC hierarchical heterostructures. <i>Materials Characterization</i> , 2022, 189, 111961.	4.4	17
1094	Enhanced visible light photocatalytic activity of magnetic cobalt doped BiFeO <sub>3</sub> . <i>Surfaces and Interfaces</i> , 2022, 31, 102050.	3.0	8
1095	Zn <sub>0.97-x</sub> Cu <sub>0.03</sub> V <sub>x</sub> O ( $x = 0, 0.02, 0.04$ ) hexagonal tube and microrods structures: Optical, refractive index, electrical and solar photocatalytic properties. <i>Optical Materials</i> , 2022, 129, 112475.	3.6	6
1096	Photocatalytic nanohybrid membranes for highly efficient wastewater treatment: A comprehensive review. <i>Journal of Environmental Management</i> , 2022, 317, 115357.	7.8	17
1097	Interfacial Engineering of Metal Oxide Nanoparticles for Improving Mechanical Performance and Flame Retardancy of Polymer Nanocomposites Based on the Host-Guest Complex. <i>SSRN Electronic Journal</i> , 0, , .	0.4	0
1099	Photocatalytic activity of nanosized ZnO:Ho films deposited by explosive evaporation at degradation of toluene in air. <i>Journal of Physical Studies</i> , 2022, 26, .	0.5	1
1100	A novel foam glass obtained from solid waste: A sustainable strategy for application in the degradation of an environmental pollutant. <i>Ceramics International</i> , 2022, 48, 26351-26360.	4.8	1
1101	Application of Response Surface Methodology for Optimization of Nanosized Zinc Oxide Synthesis Conditions by Electrospinning Technique. <i>Nanomaterials</i> , 2022, 12, 1733.	4.1	4
1102	Solar-photovoltaic electrocoagulation of wastewater from a chocolate manufacturing industry: Anodic material effect (aluminium, copper and zinc) and life cycle assessment. <i>Journal of Environmental Chemical Engineering</i> , 2022, 10, 107969.	6.7	7
1103	Role of polyaniline in accomplishing a sustainable environment: recent trends in polyaniline for eradicating hazardous pollutants. <i>Environmental Science and Pollution Research</i> , 2022, 29, 49598-49631.	5.3	9
1104	Photocatalytic degradation of methyl red using seaweed mediated zinc oxide nanoparticles. <i>Biocatalysis and Agricultural Biotechnology</i> , 2022, 43, 102384.	3.1	10
1105	Controlling the Morphology of Barrel-Shaped Nanostructures Grown via CuZn Electro-Oxidation. <i>Materials</i> , 2022, 15, 3961.	2.9	3
1106	Synthesis of ZnO nanoparticles using <i>Sapindus rarak</i> DC fruit pericarp extract for rhodamine B photodegradation. <i>Inorganic Chemistry Communication</i> , 2022, 141, 109593.	3.9	10
1107	Conducting polymer based visible light photocatalytic composites for pollutant removal: Progress and prospects. <i>Environmental Technology and Innovation</i> , 2022, 28, 102698.	6.1	16
1108	Sonochemical synthesis and characterization of CuInS <sub>2</sub> nanostructures using new sulfur precursor and their application as photocatalyst for degradation of organic pollutants under simulated sunlight. <i>Arabian Journal of Chemistry</i> , 2022, 15, 104007.	4.9	8
1109	Enhanced photodegradation of acetaminophen over Sr@TiO <sub>2</sub> /UiO-66-NH <sub>2</sub> heterostructures under solar light irradiation. <i>Chemical Engineering Journal</i> , 2022, 446, 137229.	12.7	5
1110	Charge Carrier Management in Semiconductors: Modeling Charge Transport and Recombination. <i>Springer Handbooks</i> , 2022, , 365-398.	0.6	2
1111	Bismuth ferrite (BiFeO <sub>3</sub> ) perovskite-based advanced nanomaterials with state-of-the-art photocatalytic performance in water clean-up. <i>Environmental Science: Water Research and Technology</i> , 0, , .	2.4	6

#	ARTICLE	IF	CITATIONS
1112	One-step construction of Y, C, and O tridoped g-C <sub>3</sub> N <sub>4</sub> as a bifunctional photocatalyst for H <sub>2</sub> evolution and organic pollutant degradation under visible light irradiation. Sustainable Energy and Fuels, 2022, 6, 3858-3871.	4.9	9
1113	One-step fabrication and photocatalytic performance of sea urchin-like CuO/ZnO heterostructures. New Journal of Chemistry, 2022, 46, 16078-16089.	2.8	6
1114	Towards Bio-Safe and Easily Redispersible Bare ZnO Quantum Dots Engineered Via Organometallic Wet-Chemical Processing. SSRN Electronic Journal, 0, , .	0.4	0
1115	Facile preparation of nanostructured ZnO via low-temperature hydrothermal method upon changing the precursor anion: The study of structural, morphological, and optical properties. Materials Today Communications, 2022, 31, 103789.	1.9	3
1116	A comprehensive review on sustainable greener nanoparticles for efficient dye degradation. Environmental Science and Pollution Research, 2022, 29, 55415-55436.	5.3	9
1117	Zinc Oxide Nanoparticles with Mangiferin: Optical Properties, In Vitro Release Studies, and Antibacterial Activity. Revista Brasileira De Farmacognosia, 2022, 32, 447-454.	1.4	1
1118	Studies on photocatalytic removal of antibiotics, ciprofloxacin and sulfamethoxazole, by Fe <sub>3</sub> O <sub>4</sub> -ZnO-Chitosan/Alginate nanocomposite in aqueous systems. Advanced Powder Technology, 2022, 33, 103691.	4.1	15
1119	Reduced graphene oxide-assisted graphitic carbon nitride@ZnO rods for enhanced physical and photocatalytic degradation. Inorganic Chemistry Communication, 2022, 142, 109623.	3.9	8
1120	Facile metal organic framework composites as photocatalysts for lone/simultaneous photodegradation of naproxen, ibuprofen and methyl orange. Environmental Technology and Innovation, 2022, 27, 102751.	6.1	12
1121	Graphene-based nanocomposites and nanohybrids for the abatement of agro-industrial pollutants in aqueous environments. Environmental Pollution, 2022, 308, 119557.	7.5	17
1122	Efficient Degradation of Bisphenol a Over Facilely Optimized Ternary Ag/ZnO/ZnAl <sub>2</sub> O <sub>4</sub> /Ldh Composite with Enhanced Photocatalytic Performance Under Visible Light Irradiation. SSRN Electronic Journal, 0, , .	0.4	0
1123	Green Synthesis of Nanoparticles Using Plants as a Bioreactor. International Journal of Scientific Research in Science and Technology, 2022, , 148-156.	0.1	0
1124	Carbamazepine Removal by Clay-Based Materials Using Adsorption and Photodegradation. Water (Switzerland), 2022, 14, 2047.	2.7	2
1125	Enhanced photocatalytic activity of ZnO nanostructures deposited on mesh through electrochemical deposition and thermal oxidation. , 2022, 32, 63-69.		0
1126	Palladium and Graphene Oxide Doped ZnO for Aqueous Acetamiprid Degradation under Visible Light. Catalysts, 2022, 12, 709.	3.5	2
1127	A review on synthesis and applications of versatile nanomaterials. Inorganic and Nano-Metal Chemistry, 0, , 1-30.	1.6	3
1128	Photocatalytic Materials Obtained from E-Waste Recycling: Review, Techniques, Critique, and Update. Journal of Manufacturing and Materials Processing, 2022, 6, 69.	2.2	4
1129	Comparative study on photocatalytic degradation of methylene blue using pristine ZnO and Ni/ZnO composite films. Materials Today: Proceedings, 2022, 66, 3168-3173.	1.8	3

#	ARTICLE	IF	CITATIONS
1130	Verifying the relationships of defect site and enhanced photocatalytic properties of modified ZnO nanoparticles evaluated by in-situ spectroscopy and STEM-EELS. Scientific Reports, 2022, 12, .	3.3	4
1131	Recent progress in visible light-doped ZnO photocatalyst for pollution control. International Journal of Environmental Science and Technology, 2023, 20, 5753-5772.	3.5	18
1132	ZnO nanostructures by hot water treatment for photocatalytic bacterial disinfection. MRS Advances, 0, , .	0.9	0
1133	Research Progress on Photocatalytic Reduction of CO <sub>2</sub> Based on CsPbBr <sub>3</sub> Perovskite Materials. ChemNanoMat, 0, , .	2.8	2
1134	Synthesis of nanoparticles using microorganisms and their applications: a review. Environmental Chemistry Letters, 2022, 20, 3153-3197.	16.2	33
1135	Mo-modified TiO <sub>2</sub> mesoporous microspheres prepared by spray pyrolysis for adsorption-photocatalytic water remediation. Journal of Sol-Gel Science and Technology, 2022, 103, 853-864.	2.4	4
1136	Vertically Aligned Cu-Doped ZnO Nanorods for Photocatalytic Activity Enhancement. International Journal of Electrochemical Science, 2022, 17, 220813.	1.3	3
1137	Photocatalytic degradation of methylene blue, rhodamine B, methyl orange and Eriochrome black T dyes by modified ZnO nanocatalysts: A concise review. Inorganic Chemistry Communication, 2022, 143, 109764.	3.9	91
1138	Advances in the strategies for enhancing the photocatalytic activity of TiO <sub>2</sub> : Conversion from UV-light active to visible-light active photocatalyst. Inorganic Chemistry Communication, 2022, 143, 109700.	3.9	64
1139	Recent developments in ZnO-based heterostructures as photoelectrocatalysts for wastewater treatment: A review. Environmental Advances, 2022, 9, 100264.	4.8	17
1140	Nanocomposites of ternary mixed metal oxides (Ag <sub>2</sub> O/NiO/ZnO) used for the efficient removal of organic pollutants. Journal of Water Process Engineering, 2022, 49, 102961.	5.6	5
1141	A novel recyclable BiOCl/BiOI/MnxZn1-xFe2O4 photocatalyst with enhanced Rhodamine B removal under visible light. Journal of Physics and Chemistry of Solids, 2022, 170, 110892.	4.0	7
1142	Recent advances in the breakdown of microplastics: strategies and future perspectives. Environmental Science and Pollution Research, 2022, 29, 65887-65903.	5.3	24
1143	Acoustofluidic bubble-driven micromixers for the rational engineering of multifunctional ZnO nanoarray. Chemical Engineering Journal, 2022, 450, 138273.	12.7	8
1144	Decorating of Ag and CuO on ZnO Nanowires by Plasma Electrolyte Oxidation Method for Enhanced Photocatalytic Efficiency. Catalysts, 2022, 12, 801.	3.5	10
1145	Solution combustion synthesis of Î <sup>2</sup> -Cu <sub>2</sub> V <sub>2</sub> O <sub>7</sub> nanoparticles: photocatalytic degradation of crystal violet under UV and visible light illumination. Reaction Kinetics, Mechanisms and Catalysis, 2022, 135, 2797-2812.	1.7	5
1146	Enhanced Bactericidal Action of rGOâ€ZnO Hybrids Prepared by the One-Pot Co-precipitation Approach. ACS Omega, 2022, 7, 26715-26722.	3.5	6
1147	Green Derived Zinc Oxide (ZnO) for the Degradation of Dyes from Wastewater and Their Antimicrobial Activity: A Review. Catalysts, 2022, 12, 833.	3.5	19

#	ARTICLE	IF	CITATIONS
1148	Structural Engineering of ZnO@SnO <sub>2</sub> @Ag(AgCl) Nanocomposites for the Medical Applications. Journal of Inorganic and Organometallic Polymers and Materials, 2022, 32, 4373-4383.	3.7	1
1149	ZnO Nanowires with Increasing Aspect Ratios for Room-Temperature NO <sub>2</sub> Gas Sensing. ACS Applied Nano Materials, 2022, 5, 10603-10616.	5.0	2
1152	Green synthesis of cerium oxide, Co-doped cerium oxide nanoparticles and its dielectric properties. Materials Today: Proceedings, 2022, , .	1.8	0
1153	Pharmaceutical Potential of Constituents from Azadirachta Indica and Their Specific Role as Anti-Cancer Agents. Current Bioactive Compounds, 2022, 18, .	0.5	0
1154	Green Synthesis of a CuO@ZnO Nanocomposite for Efficient Photodegradation of Methylene Blue and Reduction of 4-Nitrophenol. ACS Omega, 2022, 7, 30908-30919.	3.5	49
1155	Preparation and spectroscopic studies of ZnO incorporated PVA nanocomposite films. Materials Today: Proceedings, 2022, 67, 872-878.	1.8	1
1156	Photocatalytic degradation of Reactive Black dye using ZnO@CeO <sub>2</sub> nanocomposites. Environmental Science and Pollution Research, 2023, 30, 42713-42727.	5.3	8
1158	Synergistic photodegradation of methylene blue by Sm doped Fe <sub>2</sub> O <sub>3</sub> photocatalyst under sunlight. Chinese Journal of Physics, 2023, 83, 637-649.	3.9	12
1159	Enhanced visible-light photocatalytic activity of rGO-ZnO composite thin films prepared by SILAR method. Advances in Materials and Processing Technologies, 0, , 1-16.	1.4	2
1160	Tuning the workfunction of ZnO through surface doping with Mn from first-principles simulations. Surface Science, 2022, 726, 122175.	1.9	3
1163	High-Efficiency Photodynamic Antibacterial Activity of NH <sub>2</sub> -MIL-101(Fe)@MoS <sub>2</sub> /ZnO Ternary Composites. ACS Applied Bio Materials, 2022, 5, 3912-3922.	4.6	12
1164	Zinc oxide nanoparticles: an excellent biomaterial for bioengineering applications. Emergent Materials, 2022, 5, 1629-1648.	5.7	9
1165	Diacetylene-Zinc(II)-Zinc Oxide Nanocomposites for Colorimetric Detection of Ultraviolet-A Light. ACS Applied Nano Materials, 2022, 5, 13198-13207.	5.0	6
1166	Influence of Precursor Concentration in the Synthesis of ZnO Nanoparticles on their Morphological, Structural, and Photocatalytic Properties. Topics in Catalysis, 2022, 65, 1149-1162.	2.8	4
1167	Tuning Molecular Chromophores of Isoreticular Covalent Organic Frameworks for Visible Light-Induced Hydrogen Generation. Advanced Functional Materials, 2022, 32, .	14.9	17
1168	Effect of activation temperature of Yttria Stabilized Zirconia (YSZ)/ZnO nanorods thin film on photoelectrochemical cell performance. Journal of Materials Research and Technology, 2022, 20, 2348-2357.	5.8	3
1169	Efficient degradation of bisphenol A over facilely optimized ternary Ag/ZnO/ZnAl <sub>2</sub> O <sub>4</sub> /LDH composite with enhanced photocatalytic performance under visible light irradiation. Solid State Sciences, 2022, 132, 106992.	3.2	8
1170	Optical and morphological characterization of ZnO nano-sized powder synthesized using single step sol-gel technique. Optical Materials, 2022, 132, 112794.	3.6	11

#	ARTICLE	IF	CITATIONS
1171	Template-free microwave-assisted growth of 3D hexagonal ZnO rods. Materials Science and Engineering B: Solid-State Materials for Advanced Technology, 2022, 284, 115901.	3.5	6
1172	Morphological and optical characterizations of different ZnO nanostructures grown by mist-CVD. Journal of Luminescence, 2022, 251, 119158.	3.1	3
1173	Removal assessment of disinfection by-products (DBPs) from drinking water supplies by solar heterogeneous photocatalysis: A case study of trihalomethanes (THMs). Journal of Environmental Management, 2022, 321, 115936.	7.8	10
1174	Green synthesis of ZnO nanoparticles with enhanced photocatalytic and antibacterial activity. Journal of Alloys and Compounds, 2022, 924, 166431.	5.5	18
1175	Photodegradation of dye using Polythiophene/ZnO nanocomposite: A computational approach. Journal of Molecular Graphics and Modelling, 2022, 117, 108285.	2.4	14
1176	Synthesis and Investigation of Piezophotocatalytic Properties of Polyvinylidene Fluoride Nanofibers Modified with Titanium Dioxide. Moscow University Chemistry Bulletin, 2022, 77, 256-261.	0.6	4
1177	Immobilization of zinc oxide-based photocatalysts for organic pollutant degradation: A review. Journal of Environmental Chemical Engineering, 2022, 10, 108505.	6.7	28
1178	Facile synthesis of sunlight driven photocatalysts Zn <sub>0.9</sub> Ho <sub>0.05</sub> M <sub>0.05</sub> O (M=Pr, Sm, Er) for the removal of synthetic dyes from wastewater. Surfaces and Interfaces, 2022, 34, 102376.	3.0	9
1179	Electrospun ZnO nanofibers thin films for the methylene blue degradation driven by natural sunlight. Inorganic Chemistry Communication, 2022, 145, 109962.	3.9	1
1180	Low temperature based PDINO cathode interlayer for high operational photostable inverted non-fullerene organic solar cells. Solar Energy Materials and Solar Cells, 2022, 248, 111985.	6.2	8
1181	ZnO/g-C <sub>3</sub> N <sub>4</sub> heterostructures: Synthesis, characterization and application as photoanode in dye sensitized solar cells. Solar Energy Materials and Solar Cells, 2022, 248, 112002.	6.2	12
1182	Photocatalytic activity of ZnO-PbS nanoscale toward Allura Red AC in an aqueous solution: Characterization and mechanism study. Journal of Photochemistry and Photobiology A: Chemistry, 2023, 434, 114254.	3.9	8
1183	Green Synthesis of Hybrid Nanostructure for Wastewater Remediation by Photocatalytic Degradation. , 2022, , 1-30.		0
1184	Metal oxide engineering. , 2022, , 3-56.		2
1185	Mixed metal oxide nanocomposites for environmental remediation. , 2022, , 425-477.		0
1186	Emerging Nanocomposites and Their Impact on Effective Dye Degradation. , 2022, , 231-255.		0
1187	Facile synthesis of bismuth terephthalate metal-organic frameworks and their visible-light-driven photocatalytic activities toward Rhodamine B dye. Green Chemistry Letters and Reviews, 2022, 15, 572-581.	4.7	8
1188	Recent Advances in Photocatalytic Oxidation of Methane to Methanol. Molecules, 2022, 27, 5496.	3.8	9



#	ARTICLE	IF	CITATIONS
1189	Synthesis of Zinc Oxide Nanoparticles with Bioflavonoid Rutin: Characterisation, Antioxidant and Antimicrobial Activities and In Vivo Cytotoxic Effects on Artemia Nauplii. Antioxidants, 2022, 11, 1853.	5.1	13
1190	Evaluation of structural, optical properties and photocatalytic activity of Ag <sub>2</sub> O coated ZnO nanoparticles. Journal of Materials Science: Materials in Electronics, 2022, 33, 23224-23235.	2.2	4
1191	The GaSe/g-C <sub>6</sub> N <sub>6</sub> type-II van der Waals heterostructure: A prospective water-splitting photocatalyst under acidic, alkaline and neutral conditions. Thin Solid Films, 2022, 758, 139419.	1.8	4
1192	Synthesis, characterizations and antifungal activities of copper oxide and differentially doped copper oxide nanostructures. Materials Today: Proceedings, 2022, , .	1.8	3
1193	A proposed synergetic mechanism for metal fume fever involving ZnO and Fe <sub>3</sub> O <sub>4</sub> nanoparticles. Scientific Reports, 2022, 12, .	3.3	0
1194	Adsorption characteristics of Copper (II) ion on Cu-doped ZnO nanomaterials based on green synthesis from Piper Chaudocanm L. leaves extract. Colloid and Polymer Science, 2022, 300, 1343-1354.	2.1	9
1195	The Suitability of Photocatalyst Precursor Materials in Geopolymer Coating Applications: A Review. Coatings, 2022, 12, 1348.	2.6	15
1196	Composite TiO <sub>2</sub> -based photocatalyst with enhanced performance. Photochemical and Photobiological Sciences, 0, , .	2.9	1
1197	Interfacial Grown Zinc Oxide Origami Structure for Broadband Visible Light Driven Photocatalysts. Advanced Materials Interfaces, 2022, 9, .	3.7	1
1198	Synthesis, Characterization, and Comparison of Pure Zinc Oxide and Magnesium-Doped Zinc Oxide Nanoparticles and their Application on Ethanol Sensing Activities. Journal of Nanomaterials, 2022, 2022, 1-8.	2.7	5
1199	Facile and Novel Route for the Preparation of ZnO Nanoparticles with Different Cr Loadings for Opto-Photocatalysis Applications. Catalysts, 2022, 12, 1093.	3.5	7
1200	Hepatotoxicity and the role of the gut-liver axis in dogs after oral administration of zinc oxide nanoparticles. Metallomics, 2022, 14, .	2.4	1
1201	An effective strategy to achieve high photocatalytic activity of a hierarchical ZnO/BiOI structure. Journal of Materials Research, 2022, 37, 3099-3112.	2.6	3
1202	Engineering Covalent Organic Frameworks as Heterogeneous Photocatalysts for Organic Transformations. Angewandte Chemie - International Edition, 2022, 61, .	13.8	55
1203	Engineering Covalent Organic Frameworks as Heterogeneous Photocatalysts for Organic Transformations. Angewandte Chemie, 2022, 134, .	2.0	2
1204	Aqueous Acetamiprid Degradation Using Combined Ultrasonication and Photocatalysis Under Visible Light. Water, Air, and Soil Pollution, 2022, 233, .	2.4	3
1205	Ag-decorated ZnO-based nanocomposites for visible light-driven photocatalytic degradation: basic understanding and outlook. Journal Physics D: Applied Physics, 2022, 55, 483001.	2.8	17
1206	Construction of g-C <sub>3</sub> N <sub>4</sub> -ZnO composites with enhanced visible-light photocatalytic activity for degradation of amoxicillin. Korean Journal of Chemical Engineering, 2022, 39, 3377-3388.	2.7	1

#	ARTICLE	IF	CITATIONS
1207	Photocatalytic removal of persistent pollutants using eco-friendly ZnO. Journal of Sol-Gel Science and Technology, 2022, 104, 387-400.	2.4	1
1208	Utilization of Photocatalysis and Pyroelectric Catalysis to Enhance Catalytic Properties in Pb(Zr <sub>0.52</sub> Ti <sub>0.48</sub> )O <sub>3</sub> Nanocubes: A Study on Pyroelectric Catalysis Degradation of Dye Wastewater. ChemistrySelect, 2022, 7, .	1.5	6
1209	Engineering of ZnO/graphene nanocomposite for enhancing visible photocatalytic ability. Physica Status Solidi (A) Applications and Materials Science, 0, , .	1.8	0
1210	Photocatalytic Activity Induced by Metal Nanoparticles Synthesized by Sustainable Approaches: A Comprehensive Review. Frontiers in Chemistry, 0, 10, .	3.6	13
1211	Recent advances in application of metal-organic frameworks (MOFs) as adsorbent and catalyst in removal of persistent organic pollutants (POPs). Journal of Hazardous Materials, 2023, 442, 130127.	12.4	63
1212	A Facile Route for the Synthesis of Pure & Ag-Doped ZnO for Dye-Sensitized Solar Cell Application. Lecture Notes in Electrical Engineering, 2023, , 465-473.	0.4	0
1213	Efficient dye degradation strategies using green synthesized ZnO-based nanoplateforms: A review. Applied Surface Science Advances, 2022, 11, 100314.	6.8	64
1214	Enhanced dielectric and electrical properties of polystyrene-2% divinyl benzene (PDB) embedded in SrTiO <sub>3</sub> -Poly (vinylidene fluoride) three phase composite films. Optik, 2022, 270, 170001.	2.9	5
1215	Jute stick extract assisted hydrothermal synthesis of zinc oxide nanoflakes and their enhanced photocatalytic and antibacterial efficacy. Arabian Journal of Chemistry, 2022, 15, 104265.	4.9	11
1216	Sunlight-driven photocatalytic per- and polyfluoroalkyl substances degradation over zinc oxide/cellulose nanofiber catalyst using a continuous flow reactor. Journal of Environmental Chemical Engineering, 2022, 10, 108686.	6.7	7
1217	ZnO photocatalysts applications in abating the organic pollutant contamination: A mini review. , 2022, 3-4, 100013.		6
1218	Photocatalytic, structural and optical properties of Ce-Ni co-doped ZnO nanodisks-like self-assembled structures. Materials Chemistry and Physics, 2022, 292, 126814.	4.0	16
1219	Reusable catalysts based on CeO <sub>2</sub> /cellulose derivative with visible light photocatalytic activity tuned by noble metal nanoparticles inclusion. International Journal of Biological Macromolecules, 2022, 222, 736-749.	7.5	3
1220	Synergistic photo-enhanced electrocatalysis of Pt-ZnO-Bi <sub>2</sub> O <sub>3</sub> heterojunction for methanol oxidation under visible light illumination. Energy Advances, 2022, 1, 908-925.	3.3	3
1221	Photocatalytic degradation-based efficient elimination of pesticides using ruthenium/gold metal nanoparticle-anchored zirconium dioxide. New Journal of Chemistry, 2022, 46, 22561-22573.	2.8	4
1222	Effect of SiO <sub>2</sub> Content on Photocatalytic Activities of ZnO/Ag/SiO <sub>2</sub> Nanocomposites Prepared by Spray Pyrolysis. Journal of Physics: Conference Series, 2022, 2344, 012010.	0.4	0
1223	Fabrication and characterization of TiO <sub>2</sub> /CuS nanocomposites (Cu% = 0.25, 0.50, and 0.75 Å) utilized for the photocatalytic degradation of crystal violet dye. Journal of Materials Research, 2022, 37, 4182-4199.	2.6	3
1224	Effect of the thickness on the photocatalytic and the photocurrent properties of ZnO films deposited by spray pyrolysis. Discover Materials, 2022, 2, .	2.8	2

#	ARTICLE	IF	CITATIONS
1225	Degradation of antibiotics in aquaculture wastewater by bio-nanoparticles: A critical review. Ain Shams Engineering Journal, 2023, 14, 101981.	6.1	7
1226	Novel strategies to tailor the photocatalytic activity of metal-organic frameworks for hydrogen generation: a mini-review. Frontiers in Energy, 2022, 16, 734-746.	2.3	3
1227	A simple methodology for obtaining novel heterojunction photocatalyst NiO/FeOOH: a theoretical and experimental study. Journal of the Iranian Chemical Society, 0, , .	2.2	0
1228	Syntheses and Applications of Nanomaterials-Based Photocatalysts for Air Purification. Green Energy and Technology, 2023, , 75-150.	0.6	0
1229	Novel cubic heterojunction Fe <sub>2</sub> O <sub>3</sub> /ZnO composite for the photocatalyst application. Materials Today: Proceedings, 2023, 75, 1-8.	1.8	1
1230	A novel method to prepare antibacterial ZnO nanoflowers. Applied Physics A: Materials Science and Processing, 2022, 128, .	2.3	5
1231	ZnO/Boron Nitride Quantum Dots Nanocomposites for the Enhanced Photocatalytic Degradation of Methylene Blue and Methyl Orange. Molecules, 2022, 27, 6833.	3.8	11
1232	Structural, morphological and optical attributes of ZnO thin films deposited via spray pyrolysis process: Impact of molarity variation. IOP Conference Series: Materials Science and Engineering, 2022, 1258, 012012.	0.6	1
1233	Enhanced Photocatalytic Degradation of Amoxicillin with Mn-Doped Cu <sub>2</sub> O under Sunlight Irradiation. Journal of Composites Science, 2022, 6, 317.	3.0	13
1234	Renewable and eco-friendly ZnO immobilized onto dead sea sponge floating materials with dual practical aspects for enhanced photocatalysis and disinfection applications. Nanotechnology, 2023, 34, 035602.	2.6	1
1235	Optimal thickness and annealing temperature for enhancement of structural, optical, and photocatalytic properties of ZnO thin films. Journal of the Australian Ceramic Society, 2022, 58, 1667-1683.	1.9	2
1236	MOF-derived hierarchical carbon/ZnO hybrid synergistically boosts photothermal conversion and storage capability of phase change materials. Materials Today Nano, 2022, 20, 100277.	4.6	7
1237	Recent Advancements in Nanobiosensors: Current Trends, Challenges, Applications, and Future Scope. Biosensors, 2022, 12, 892.	4.7	22
1238	Selective Oxidation of Biomass Molecules via ZnO Nanoparticles Modified Using Charge Mismatch of the Doped Co ions. Inorganic Chemistry, 2022, 61, 16887-16894.	4.0	1
1239	A transparent kaolinite-loaded zinc oxide nanocomposite sunscreen with UV shielding rate over 99% based on bidirectional dispersion. Nanotechnology, 2023, 34, 075601.	2.6	1
1240	Modified Electrode with ZnO Nanostructures Obtained from Silk Fibroin for Amoxicillin Detection. Crystals, 2022, 12, 1511.	2.2	0
1241	Ozonation of ibuprofen in presence of SrWO <sub>4</sub> /ZnO photo-catalyst. Emerging Contaminants, 2022, 8, 391-399.	4.9	4
1242	Synergic Effect of type-II ZnO/BiVO <sub>4</sub> Magnetic Heterostructures for Visible-Light-Driven Degradation of Bisphenol A and Methyl Violet. Applied Organometallic Chemistry, 0, , .	3.5	0

#	ARTICLE	IF	CITATIONS
1243	Electrogeneration of active photocatalysts for wastewater remediation: a review. <i>Environmental Chemistry Letters</i> , 2023, 21, 981-1003.	16.2	4
1244	Photoactive Antimicrobial CuZnO Nanocrystals. <i>Journal of Physical Chemistry C</i> , 2022, 126, 18683-18691.	3.1	1
1245	A comprehensive review on zinc-based mixed metal oxide catalysts for dimethyl carbonate synthesis via urea alcoholysis process. <i>Journal of Industrial and Engineering Chemistry</i> , 2023, 117, 70-84.	5.8	3
1246	Constructing a ZnO/CuCo <sub>2</sub> O <sub>4</sub> p-n heterojunction photocatalyst for efficiently hexavalent chromium phenol detoxification and nitrogen fixation. <i>Journal of Physics and Chemistry of Solids</i> , 2023, 172, 111057.	4.0	11
1247	Novel ZnFe <sub>2</sub> O <sub>4</sub> /BC/ZnO photocatalyst for high-efficiency degradation of tetracycline under visible light irradiation. <i>Chemosphere</i> , 2023, 311, 137041.	8.2	11
1248	Novel Synthesis of Zinc Oxide Nanoparticles from Type IV Deep Eutectic Solvents. <i>Inorganica Chimica Acta</i> , 2023, 545, 121268.	2.4	15
1249	Metal ferrites-based nanocomposites and nanohybrids for photocatalytic water treatment and electrocatalytic water splitting. <i>Chemosphere</i> , 2023, 310, 136835.	8.2	23
1250	Exploring the Spondias mombin (Hog plum) mediated ZnWO <sub>4</sub> /CuWO <sub>4</sub> nanocomposite for photocatalysis and electrochemical nitrite sensing. <i>Materials Chemistry and Physics</i> , 2023, 293, 126882.	4.0	6
1251	Enhanced photocatalytic and photoelectrochemical performance of KBiFe <sub>2</sub> O <sub>5</sub> /g-C <sub>3</sub> N <sub>4</sub> heterojunction photocatalyst under visible light. <i>Physica B: Condensed Matter</i> , 2023, 648, 414411.	2.7	3
1252	MOFs meet electrospinning: New opportunities for water treatment. <i>Chemical Engineering Journal</i> , 2023, 453, 139669.	12.7	30
1253	Formulation of heterometallic ZIF-8@Cu/Ni/ZnO@CNTs heterostructure photocatalyst for Ultra-Deep desulphurization of coal and fuels. <i>Chemical Engineering Journal</i> , 2023, 453, 139846.	12.7	21
1254	ZnO/Chalcogenides Semiconductor Heterostructures for Photoelectrochemical Water Splitting. <i>Materials Horizons</i> , 2022, , 3-35.	0.6	3
1255	Investigation on synthesis of ternary g-C <sub>3</sub> N <sub>4</sub> /ZnO/W/M nanocomposites integrated heterojunction II as efficient photocatalyst for environmental applications. <i>Environmental Research</i> , 2023, 217, 114621.	7.5	7
1256	Bioinspired Interfacial Spontaneous Growth of ZnO Nanocatalysts onto Recycled Textiles as a Sustainable Approach for Water Purification. <i>Global Challenges</i> , 2023, 7, .	3.6	1
1258	Recent advances of photocatalytic degradation for BTEX: Materials, operation, and mechanism. <i>Chemical Engineering Journal</i> , 2023, 455, 140461.	12.7	21
1259	The Solution Combustion Synthesis of ZnO Powder for the Photodegradation of Phenol. <i>Ceramics</i> , 2022, 5, 928-946.	2.6	4
1260	Optimization Temperature Programming of Microwave-Assisted Synthesis ZnO Nanoneedle Arrays for Optical and Surface-Enhanced Raman Scattering Applications. <i>Nanomaterials</i> , 2022, 12, 3989.	4.1	4
1261	Photocatalytic Activity of ZnO/Ag Nanoparticles Fabricated by a Spray Pyrolysis Method with Different O <sub>2</sub> :N <sub>2</sub> Carrier Gas Ratios and Ag Contents. <i>Catalysts</i> , 2022, 12, 1374.	3.5	7

#	ARTICLE	IF	CITATIONS
1262	A Review on Cement-Based Composites for Removal of Organic/Heavy Metal Contaminants from Water. Catalysts, 2022, 12, 1398.	3.5	1
1263	Facile Preparation of a Bispherical Silver@Carbon Photocatalyst and Its Enhanced Degradation Efficiency of Methylene Blue, Rhodamine B, and Methyl Orange under UV Light. Nanomaterials, 2022, 12, 3959.	4.1	2
1264	Design and synthesis of TiO <sub>2</sub> /ZnO nanocomposite with enhanced oxygen vacancy: Better photocatalytic removal of MB dye under visible light-driven condition. Inorganic Chemistry Communication, 2022, 146, 110197.	3.9	6
1265	Microwave-assisted biosynthesis of ZnO-GO particles using orange peel extract for photocatalytic degradation of methylene blue. Journal of Environmental Chemical Engineering, 2022, 10, 108924.	6.7	17
1266	Investigations on ZnO reinforced composite materials for electronic applications – A review. Materials Today: Proceedings, 2023, 74, 57-59.	1.8	3
1268	Electrospun Sn-doped TiO <sub>2</sub> : Synthesis, structural, optical and catalytic performance as a function of Sn loading and calcination temperatures. Ceramics International, 2023, 49, 10384-10394.	4.8	5
1269	Novel ZnO-biochar nanocomposites obtained by hydrothermal method in extracts of Ulva lactuca collected from Black sea. Ceramics International, 2022, , .	4.8	3
1270	Transparent zinc silicate/ zinc oxide crystallized glass-ceramics for water remediation application under visible light. Ceramics International, 2023, 49, 10420-10427.	4.8	2
1271	A ZIF-67-derived lamellar CoP@C cocatalyst for promoting photocatalytic hydrogen evolution from water. International Journal of Hydrogen Energy, 2022, , .	7.1	2
1272	Structural growth of zinc oxide nanograins on carbon cloth as flexible electrochemical platform for hydroxychloroquine detection. Chemosphere, 2023, 312, 137186.	8.2	14
1273	ZnHCF@PB nanoparticles with reduced bandgap as a promising photocatalyst for the degradation of conventional and emerging water contaminants. Journal of Colloid and Interface Science, 2023, 631, 258-268.	9.4	3
1274	High-performance PbS/CdS quantum dot Co-sensitized hierarchical ZnO nanowall photoanodes decorated on electrochemically reduced graphene. Electrochimica Acta, 2023, 438, 141584.	5.2	2
1275	Macroemulsion-mediated synthesis of fibrous ZnO microrods and their surface morphology contribution to the high photocatalytic degradation rate. New Journal of Chemistry, 2022, 47, 428-442.	2.8	4
1276	Fullerene triggered energy storage and photocatalytic ability of La <sub>2</sub> O <sub>3</sub> -ZnO@C <sub>60</sub> core-shell nanocomposite. Materials Science and Engineering B: Solid-State Materials for Advanced Technology, 2023, 288, 116151.	3.5	23
1277	Recent progress on the remediation of metronidazole antibiotic as emerging contaminant from water environments using sustainable adsorbents: A review. Journal of Water Process Engineering, 2023, 51, 103405.	5.6	15
1278	Preparation of Chitosan-Carbon Nanotubes Decorated with ZnO@laccase: Application in the Removal of Bisphenol A from Aqueous Solution. Journal of Environmental Engineering, ASCE, 2023, 149, .	1.4	2
1279	Mesoporous LaVO <sub>4</sub> /MCM-48 nanocomposite with visible-light-driven photocatalytic degradation of phenol in wastewater. Environmental Research, 2023, 218, 114983.	7.5	18
1280	High photodegradation performance of ZnO nanoparticles supported on porous Zeolite Na-A: Effects of ZnO loading. Materials Chemistry and Physics, 2023, 295, 127063.	4.0	4

#	ARTICLE	IF	CITATIONS
1281	Visible light driven photocatalytic degradation of methylene blue by ZnO nanostructures synthesized by glycine nitrate auto combustion route. Inorganic Chemistry Communication, 2023, 148, 110311.	3.9	10
1282	Nano-gold decorated ZnO: An alternative photocatalyst promising for NOx degradation. Chemical Engineering Science, 2023, 267, 118377.	3.8	6
1283	Morphological features and photoluminescence of ZnO and ZnO decorated S,N-doped few-layered graphene (ZnO@S, N-FLGs). Journal of Physics and Chemistry of Solids, 2023, 174, 111175.	4.0	7
1284	Nanostructured coatings based on metallic nanoparticles as viral entry inhibitor to combat COVID-19. Sustainable Materials and Technologies, 2023, 35, e00544.	3.3	1
1285	Effect of nanopackaging on the quality of edible mushrooms and its action mechanism: A review. Food Chemistry, 2023, 407, 135099.	8.2	8
1286	Review of different series of MOF/g-C <sub>3</sub> N <sub>4</sub> composites for photocatalytic hydrogen production and CO <sub>2</sub> reduction. New Journal of Chemistry, 2023, 47, 1599-1609.	2.8	5
1287	The Effect of Ag-Doping on the Cytotoxicity of ZnO Nanostructures Grown on Ag/Si Substrates by APMOCVD. MikrobiologichnyĖ Zhurnal, 2022, 84, 47-56.	0.6	1
1288	Investigation of the photocatalytic activity and radiopacity of nanopowders produced by pulsed electron beam evaporation in vacuum. , 0, , .		0
1289	Synthesis of Metal Oxide Nanoparticles using Indian Medicinal Plants for Photocatalytic Applications - A Review. International Journal of Scientific Research in Science and Technology, 2022, , 80-93.	0.1	0
1290	High Surface Area ZnO-Nanorods Catalyze the Clean Thermal Methane Oxidation to CO <sub>2</sub> . Catalysts, 2022, 12, 1533.	3.5	4
1292	ĐġĐġ <sup>1/2</sup> Ń,ĐμĐ· Đ <sup>1/2</sup> Đ°Đ <sup>1/2</sup> Đ <sup>3/4</sup> ĐġĐ <sup>3/4</sup> ŃĐĐ <sup>3/4</sup> Ń·Đ°Đ° ZnO ĐġŃĐĐ, Đ <sup>3</sup> Đ <sup>3/4</sup> ŃĐĐμĐ <sup>1/2</sup> Đġ, Đ <sup>3</sup> ĐμĐ»Ń·Ń«Đ <sup>1/2</sup> Đġ,Ń,ŃĐĐ°Ń, Ń†ĐġĐ <sup>1/2</sup> ĐġĐ°Đ <sup>3</sup> Đ»Đġ,		
1293	Efficiency of Ferritin bio-nanomaterial in reducing the pollutants level of water in the underground corridors of metro rail using GIS. Scientific Reports, 2022, 12, .	3.3	0
1294	Theoretical study of nickel-doped zinc oxide interaction with methylene blue and methyl orange using DFT methods. Materials Research Express, 0, , .	1.6	0
1295	Nanocomposite Zinc Oxide-Based Photocatalysts: Recent Developments in Their Use for the Treatment of Dye-Polluted Wastewater. Water (Switzerland), 2022, 14, 3899.	2.7	7
1296	Towards bio-safe and easily redispersible bare ZnO quantum dots engineered via organometallic wet-chemical processing. Chemical Engineering Journal, 2023, 455, 140497.	12.7	7
1297	Photocatalysis performance enhancement of Ag <sub>2</sub> O/Al-doped ZnO heterojunction by introducing ZnO nanorod array. Ceramics International, 2023, 49, 10513-10524.	4.8	8
1298	New insights into the photocatalytic mechanism of pristine ZnO nanocrystals: From experiments to DFT calculations. Applied Surface Science, 2023, 614, 156225.	6.1	15
1299	Highly efficient ZnO photocatalytic foam reactors for micropollutant degradation. Chemical Engineering Journal, 2023, 455, 140784.	12.7	18



#	ARTICLE	IF	CITATIONS
1300	Structural, magnetic and optical properties of chemically synthesized Zn <sub>0.98</sub> Fe <sub>0.02</sub> O dilute magnetic semiconductor nanoparticles. Materials Today: Proceedings, 2022, , .	1.8	0
1301	In Situ Fabrication of N-Doped ZnS/ZnO Composition for Enhanced Visible-Light Photocatalytic H <sub>2</sub> Evolution Activity. Molecules, 2022, 27, 8544.	3.8	2
1302	Photocatalytic degradation of methylene blue at nanostructured ZnO thin films. Nanotechnology, 2023, 34, 155702.	2.6	14
1303	In Situ Growth and UV Photocatalytic Effect of ZnO Nanostructures on a Zn Plate Immersed in Methylene Blue. Catalysts, 2022, 12, 1657.	3.5	1
1304	Antibacterial and Photodegradation of Organic Dyes Using Lamiaceae-Mediated ZnO Nanoparticles: A Review. Nanomaterials, 2022, 12, 4469.	4.1	6
1305	Photocatalysis of Cr- and Fe-Doped CeO <sub>2</sub> Nanoparticles to Selective Oxidation of 5-Hydroxymethylfurfural. Nanomaterials, 2023, 13, 44.	4.1	3
1306	Industrial Manufacturing Applications of Zinc Oxide Nanomaterials: A Comprehensive Study. Nanomanufacturing, 2022, 2, 265-291.	3.6	19
1307	ZnO codoped with Si and Mn “ Preparation, characterization and photocatalytic reduction of hazardous chromium (VI) by the codoped ZnO. Materials Today: Proceedings, 2022, , .	1.8	0
1308	Twoâ€Dimensional (2D) Porous Zinc Oxides Derived from the Coordination Polymer via Chemicalâ€Assisted Phase Transition. European Journal of Inorganic Chemistry, 2023, 26, .	2.0	1
1309	Photocatalysis of Covalent Organic Frameworks. , 0, , .		1
1310	Colloidal Approaches to Zinc Oxide Nanocrystals. Chemical Reviews, 2023, 123, 271-326.	47.7	26
1311	Charge traps in Zn- and Mo-based oxide microstructures. The role of Mo. Journal of Physics: Conference Series, 2022, 2413, 012007.	0.4	0
1313	Investigation of photocatalytic activity (under visible light) of ultrathin CZTS films produced in different thicknesses by PLD method. Optical and Quantum Electronics, 2023, 55, .	3.3	6
1314	Rapid microwave fabrication of new nanocomposites based on Tb-Co-O nanostructures and their application as photocatalysts under UV/Visible light for removal of organic pollutants in water. Arabian Journal of Chemistry, 2023, 16, 104579.	4.9	145
1315	RSM-BBD optimization approach for degradation and electrochemical sensing of Evanâ€™s blue dye using green synthesized ZnO<sub>2</sub>-ZnO nanocomposite. Inorganic and Nano-Metal Chemistry, 0, , 1-15.	1.6	4
1316	Rapid and facile synthesis of Z-scheme ZnO/g-C <sub>3</sub> N <sub>4</sub> heterostructure as efficient visible light-driven photocatalysts for dye degradation and hydrogen evolution reaction. Journal of Hazardous Materials Advances, 2023, 9, 100230.	3.0	8
1317	Fabrication of Well-Aligned ZnO Nanorods with Different Reaction Times by Chemical Bath Deposition Method Applying for Photocatalysis Application. Molecules, 2023, 28, 397.	3.8	4
1318	WO<sub>3</sub>@ZnO Nanoarrays as the Photoanode for Photoelectrochemical Production of H<sub>2</sub>O<sub>2</sub>. Journal of the Electrochemical Society, 2023, 170, 016502.	2.9	0

#	ARTICLE	IF	CITATIONS
1319	Influence of Zinc Acetate Concentration on ZnO Growth on Anodized Nb2O5 Nanoporous Films and Photocatalytic Dye Degradation. <i>Arabian Journal for Science and Engineering</i> , 2023, 48, 9009-9022.	3.0	1
1320	Microwave-Assisted Synthesis of rGO-ZnO/CuO Nanocomposites for Photocatalytic Degradation of Organic Pollutants. <i>Crystals</i> , 2023, 13, 133.	2.2	7
1321	Recent advances in metal-free CDs/g-C3N4 photocatalysts: Synthetic strategies, mechanism insight, and applications. <i>Journal of Materials Science and Technology</i> , 2023, 150, 11-26.	10.7	11
1322	Traditional vs. Microfluidic Synthesis of ZnO Nanoparticles. <i>International Journal of Molecular Sciences</i> , 2023, 24, 1875.	4.1	16
1323	A spherical fountain prototype photoreactor operated under natural sunlight: Mechanism, toxicology assessment, and economics. <i>Journal of Water Process Engineering</i> , 2023, 51, 103467.	5.6	1
1324	Boosted natural sunlight driven photodegradation of organic dyes using rGO anchored Pr/Cu dual-doped ZnO nanocomposite: Characterization and mechanistic insight. <i>Optical Materials</i> , 2023, 136, 113397.	3.6	21
1325	Nanostructured ZnO as an efficient heterogeneous photocatalyst towards degradation of lignin under visible light irradiation. <i>Molecular Catalysis</i> , 2023, 536, 112918.	2.0	5
1326	Optimisation of aqueous phase low density polyethylene degradation by graphene oxide-zinc oxide photocatalysts. <i>Chemical Engineering Research and Design</i> , 2023, 190, 550-565.	5.6	10
1327	Solvothermal synthesis of magnetically separable Co@ZnO nanowires for visible light driven photocatalytic applications. <i>Physica B: Condensed Matter</i> , 2023, 652, 414654.	2.7	7
1328	Photocatalytic degradation of hazardous Rhodamine B dye using sol-gel mediated ultrasonic hydrothermal synthesized of ZnO nanoparticles. <i>Results in Engineering</i> , 2023, 17, 100890.	5.1	25
1329	Pyro-phototronic effect: An effective route toward self-powered photodetection. <i>Nano Energy</i> , 2023, 107, 108172.	16.0	32
1330	Sun irradiated high efficient photocatalyst ZnO nanoparticles obtained by assisted microwave irradiation. <i>Materials Science and Engineering B: Solid-State Materials for Advanced Technology</i> , 2023, 289, 116263.	3.5	7
1331	ZnO microrods sandwiched between layered CNF matrix: Fabrication, stress transfer, and mechanical properties. <i>Carbohydrate Polymers</i> , 2023, 305, 120536.	10.2	2
1332	Physicochemical properties and photocatalytic activity of MoO3 nanostructures: Evaluation of structural, optical, vibrational, and morphological properties. <i>Ceramics International</i> , 2023, 49, 13994-14006.	4.8	4
1333	Efficient photodegradation of methyl orange dye using electrogenerated copper-zinc oxide hybrid. <i>Materials Today: Proceedings</i> , 2023, 88, 1-5.	1.8	1
1334	Dual function of rhodium photodeposition on ZnO/ZnS: Enhanced H2 production and photocorrosion suppression in water. <i>International Journal of Hydrogen Energy</i> , 2023, 48, 9713-9722.	7.1	6
1335	ZnO Nanoparticles from Different Precursors and Their Photocatalytic Potential for Biomedical Use. <i>Nanomaterials</i> , 2023, 13, 122.	4.1	16
1336	A 0D/2D Heterojunction Composite of Polymeric Carbon Nitride and ZIF-8-Derived ZnO for Photocatalytic Organic Pollutant Degradation. <i>Crystals</i> , 2023, 13, 47.	2.2	1

#	ARTICLE	IF	CITATIONS
1337	Metal peroxides as potential photocatalysts for environmental remediation. RSC Advances, 2023, 13, 3416-3424.	3.6	2
1338	BiOBr as template and Bi <sup>3+</sup> source to support the growth of Bi-Zn bimetallic MOF and hybrid photocatalysts with highly visible-light photocatalytic performances. Journal of Materials Science, 2023, 58, 2506-2524.	3.7	2
1339	Morphological Control of Supported ZnO Nanosheet Arrays and Their Application in Photodegradation of Organic Pollutants. Nanomaterials, 2023, 13, 443.	4.1	4
1340	Effect of phenol concentration on the photocatalytic performance of ZnO nanoparticles. Journal of Chemical Technology and Biotechnology, 2023, 98, 1826-1836.	3.2	2
1341	Investigation of Advanced Oxidation Process in the Presence of TiO <sub>2</sub> Semiconductor as Photocatalyst: Property, Principle, Kinetic Analysis, and Photocatalytic Activity. Catalysts, 2023, 13, 232.	3.5	26
1342	Morphological effect of one-dimensional ZnO nanostructures on the photocatalytic activity. Journal of Physics and Chemistry of Solids, 2023, 176, 111259.	4.0	4
1343	Hydrothermal synthesis of stable lead-free Cs <sub>4</sub> MnBi <sub>2</sub> Cl <sub>12</sub> perovskite single crystals for efficient photocatalytic degradation of organic pollutants. Journal of Materials Chemistry C, 2023, 11, 3715-3725.	5.5	13
1344	Revealing Photocatalytic Performance of Zn <sub>x</sub> Cd <sub>1-x</sub> S Nanoparticles Depending on the Irradiation Wavelength. Inorganic Chemistry, 2023, 62, 3703-3711.	4.0	1
1345	Magnetic Fe <sub>2</sub> O <sub>3</sub> /CNT nanocomposites: Characterization and photocatalytic application towards the degradation of Rose Bengal dye. Ceramics International, 2023, 49, 20071-20079.	4.8	8
1346	ZnO NPs: Photocatalytic potential, mechanistic insights, favorable parameters and challenges. Materials Today: Proceedings, 2023, , .	1.8	1
1347	Construction of novel ternary MoSe <sub>2</sub> /ZnO/p-BN photocatalyst for efficient ofloxacin degradation under visible light. Colloids and Surfaces A: Physicochemical and Engineering Aspects, 2023, 663, 131050.	4.7	4
1348	The Promising Antibacterial and Anticancer Activity of Green Synthesized Zinc Nanoparticles in Combination with Silver and Gold Nanoparticles. Journal of Inorganic and Organometallic Polymers and Materials, 2023, 33, 1868-1881.	3.7	5
1349	Hydrothermal synthesis of cobalt substitute zinc-ferrite (Co <sub>1-x</sub> Zn <sub>x</sub> Fe <sub>2</sub> O <sub>4</sub> ) nanodot, functionalised by polyaniline with enhanced photocatalytic activity under visible light irradiation. Heliyon, 2023, 9, e15381.	3.2	5
1350	Characterization and photocatalytic application of SrGd <sub>2</sub> O <sub>4</sub> doped with rare earth Sm <sup>3+</sup> and Dy <sup>3+</sup> ions. Surfaces and Interfaces, 2023, 37, 102755.	3.0	2
1351	Metal-organic framework nanopesticide carrier for accurate pesticide delivery and decrement of groundwater pollution. Journal of Cleaner Production, 2023, 402, 136809.	9.3	18
1352	Structural design of SiO <sub>2</sub> /TiO <sub>2</sub> materials and their adsorption-photocatalytic activities and mechanism of treating cyanide wastewater. Journal of Molecular Liquids, 2023, 377, 121519.	4.9	6
1353	Annealing in ionic liquid for synthesis of ZnO nanostructures and its effect on linear-nonlinear optical properties. Optical Materials, 2023, 139, 113758.	3.6	0
1354	UV-durable superhydrophobic ZnO/SiO <sub>2</sub> nanorod arrays on an aluminum substrate using catalyst-free chemical vapor deposition and their corrosion performance. Applied Surface Science, 2023, 623, 157085.	6.1	10

#	ARTICLE	IF	CITATIONS
1355	Water remediation using titanium and zinc oxide nanomaterials through disinfection and photocatalysis process: A review. Environmental Research, 2023, 227, 115786.	7.5	14
1356	Green synthesis of zinc oxide nanoparticles using Pisonia Alba leaf extract and its antibacterial activity. Applied Surface Science Advances, 2023, 15, 100400.	6.8	29
1357	Application of a new lignin/cellulose carbon xerogel/ZnO/Bi <sub>2</sub> O <sub>3</sub> /Bi <sup>0</sup> composite photocatalyst for the degradation of bisphenol-A under sunlight. Chemical Physics Impact, 2023, 6, 100182.	3.5	4
1358	Experimental and density functional theory investigation on one- and two-dimensional coordination polymers and their ZnO-doped nanocomposite materials for wastewater remediation. Separation and Purification Technology, 2023, 315, 123598.	7.9	5
1359	Bone powder decorated TiO <sub>2</sub> and ZnO nanoparticles: The first investigation of NO <sub>x</sub> degradation by solar light and visible light-driven photocatalyst. Materials Chemistry and Physics, 2023, 302, 127707.	4.0	0
1360	Solvent-exfoliated D-A $\pi$ -polymer @ ZnS heterojunction for efficient photocatalytic hydrogen evolution. Materials Science in Semiconductor Processing, 2023, 161, 107463.	4.0	6
1361	First principles study of the effect of (Mg, C) doping and Zn vacancies on the carrier activity, lifetime, visible light effect, and oxidation–reduction reaction of ZnO(0 0 1) monolayers. Applied Surface Science, 2023, 616, 156477.	6.1	7
1362	Mediation of Nanotechnology and Biotechnology: An Emerging Pathway for the Treatment of Environmental Pollution. , 2023, , 1-44.		0
1363	An Overview of Nanomaterials’s Synthesis, and Their Applications for Wastewater Treatment. , 2023, , 27-47.		0
1364	Dual doping effect of Ag <sup>+</sup> & Al <sup>3+</sup> on the structural, optical, photocatalytic properties of ZnO nanoparticles. Applied Surface Science Advances, 2023, 13, 100382.	6.8	8
1365	Enhancement of light extraction from the LED using PDMS-ZnO quantum dots layer. Journal of Materials Science: Materials in Electronics, 2023, 34, .	2.2	1
1366	Fabrication of La, Ce co-doped ZnO nanorods for improving photodegradation of methylene blue. Journal of Rare Earths, 2024, 42, 76-83.	4.8	7
1368	Successive Photocatalytic Degradation of Methylene Blue by ZnO, CuO and ZnO/CuO Synthesized from Coriandrum sativum Plant Extract via Green Synthesis Technique. Crystals, 2023, 13, 281.	2.2	19
1369	Photoresponsive Activity of the Zn <sub>0.94</sub> Er <sub>0.02</sub> Cr <sub>0.04</sub> O Compound with Hemisphere-like Structure Obtained by Co-Precipitation. Materials, 2023, 16, 1446.	2.9	6
1370	Biosynthetic modulation of carbon-doped ZnO for rapid photocatalytic endocrine disruptive remediation and hydrogen evolution. Journal of Cleaner Production, 2023, 394, 136393.	9.3	9
1371	Photocatalytic properties of Ni <sub>1-x</sub> Fe <sub>x</sub> O nanoparticles synthesized by a freeze-drying process. Materials Chemistry and Physics, 2023, 299, 127488.	4.0	3
1372	Nanotechnology in Management of Environmental Contaminants. , 2023, , 383-401.		0
1373	Development of Novel Fouling-Resistant Hollow Fibre Nanocomposite Membrane Augmented with Iron Oxide Nanoparticles for Efficient Rejection of Bisphenol A from Water: Fouling, Permeability, and Mechanism Studies. Journal of Polymers and the Environment, 2023, 31, 2880-2901.	5.0	2

#	ARTICLE	IF	CITATIONS
1374	Covalent Organic Frameworks-Semiconductor-Based Heterostructures for Photocatalytic Applications. ChemSusChem, 2023, 16, .	6.8	10
1375	Comparative study of structural, optical, and photocatalytic properties of ZnO synthesized by chemical coprecipitation and modified sol-gel methods. Surface and Interface Analysis, 2023, 55, 424-429.	1.8	3
1376	Elemental semiconductor red phosphorus/ZnO nanohybrids as high performance photocatalysts. Ceramics International, 2023, 49, 17746-17752.	4.8	5
1377	Synthesis and comparative study of the structural and optical properties of binary ZnO-based composites for environmental applications. RSC Advances, 2023, 13, 6287-6303.	3.6	9
1378	Preparation of Au/ZnO/Fe <sub>3</sub> O <sub>4</sub> Composite for Degradation of Tartrazine under Visible Light. Bulletin of Chemical Reaction Engineering and Catalysis, 2023, 18, 71-84.	1.1	1
1379	Bismuth vanadate: A versatile heterogeneous catalyst for photocatalytic functionalization of C(sp <sup>2</sup> )-H bonds. Chinese Journal of Catalysis, 2023, 46, 157-166.	14.0	5
1380	Influence of Seeds Layer on the Control of Growth and Crystallinity of AZO Films Deposited by Mist Vapor Deposition Applying for Photocatalytic Activity. Topics in Catalysis, 2023, 66, 523-532.	2.8	1
1381	Photocatalysis: TiO <sub>2</sub> , ZnO, and species of iron oxides. , 2023, , 101-126.		0
1382	ZnO micro/nanorods: their performance in the photocatalytic degradation and photodiode. Applied Physics A: Materials Science and Processing, 2023, 129, .	2.3	2
1383	Improving Both Efficiency and Stability of Inverted Polymer Solar Cells by Incorporating Carbon Dots as Cathode Modified Layer. , 2022, , .		0
1384	Photocatalytic studies of tin oxide nanostructures produced by different methods. Modern Physics Letters B, 2023, 37, .	1.9	2
1386	Controlling simonkolleite crystallisation <i>via</i> metallic Zn oxidation in a betaine hydrochloride solution. Nanoscale Advances, 0, , .	4.6	0
1387	Biogenic synthesis of metal oxide-based photocatalysts for dye removal. , 2023, , 69-109.		0
1388	Photoelectrochemical Degradation of Contaminants of Emerging Concern with Special Attention on the Removal of Acetaminophen in Water-Based Solutions. Catalysts, 2023, 13, 524.	3.5	3
1389	Ag <sub>2</sub> CO <sub>3</sub> -Based Photocatalyst with Enhanced Photocatalytic Activity for Endocrine-Disrupting Chemicals Degradation: A Review. Catalysts, 2023, 13, 540.	3.5	3
1390	Facile fabrication of a visible-light stable metal-free g-C <sub>3</sub> N <sub>4</sub> /COF heterojunction with efficiently enhanced photocatalytic activity. New Journal of Chemistry, 2023, 47, 7538-7547.	2.8	1
1391	Dielectric properties of Zn <sub>1-x</sub> Cu <sub>x</sub> O <sub>0.997</sub> N <sub>0.003</sub> nanopowders synthesised via sol-gel method. Journal of the Australian Ceramic Society, 2023, 59, 657-669.	1.9	1
1392	Suspension of ZnO Nanostructures Synthesized by Hot Water Treatment for Photocatalytic Wastewater Treatment. Water, Air, and Soil Pollution, 2023, 234, .	2.4	0

#	ARTICLE	IF	CITATIONS
1393	Fate and transport of engineered nanoparticles in the subsurface: Current understanding, challenges, and future scope. , 2023, , 129-172.		0
1394	Thermoelectric and Structural Properties of Sputtered AZO Thin Films with Varying Al Doping Ratios. Coatings, 2023, 13, 691.	2.6	1
1395	Nd-Doped ZnO Nanostructures with Enhanced Photocatalytic Performance for Environmental Protection. International Journal of Molecular Sciences, 2023, 24, 6436.	4.1	4
1396	Preparation and Properties of (Cu, Ni) Co-Doped ZnO Nanoparticle-Reinforced Cu-Ni Nanocomposite Coatings. Materials, 2023, 16, 2746.	2.9	1
1397	Construction of CuS/ZnO Z-scheme heterojunction as highly efficient piezocatalyst for degradation of organic pollutant and promoting N2 fixation properties. Ceramics International, 2023, 49, 21658-21666.	4.8	4
1398	Preparation of carnation-like Ag-ZnO composites for enhanced photocatalysis under visible light. Nanotechnology, 2023, 34, 275602.	2.6	6
1399	Meta-analysis of metal nanoparticles degrading pesticides: what parameters are relevant?. Environmental Science and Pollution Research, 2023, 30, 60168-60179.	5.3	2
1400	Improved photocatalytic, antimicrobial and photoelectrochemical properties of nanocrystalline Cu <sup>2+</sup> -doped ZnO nanoparticles. Ceramics International, 2023, 49, 22449-22459.	4.8	6
1401	Hybrid Organic Polymer/Inorganic Nano-materials for Biomedical Applications: Where we are and Where to go?. Current Nanoscience, 2024, 20, 188-205.	1.2	0
1402	Hydrothermal-assisted synthesis of Co-doped ZnO nanoparticles catalyst for sodium borohydride dehydrogenation and photodegradation of organic pollutants in water. Chemical Engineering Journal Advances, 2023, 14, 100495.	5.2	7
1403	Reverse strain effects in the defect states in aluminium doped ZnO. Materials Science and Technology, 2023, 39, 2269-2276.	1.6	3
1404	Photocatalytic Degradation of Methyl Green Dye Mediated by Pure and Mn-Doped Zinc Oxide Nanoparticles under Solar Light Irradiation. Adsorption Science and Technology, 2023, 2023, .	3.2	12
1405	Polyol-mediated zinc oxide nanoparticles using the refluxing method as an efficient photocatalytic and antimicrobial agent. Frontiers in Bioengineering and Biotechnology, 0, 11, .	4.1	5
1406	Phytochemical-Mediated Synthesis of Nanozinc Oxide Particles and Its Antibacterial, Photocatalytic Degradation of Methylene Blue. Journal of Nanomaterials, 2023, 2023, 1-8.	2.7	0
1407	Plasmonic Solar Energy Harvesting by ZnO Nanostructures and Their Composite Interfaces: A Review on Fundamentals, Recent Advances, and Applications. Energy Technology, 2023, 11, .	3.8	2
1408	A pragmatic review on photocatalytic degradation of methyl orange dye pollutant using greenly biofunctionalized nanometallic materials: A focus on aquatic body. Applied Organometallic Chemistry, 2023, 37, .	3.5	12
1409	Graphene in nanomedicine: A review on nano-bio factors and antibacterial activity. Colloids and Surfaces B: Biointerfaces, 2023, 226, 113323.	5.0	13
1410	Insights Into the Application of Polyaniline-Based Composites in Environmental Engineering. , 2023, 1, 25-31.		0



#	ARTICLE	IF	CITATIONS
1411	Preparation of Alloy and the Application for Photocatalytic Degradation Under Solar/UV and Visible Light Irradiation. <i>Green Chemistry and Sustainable Technology</i> , 2023, , 41-57.	0.7	0
1412	3D Lanthanide Neodymium Porphyrin Metal-Organic Framework for Photocatalytic Oxidation of Styrene. <i>Inorganic Chemistry</i> , 2023, 62, 8315-8325.	4.0	1
1413	Mediation of Nanotechnology and Biotechnology: An Emerging Pathway for the Treatment of Environmental Pollution. , 2023, , 2457-2500.		0
1414	Recent advances in cellulose nanocrystals-based antimicrobial agents. <i>Carbohydrate Polymers</i> , 2023, 315, 120987.	10.2	3
1415	Scalable hierarchical wood/ZnO nanohybrids for efficient mechanical energy conversion. <i>Materials and Design</i> , 2023, 226, 111665.	7.0	2
1416	Bimetallic PtNi alloy modified 2D g-C <sub>3</sub> N <sub>4</sub> nanosheets as an efficient cocatalyst for enhancing photocatalytic hydrogen evolution. <i>International Journal of Hydrogen Energy</i> , 2023, 48, 28277-28288.	7.1	7
1417	Biogenic synthesis of zinc oxide nanoparticles using leaves extract of <i>Camellia sinensis</i> for photocatalytic and biological applications. , 2023, 15, 1-9.		5
1418	Photo-responsive Mn-doped TiO <sub>2</sub> -based superhydrophobic/ underwater superoleophobicity membrane for efficient oil-water separation and photothermal decontamination. <i>Colloids and Surfaces A: Physicochemical and Engineering Aspects</i> , 2023, 670, 131519.	4.7	7
1419	Green Synthesis of Hybrid Nanostructure for Wastewater Remediation by Photocatalytic Degradation. , 2023, , 377-406.		0
1420	CdS nanocrystallites sensitized ZnO nanosheets for visible light induced sonophotocatalytic/photocatalytic degradation of tetracycline: From experimental results to a generalized model based on machine learning methods. <i>Chemosphere</i> , 2023, 332, 138852.	8.2	14
1421	Photocatalytic applications of ceramics. , 2023, , 169-204.		0
1422	The fate of three typical persistent organic pollutants in bioretention columns as revealed by stable carbon isotopes. <i>Chemosphere</i> , 2023, 334, 138996.	8.2	4
1423	Photodegradation of titan yellow dyes using Co/ZnO catalyst. <i>AIP Conference Proceedings</i> , 2023, , .	0.4	0
1424	A review of food preservation based on zein: The perspective from application types of coating and film. <i>Food Chemistry</i> , 2023, 424, 136403.	8.2	7
1425	Review of Recent Developments in the Fabrication of ZnO/CdS Heterostructure Photocatalysts for Degradation of Organic Pollutants and Hydrogen Production. <i>Molecules</i> , 2023, 28, 4277.	3.8	8
1426	Recent progress on plant extract-mediated biosynthesis of ZnO-based nanocatalysts for environmental remediation: Challenges and future outlooks. <i>Advances in Colloid and Interface Science</i> , 2023, 317, 102931.	14.7	15
1427	Photodegradation of methylene blue by phytosynthesized Ag-ZnO nanocomposites. , 2023, 3, 100050.		1
1428	Depth-profiling analysis of ZnO layers with three morphologies by direct-current glow discharge mass spectrometry. <i>Microchemical Journal</i> , 2023, 192, 108904.	4.5	1

#	ARTICLE	IF	CITATIONS
1429	Facile synthesis of PANI and rGO supported Y/Pr co-doped ZnO: boosted solar light-driven photocatalysis. Applied Physics A: Materials Science and Processing, 2023, 129, .	2.3	10
1430	Multifunctional properties of microwave assisted CuO/Cu <sub>2</sub> O-ZnO mixed metal oxide nanocomposites. Journal of Materials Science: Materials in Electronics, 2023, 34, .	2.2	11
1431	Improved transparent conductive properties of highly c-axis oriented ZnO thin films upon (Ga, Mg) co-doping. , 2023, 181, 207617.		1
1433	A Review on Impacting Parameters for Photocatalytic Degradation of Organic Effluents by Ferrites and Their Nanocomposites. Processes, 2023, 11, 1727.	2.8	3
1434	Synthesis, characterization of ternary metal oxides nanocomposite (ZnO@CdO@Pr <sub>2</sub> O <sub>3</sub> ) for photodegradation of organic pollutants: methylene blue & rhodamine B. Journal of the Iranian Chemical Society, 2023, 20, 2245-2256.	2.2	3
1435	Direct fabrication of metal-free graphene nanohairs/polyimide heterojunction for the highly efficient photocatalytic degradation of industrial dyes. Diamond and Related Materials, 2023, 137, 110096.	3.9	1
1436	Taguchi L9 (34) Orthogonal Array Design for Photocatalytic Degradation of Methylene Blue Dye by Green ZnO Particles Biosynthesized by Chrysanthemum spp. Flower Extract. Water (Switzerland), 2023, 15, 2186.	2.7	3
1437	Effect of loading of Pt-decorated TiO <sub>2</sub> on the enhancement of aerobic photo-oxidation of benzyl alcohol. Molecular Catalysis, 2023, 547, 113247.	2.0	2
1438	Facile fabrication of CoAl <sub>2</sub> O <sub>4</sub> based rGO nanohybrid as an environmental purifier for photodegradation of methylene blue. Journal of Materials Science: Materials in Electronics, 2023, 34, .	2.2	0
1439	An energy autonomous and portable pilot unit for the photocatalytic treatment of wastewater. Chemical Engineering Research and Design, 2023, 195, 490-507.	5.6	0
1440	Preparation of dual-use GPTES@ZnO photocatalyst from waste warm filter cake and evaluation of its synergic photocatalytic degradation for air-water purification. Journal of Environmental Management, 2023, 342, 118352.	7.8	15
1441	TiO <sub>2</sub> P25 and Kronos vlp 7000 materials activated by simulated solar light for atrazine degradation. International Journal of Chemical Reactor Engineering, 2023, .	1.1	0
1442	Room-temperature electrochemical deposition of nanostructured ZnO films on FTO substrate and their photoelectrochemical activity. Journal of Industrial and Engineering Chemistry, 2023, 126, 171-180.	5.8	1
1443	Porous Geopolymer/ZnTiO <sub>3</sub> /TiO <sub>2</sub> Composite for Adsorption and Photocatalytic Degradation of Methylene Blue Dye. Polymers, 2023, 15, 2697.	4.5	5
1444	Recent Progress on Ligand-Protected Metal Nanoclusters in Photocatalysis. Nanomaterials, 2023, 13, 1874.	4.1	0
1445	Effect of yttrium doping on the crystal structure, optical, and photocatalytic properties of hydrothermally synthesized ZnO nanorods. Materials Science and Engineering B: Solid-State Materials for Advanced Technology, 2023, 296, 116664.	3.5	5
1446	Review of photocatalytic ZnO nanomaterials made by atomic layer deposition. Surfaces and Interfaces, 2023, 40, 103094.	3.0	3
1447	Increasing the photocatalytic degradation rate of a rGO/PVA nanocomposite decorated with ZnO nanoparticles. New Journal of Chemistry, 2023, 47, 13661-13670.	2.8	2

#	ARTICLE	IF	CITATIONS
1448	Continuous NO dual-generation by ZnO nanoparticle conjugated with $\alpha$ -lipoic acid for functional biodegradable vascular stent. Chemical Engineering Journal, 2023, 470, 144174.	12.7	9
1449	Effect of lanthanum doping on structural, optical, and photocatalytic properties of YVO <sub>4</sub> . Journal of Materials Research, 2023, 38, 3536-3547.	2.6	1
1450	Photocatalytic degradation of metronidazole and oxytetracycline by novel L-Arginine (C, N) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 50 667 Td Chemosphere, 2023, 337, 139282.	8.2	4
1451	Algae-Based Synthesis to Generate Nanomaterials for Nanoremediation. , 2023, , 109-126.		1
1452	Tuning the stoichiometry of the pulsed laser deposited composite films. Journal of Alloys and Compounds, 2023, 961, 171102.	5.5	0
1453	Synthesis and application of manganese-doped zinc oxide as a potential adsorbent for removal of Congo red dye from wastewater. Environmental Research, 2023, 233, 116484.	7.5	5
1454	Synthesis and characterization of visible active Fe grafted ZnO nanocomposites for NBB degradation in water. Inorganic Chemistry Communication, 2023, 154, 110963.	3.9	7
1455	Surfactant assisted synthesis of nickel vanadium oxide nanostructures with strong visible-light-induced photocatalytic activity. Results in Surfaces and Interfaces, 2023, 12, 100129.	2.4	1
1456	ZnO/PDA/Mesoporous Cellular Foam Functionalized Thin-Film Nanocomposite Membrane towards Enhanced Nanofiltration Performance. Membranes, 2023, 13, 486.	3.0	3
1457	Effluent Xenobiotics and Prospects of Biogenic Zinc Oxide Nanoparticles for the Treatment of Textile Dye Effluent. , 2023, , 55-75.		0
1458	Toxic Effects of Nanomaterials on Aquatic Animals and Their Future Prospective. , 2023, , 325-351.		0
1459	Delafossite CuCoO <sub>2</sub> /ZnO derived from ZIF-8 heterojunctions as efficient photoelectrodes for dye-sensitized solar cells. RSC Advances, 2023, 13, 14825-14840.	3.6	7
1460	Novel ZnO/Ag nanohybrids prepared from Ag <sup>+</sup> -doped layered zinc hydroxides as highly active photocatalysts for the degradation of dyes and Ciprofloxacin. Colloids and Surfaces A: Physicochemical and Engineering Aspects, 2023, 671, 131643.	4.7	7
1461	Efficient photo-adsorptive eradication of endocrine disrupting pesticides by chitosan co-decorated metal oxide bio-nanocomposite. Environmental Science and Pollution Research, 2023, 30, 72523-72538.	5.3	3
1462	A Self-Cleaning UV-Cured Organic Coating with ZnO@Ag Hybrid Nanoparticles. Journal of Cluster Science, 2023, 34, 3061-3074.	3.3	3
1463	Synthesis and characterization of catalyst Cu/ZnO for degradation of titan yellow dye. AIP Conference Proceedings, 2023, , .	0.4	0
1464	Photocatalytic Application of Cerium-based Nanomaterials. , 2023, , 70-91.		0
1466	Metal-free 3D donor-acceptor COF with low exciton binding for solar fuel production based on CO <sub>2</sub> reduction. Journal of Materials Chemistry A, 2023, 11, 13615-13622.	10.3	6

#	ARTICLE	IF	CITATIONS
1467	Faujasite-Type Zeolite Obtained from Ecuadorian Clay as a Support of ZnTiO <sub>3</sub> /TiO <sub>2</sub> NPs for Cyanide Removal in Aqueous Solutions. <i>International Journal of Molecular Sciences</i> , 2023, 24, 9281.	4.1	4
1468	Preparation of ZnO p-n homojunction nanorod via nitrogen ion injection coupled with Au induced SPR effect for enhanced photoelectrochemical water splitting. <i>Surfaces and Interfaces</i> , 2023, 39, 102989.	3.0	1
1469	Efficient degradation of cationic dyes by ZnO and ZnO@Fe(III) quantum dots under natural sunlight and UV light. <i>Journal of Physics and Chemistry of Solids</i> , 2023, 181, 111464.	4.0	2
1470	Metal Oxide Nanostructures (MONs) as Photocatalysts for Ciprofloxacin Degradation. <i>International Journal of Molecular Sciences</i> , 2023, 24, 9564.	4.1	8
1471	Bulk ZnO, nanoparticles, nanorods and thin film: A comparative study of structural, optical and photocatalytic properties. <i>Journal of Crystal Growth</i> , 2023, 618, 127317.	1.5	2
1472	Comparison of Mechano- and PhotoATRP with ZnO Nanocrystals. <i>Macromolecules</i> , 2023, 56, 5101-5110.	4.8	3
1473	Covalent Triazine Framework Films through In Situ Growth for Photocatalytic Hydrogen Evolution. <i>ChemSusChem</i> , 2023, 16, .	6.8	0
1474	Engineered Metal Oxide Nanoparticles as Fungicides for Plant Disease Control. <i>Plants</i> , 2023, 12, 2461.	3.5	3
1475	Titanium dioxide nanoparticles: green synthesis, characterization, and antimicrobial/photocatalytic activity. <i>Biomass Conversion and Biorefinery</i> , 0, .	4.6	0
1476	Key factors in improving the synthesis and properties of visible-light activated g-C <sub>3</sub> N <sub>4</sub> for photocatalytic hydrogen production and organic pollutant decomposition. <i>Catalysis Reviews - Science and Engineering</i> , 0, , 1-72.	12.9	6
1477	Structural, morphological and optical properties of Sn doped zinc oxide thin films synthesis by sol-gel method for photocatalytic applications. <i>Physica Scripta</i> , 2023, 98, 085924.	2.5	0
1479	Evaluation of the photocatalytic activity of ZnO nanorods and nanoflowers grown from seed layers deposited by spin coating. <i>Boletin De La Sociedad Espanola De Ceramica Y Vidrio</i> , 2024, 63, 72-84.	1.9	1
1480	Graphene Oxide Incorporated Zinc Oxide Thin Films by Spray Pyrolysis for Efficient Photodegradation of Methylene Blue. <i>ChemistrySelect</i> , 2023, 8, .	1.5	2
1481	The composite for the photocatalytic degradation of methyl orange under visible light contains Co <sub>3</sub> O <sub>4</sub> generated from ZIF-67 with CuO/MXene. <i>International Journal of Environmental Analytical Chemistry</i> , 0, , 1-16.	3.3	0
1483	Photodegradation of methylene blue by metal-nanoparticles-modulated-graphene-based composites: An efficient way of sewage water management. <i>Solid State Sciences</i> , 2023, 142, 107255.	3.2	1
1484	Efficient photocatalytic hydrogen production by space separation of photo-generated charges from S-scheme ZnIn <sub>2</sub> S <sub>4</sub> /ZnO heterojunction. <i>Journal of Colloid and Interface Science</i> , 2023, 650, 784-797.	9.4	8
1485	Phyto-mediated synthesis of pure and cobalt-doped SnO <sub>2</sub> nanoparticles for antimicrobial, antioxidant, and photocatalytic activities. <i>Biomass Conversion and Biorefinery</i> , 0, .	4.6	2
1486	Treatment of Dark Humic Water Using Photocatalytic Advanced Oxidation (PAO) Processes under Visible and UV Light. <i>Clean Technologies</i> , 2023, 5, 852-865.	4.2	0

#	ARTICLE	IF	CITATIONS
1487	Hydro/solvothermally synthesized bismuth tungstate nanocatalysts for enhanced photocatalytic degradation of dyes, antibiotics, and bacteria in wastewater: A review. <i>Journal of Water Process Engineering</i> , 2023, 54, 103994.	5.6	12
1488	Photocatalytic Performance of Zinc Oxide and Metal-Doped Zinc Oxide for Various Organic Pollutants. <i>ChemBioEng Reviews</i> , 2023, 10, 698-710.	4.4	4
1489	Effect of Current Density on the Corrosion Resistance and Photocatalytic Properties of Cu-Ni-Zn <sub>0.96</sub> Ni <sub>0.02</sub> Cu <sub>0.02</sub> O Nanocomposite Coatings. <i>Materials</i> , 2023, 16, 4925.	2.9	0
1490	Heterogeneous Photocatalysts for Light-Mediated Reversible Deactivation Radical Polymerization. <i>ChemPhotoChem</i> , 2023, 7, .	3.0	0
1491	Emerging aspects of metal ions-doped zinc oxide photocatalysts in degradation of organic dyes and pharmaceutical pollutants – A review. <i>Journal of Environmental Management</i> , 2023, 344, 118614.	7.8	10
1492	Deployment of the one-step solvothermal method to synthesize high-performance ZnO nanorods in photocatalytic NO degradation: A novel investigation. <i>Journal of Industrial and Engineering Chemistry</i> , 2023, 127, 343-355.	5.8	1
1494	State-of-the-art evolution of g-C <sub>3</sub> N <sub>4</sub> based Z-scheme heterostructures towards energy and environmental applications: A review. <i>Materials Research Bulletin</i> , 2023, 168, 112448.	5.2	3
1496	ZnO-Based Phosphors Materials. <i>Progress in Optical Science and Photonics</i> , 2023, , 59-88.	0.5	0
1497	Fermi level shifts of gold nanospheres on ZnO film upon UV irradiation. <i>Physical Chemistry Chemical Physics</i> , 0, , .	2.8	1
1498	Photocatalytic activity of hybrid Ag/Er:ZnO nanoparticles synthesized by pulsed laser ablation in distilled water. <i>Physica Scripta</i> , 2023, 98, 095934.	2.5	1
1499	Morphological Changes of Polymer-Grafted Nanocellulose during a Drying Process. <i>Biomacromolecules</i> , 0, , .	5.4	0
1500	Enhanced visible light induced photocatalytic degradation of oxytetracycline hydrochloride by n-ZnO/p-NiO composite. <i>Chemical Physics Letters</i> , 2023, 829, 140741.	2.6	2
1501	Improvement of the photocatalytic activity of CeO <sub>2</sub> on the degradation of chlorophenolic compounds obtained by solution combustion synthesis (SCS). Effect of urea as fuel. <i>Solid State Sciences</i> , 2023, 143, 107274.	3.2	2
1502	Advanced metal oxides nanostructures to recognize and eradicate water pollutants. <i>Progress in Materials Science</i> , 2023, 139, 101169.	32.8	20
1503	Facile Fabrication of PANI/Fe <sub>2.85</sub> Ni <sub>0.15</sub> O <sub>4</sub> Nanocomposites and Their Application for the Effective Degradation of Rhodamine B Dye. <i>Magnetochemistry</i> , 2023, 9, 195.	2.4	0
1504	Flexdispersion: Amphiphilic phosphonic acid-capped nanoparticles. <i>Colloids and Surfaces A: Physicochemical and Engineering Aspects</i> , 2023, 676, 132190.	4.7	0
1505	Effect of La-doping on NiO photocatalyst for enhancing photocatalytic degradation performance under visible light irradiation: DFT calculations and degradation mechanism. <i>Inorganic Chemistry Communication</i> , 2023, 156, 111172.	3.9	6
1506	Vitamin C for Photo-Stable Non-fullerene-acceptor-Based Organic Solar Cells. <i>ACS Applied Materials &amp; Interfaces</i> , 2023, 15, 39647-39656.	8.0	0

#	ARTICLE	IF	CITATIONS
1507	High-Power-Density Thermoelectrochemical Cell Based on Ni/NiO Nanostructured Microsphere Electrodes with Alkaline Electrolyte. <i>Nanomaterials</i> , 2023, 13, 2290.	4.1	1
1508	Highly efficient green-emitting ZnO:Cu <sup>2+</sup> phosphors for NUV-pumped white-emitting diodes. <i>Dalton Transactions</i> , 0, , .	3.3	0
1509	The Surface Behavior of ZnO Films Prepared at Room Temperature. <i>Journal of Composites Science</i> , 2023, 7, 335.	3.0	0
1510	Hybrid nanostructures exhibiting both photocatalytic and antibacterial activity—a review. <i>Environmental Science and Pollution Research</i> , 2023, 30, 95215-95249.	5.3	2
1511	LED-light-driven over ZnO/biochar nanocomposite for activation of peroxymonosulfate to enhanced photocatalytic removal of methyl orange dye in aqueous solutions. <i>Environmental Technology (United Kingdom)</i> , 0, , 1-17.	2.2	1
1512	A novel magnetic photocatalyst BiOBr/BiOCl/MnxZn1-xFe2O4: highly photocatalytic activity and excellent stability. <i>Journal of Sol-Gel Science and Technology</i> , 2023, 108, 490-501.	2.4	3
1513	é«”3â®šæ€ŠMn1/4šZnO/Mn2O3ç³ç±³â®â…%â,¬âCE—â%çš,,â”¶â±âšâ…%â,¬âCE—ç%1æ€Š. <i>Guangzi Xuebao/Acta Photonica Sinica</i> , 2023, 44, 1-10.	2.4	0
1514	Photo-responsive micro/nano-membrane for smart separation and self-cleaning. <i>New Journal of Chemistry</i> , 0, , .	2.8	0
1515	Synthesis of Pr <sup>3+</sup> -doped WO <sub>3</sub> particles: correlation between photoluminescent and photocatalytic properties. <i>RSC Advances</i> , 2023, 13, 25738-25751.	3.6	0
1516	Photocatalytic degradation efficiencies of ZnO nanoparticles and CeO <sub>2</sub> nanosheets synthesized via combustion method. <i>Bulletin of Materials Science</i> , 2023, 46, .	1.7	4
1517	La <sup>3+</sup> -doped ZnO/rGO nanocomposites: Synthesis and characterization as photocatalyst for effective degradation of bromothymol blue dye in water. <i>Results in Materials</i> , 2023, 19, 100449.	1.8	1
1518	An S-scheme heterojunction between Mn/Mg co-doped BiFeO <sub>3</sub> and g-C <sub>3</sub> N <sub>4</sub> nanosheets for photodegradation of organic pollutants. <i>RSC Advances</i> , 2023, 13, 27738-27745.	3.6	0
1519	Cu-Based Z-Schemes Family Photocatalysts for Solar H <sub>2</sub> Production. <i>Hydrogen</i> , 2023, 4, 620-643.	3.4	0
1520	Porous Ceramic ZnO Nanopowders: Features of Photoluminescence, Adsorption and Photocatalytic Properties. <i>Ceramics</i> , 2023, 6, 1667-1681.	2.6	0
1521	Sustainable bioactivity enhancement of ZnO@Ag nanoparticles in antimicrobial, antibiofilm, lung cancer, and photocatalytic applications. <i>RSC Advances</i> , 2023, 13, 26663-26682.	3.6	0
1522	Photocatalytic Systems Based on ZnO Produced by Supercritical Antisolvent for Ceftriaxone Degradation. <i>Catalysts</i> , 2023, 13, 1173.	3.5	4
1523	Solar-based photocatalytic ozonation employing novel S-scheme ZnO/Cu <sub>2</sub> O/CuO/carbon xerogel photocatalyst: effect of pH, salinity, turbidity, and temperature on salicylic acid degradation. <i>Environmental Science and Pollution Research</i> , 2023, 30, 98211-98230.	5.3	0
1524	Versatile synthesis of zinc oxide nanoparticles via chemical route: A review. <i>Materials Today: Proceedings</i> , 2023, , .	1.8	1



#	ARTICLE	IF	CITATIONS
1525	Enhancement of Sulfur Source-Dependent Zn Vacancies in Different Photocatalytic Performances of ZnIn <sub>2</sub> S <sub>4</sub> Nanoparticles. Inorganic Chemistry, 2023, 62, 12913-12919.	4.0	0
1526	Dandelion flower-fabricated Ag nanoparticles versus synthetic ones with characterization and determination of photocatalytic, antioxidant, antibacterial, and $\alpha$ -glucosidase inhibitory activities. Scientific Reports, 2023, 13, .	3.3	2
1527	Photo-response range extension of Z-scheme ZnO/CdS for LED-light-driven photo-active catalyst. Renewable and Sustainable Energy Reviews, 2023, 184, 113602.	16.4	7
1528	Carbon-bridged atomically dispersed platinum on MOF-derived ZnO/C for selective photocatalytic oxidation of NO into Nitrates and Nitrites. Carbon, 2023, 214, 118299.	10.3	3
1529	Synthesis of ZnO@VC for enhancement of synergic photocatalytic degradation of SMX: Toxicity assessment, kinetics and transformation pathway determination. Chemical Engineering and Processing: Process Intensification, 2023, 193, 109544.	3.6	5
1530	Visible light treatment of azo dye-contaminated water by Ni- and Co-doped-ZnO nanoparticles supported on carbon-covered alumina. Water Practice and Technology, 2023, 18, 1898-1922.	2.0	0
1531	An S-scheme NH <sub>2</sub> -MIL-101(Fe)@MCN/Bi <sub>2</sub> O <sub>3</sub> heterojunction photocatalyst for the degradation of tetracycline and production of H <sub>2</sub> O <sub>2</sub> . Chemosphere, 2023, 343, 140234.	8.2	6
1532	Solar Photocatalytic Activity of Ba-Doped ZnO Nanoparticles: The Role of Surface Hydrophilicity. Nanomaterials, 2023, 13, 2742.	4.1	2
1534	Photocatalyst for the Degradation of Hazardous and Toxic Compounds. Advances in Chemical and Materials Engineering Book Series, 2023, , 159-190.	0.3	0
1535	Wattakaka volubilis powered green synthesized CuO, NiO and ZnO nanoparticles for cost-effective biomedical applications. Biomass Conversion and Biorefinery, 0, , .	4.6	0
1536	Emergence of CuInS <sub>2</sub> derived photocatalyst for environmental remediation and energy conversion. Environmental Research, 2023, 238, 117288.	7.5	0
1537	Optimization of photocatalytic parameters using Doehlert experimental design to improve the photodegradation of Orange G. Journal of Photochemistry and Photobiology A: Chemistry, 2023, 445, 115012.	3.9	2
1538	Non-metal doped ZnO photocatalyst prepared by sonication-assisted Sol-gel method and use for dye degradation. Inorganic Chemistry Communication, 2023, 157, 111320.	3.9	1
1539	The Photocatalytic Treatment of Industrial Wastewater Using Semiconductor-Based Materials Fabrication and Modification Methods. Advances in Chemical and Materials Engineering Book Series, 2023, , 246-275.	0.3	0
1540	Surfactant-Free Mixed-Valence ReO <sub>3</sub> Nanocubes for Solar Light Photocatalytic Applications. ACS Applied Nano Materials, 2023, 6, 18054-18061.	5.0	0
1541	A review on non-metal and metal doped ZnO: Fundamental properties and applications. Acta Periodica Technologica, 2023, , 277-299.	0.2	0
1542	Surface Modification of ZnO with Sn(IV)-Porphyrin for Enhanced Visible Light Photocatalytic Degradation of Amaranth Dye. Molecules, 2023, 28, 6481.	3.8	3
1543	Regulating the generation of reactive oxygen species for photocatalytic oxidation by metalloporphyrinic covalent organic frameworks. Chemical Engineering Journal, 2023, 476, 146623.	12.7	1

#	ARTICLE	IF	CITATIONS
1544	Green Synthesis, Characterization, and Antibacterial Activity of CuO/ZnO Nanocomposite Using Zingiber officinale Rhizome Extract. Journal of Chemistry, 2023, 2023, 1-15.	1.9	4
1545	Enhanced ZnO-based ETL and nanostructured interface modification for improved perovskite solar cells efficiency. Optical Materials, 2023, 145, 114440.	3.6	1
1546	Zinc-decorated barium oxide nanorods for the effective sunlight-induced catalytic degradation of Irgalite violet dye. Nanotechnology for Environmental Engineering, 2023, 8, 655-673.	3.3	2
1547	The exploitation of plant wastes in ZnO photocatalyst electrosynthesis for 2,4-dichlorophenol degradation application. Chemical Engineering Research and Design, 2023, 198, 105-120.	5.6	0
1548	Investigation of photoreduction of Cr (VI) and electrocatalytic properties of hydrothermally produced novel CoFe <sub>2</sub> O <sub>4</sub> /ZnO nanostructure. Solid State Sciences, 2023, 143, 107278.	3.2	13
1550	ZnO/TiO <sub>2</sub> Composite Thin-Film Photocatalysts for Gas-Phase Oxidation of Ethanol. Catalysts, 2023, 13, 1203.	3.5	1
1551	Synthesis and characterization of enhanced visible light-driven C-doped ZnO-2D GO/g-C <sub>3</sub> N <sub>4</sub> heterojunction photocatalyst. Diamond and Related Materials, 2023, 139, 110364.	3.9	1
1553	Reaction Steps in Heterogeneous Photocatalytic Oxidation of Toluene in Gas Phase—A Review. Molecules, 2023, 28, 6451.	3.8	4
1554	Nanocomposites from spent coffee grounds and iron/zinc oxide: green synthesis, characterization, and application in textile wastewater treatment. Water Science and Technology, 2023, 88, 1547-1563.	2.5	1
1555	Insights to the enhanced photoelectrochemical sensing of Cr(VI) by piezoelectric effect based on ZnO/MoS <sub>2</sub> heterojunction nanoarrays: Piezoelectric field-induced II-type to Z-scheme system. Sensors and Actuators B: Chemical, 2023, 396, 134563.	7.8	0
1556	Design of Ag@ZnO@Ti <sub>3</sub> C <sub>2</sub> MXene heterojunction photocatalyst for enhanced photocatalytic degradation activity of methylene blue and levofloxacin under visible light irradiation. Journal of Environmental Chemical Engineering, 2023, 11, 110926.	6.7	1
1557	Photocatalytic efficiency of green synthesized ZnO nanoparticles for the degradation of methyl orange dye: A review. , 2023, 1, .		3
1558	Chitosan/hybrid ceria supported nickel nanoparticles: Study of magnetic and optical properties, photodegradation of rhodamine B, and antimicrobial activity, with DFT. Inorganic Chemistry Communication, 2023, 158, 111311.	3.9	0
1559	A Novel Green Electrochemical Sensor Modified with ZnO Nanoparticles for Detection of Allura Red. Journal of the Electrochemical Society, 2023, 170, 097509.	2.9	0
1560	Photodegradation of antibacterial cefotaxime using Mn doped ZnO nanosphere. Inorganic Chemistry Communication, 2023, 158, 111434.	3.9	2
1561	Piezoelectric polarization coupled with photoinduced catalytic oxidation technology for environmental pollution control: Recent advances and future prospects. Science of the Total Environment, 2023, 905, 167284.	8.0	1
1562	Electrocatalytic and photocatalytic activities of hierarchically structured zinc oxide nanoparticles derived from cellulose paper-precipitated hydrozincite. Ceramics International, 2023, 49, 39180-39188.	4.8	0
1563	Insight assessment of the morphological and photocatalytic properties of ZnO-anchored graphitic carbon nitride interlayer composite for emerging antibiotic removals in water under visible light. Optical Materials, 2023, 145, 114367.	3.6	2

#	ARTICLE	IF	CITATIONS
1564	ZnO-Based Materials: From Pauliâ€™s Nonsense to a Key Enabling Technology. Photonics, 2023, 10, 1106.	2.0	0
1565	Ag-Cu <sub>2</sub> O decorated reduced graphene oxide nanocomposite for photocatalytic water splitting, methylene blue dye degradation, electrochemical nitrite sensing, photoluminescence and selected biological applications. Biomass Conversion and Biorefinery, 0, , .	4.6	0
1566	Ferroelectric ceramics for pyrocatalytic applications. Progress in Solid State Chemistry, 2023, 72, 100428.	7.2	2
1567	Optical, photo catalytic, electrochemical and antibacterial performance of ZnO and Co doped ZnO nanoparticles. Inorganic Chemistry Communication, 2023, 158, 111552.	3.9	1
1568	Highly efficient photocatalytic removal of concentrated PEX, PAX and SIPX xanthates collectors by an immobilized nanostructured g-C <sub>3</sub> N <sub>4</sub> /ZnO low power backlighted module. Minerals Engineering, 2023, 204, 108416.	4.3	1
1569	Improvement of the photocatalytic activity of ZnO thin films doped with manganese. Heliyon, 2023, 9, e20809.	3.2	0
1570	Morphological, structural and luminescent characterization of Nd-doped ZnO nano- and microstructures grown by vapor-solid method. Materials Science and Engineering B: Solid-State Materials for Advanced Technology, 2024, 299, 116941.	3.5	1
1571	Plant Extract-Mediated Synthesis of Ag-Doped ZnO: Eco-Friendly Nanomaterial for Environmental Restoration, Microbial Inhibition, Cell Toxicity, Antioxidant Potential, and Sensing. Colloid Journal, 2023, 85, 827-845.	1.3	2
1572	When aerobic granular sludge faces emerging contaminants: A review. Science of the Total Environment, 2023, , 167792.	8.0	0
1573	Morphological evaluation and boosted photocatalytic activity of N-doped ZnO nanoparticles prepared via Co-precipitation method. Heliyon, 2023, 9, e20948.	3.2	2
1574	A review on ZnO-based S-scheme heterojunction photocatalysts. Chinese Journal of Catalysis, 2023, 52, 32-49.	14.0	11
1575	Solar photocatalysis using post-consumer alkaline batteries for degrading contaminants of emerging concern in surface water. Journal of Environmental Chemical Engineering, 2023, 11, 111226.	6.7	0
1576	Facile Preparation of the ZnSe/Ag <sub>2</sub> Se Binary Heterojunction for Photocatalytic Antibacterial Efficiency. ACS Applied Materials & Interfaces, 2023, 15, 50155-50165.	8.0	2
1577	Fabrication of ternary metal oxide (ZnO:NiO:CuO) nanocomposite heterojunctions for enhanced photocatalytic and antibacterial applications. RSC Advances, 2023, 13, 30838-30854.	3.6	4
1578	Direct Growth of Nitrogen-Doped Carbon Quantum Dots on Co <sub>9</sub> S <sub>8</sub> Passivated on Cotton Fabric as an Efficient Photoelectrode for Water Treatment. ACS Omega, 0, , .	3.5	0
1579	Eco-Friendly Green Synthesis and Photocatalyst Activity of Ag-ZnO Nanocomposite. East European Journal of Physics, 2023, , 271-278.	0.8	0
1580	An efficient GaS/ XTe <sub>2</sub> (X=W, Mo) vdW heterstructure photocatalyst for water splitting: The first-principles study. International Journal of Hydrogen Energy, 2024, 51, 55-60.	7.1	2
1581	Fluorescent Conversion Agent Embedded in Zinc Oxide as an Electronâ€™Transporting Layer for Highâ€™Performance Nonâ€™Fullerene Organic Solar Cells with Improved Photostability. Small, 0, , .	10.0	0

#	ARTICLE	IF	CITATIONS
1582	Extending the Optical Absorption Limit of Graphitic Carbon Nitride Photocatalysts: A Review. ACS Applied Nano Materials, 2023, 6, 19551-19572.	5.0	0
1583	The prospect of CuxO-based catalysts in photocatalysis: From pollutant degradation, CO2 reduction, and H2 production to N2 fixation. Environmental Research, 2024, 241, 117656.	7.5	0
1584	Experimental Verification of Size Dependence of Intrinsic Bandgap of ZnO Nanoparticles. , 2023, , .		0
1585	Gradient Structural and Compositional Design of Conductive MXene Aerogels for Stable Zn Metal Anodes. Advanced Energy Materials, 2023, 13, .	19.5	0
1586	Oxygen Vacancies and Surface Wettability: Key Factors in Activating and Enhancing the Solar Photocatalytic Activity of ZnO Tetrapods. International Journal of Molecular Sciences, 2023, 24, 16338.	4.1	0
1587	Critical assessment of a TiO2-Ag-ZnO nanocomposite photocatalyst on improved photocatalytic activity under mixed UV-visible light. Applied Surface Science Advances, 2023, 18, 100500.	6.8	0
1588	Pure and Mg/Al-Doped ZnO Nanoparticle-Modified Asphalts for Improved Anti-UV Aging Performance. ACS Applied Nano Materials, 2023, 6, 21395-21404.	5.0	0
1589	The potentials of Si-doped magnesium oxide nanotubes for decontamination of pollutants. Physica Scripta, 2023, 98, 125946.	2.5	1
1590	Microstructure-driven mechanical and electromechanical phenomena in additively manufactured nanocrystalline zinc oxide. Nanotechnology, 2024, 35, 065706.	2.6	0
1591	Impact of high substrate temperature on pulsed laser deposited ZnO pillars: A technological route to investigate the structural, optical and superhydrophilic properties. Applied Surface Science, 2024, 646, 158907.	6.1	0
1592	Effect of Cr cations addition on the structural, morphological, optical, and photocatalytic properties of Er-doped ZnO structures. Materials Today Communications, 2023, 37, 107419.	1.9	1
1593	Antibacterial and Photocatalytic Activity of ZnO/Au and ZnO/Ag Nanocomposites. International Journal of Molecular Sciences, 2023, 24, 16939.	4.1	0
1594	Photocatalytic Gold Recovery from Industrial Gold Plating Effluent by ZnO Nanoparticles: Optimum Condition and Possible Applications. ACS Omega, 2023, 8, 45096-45108.	3.5	0
1595	Coprecipitation synthesis of transition metal (Al, Mn, Cu, Ag) doped zinc oxide nanopowders: characterization, photocatalytic test, and comparison study. Journal of the Australian Ceramic Society, 0, , .	1.9	0
1596	Performance and applications of ZnO/pyrolusite composite particle electrode. Environmental Technology (United Kingdom), 0, , 1-14.	2.2	0
1597	Recent advances of photocatalytic coupling technologies for wastewater treatment. Chinese Journal of Catalysis, 2023, 54, 88-136.	14.0	4
1598	Revisiting the Underlying Chemistry Enhancing the Activity of Photoelectro- and Photo-Catalysts Concerning H2 Production. Engineering Materials, 2024, , 119-150.	0.6	0
1599	CuO/ZnO Type-II heterojunction modified by rGO nanosheets for improved photocatalytic mineralization of antibiotics. Journal of Industrial and Engineering Chemistry, 2024, 132, 304-317.	5.8	0

#	ARTICLE	IF	CITATIONS
1600	Synthesis and characterization of Cadmium doped zinc oxide nanocomposites. Materials Today: Proceedings, 2023, , .	1.8	0
1601	Green synthesis of MnCr2O4 nanoparticles using Vernonia amygdalina (bitter leaf) for photocatalytic crystal violet dye degradation. Journal of Materials Science: Materials in Electronics, 2023, 34, .	2.2	0
1602	H2 generation from aqueous ethanol over ZnO nanowires, the photo-transformation of surface species. International Journal of Hydrogen Energy, 2024, 53, 1303-1309.	7.1	0
1603	Emerging electrochemical, optical, electrochemiluminescence and photoelectrochemical bio(sensing) approaches for detection of vitamins in the food, pharmaceutical, and human samples: A review on recent advancements. Microchemical Journal, 2024, 197, 109766.	4.5	2
1604	Influence of Cobalt Doping on the Photogenerated Holes in ZnO Nanoparticles. Physica Status Solidi - Rapid Research Letters, 0, , .	2.4	0
1605	Green synthesis of ZnO nano-crystals using Chenopodium album L. Leaf extract, their characterizations and antibacterial activities. Materials Science and Engineering B: Solid-State Materials for Advanced Technology, 2024, 299, 117005.	3.5	0
1606	Optimization of metal dopant effect on ZnO nanoparticles for enhanced visible LED photocatalytic degradation of citalopram: comparative study and application to pharmaceutical cleaning validation. Sustainable Environment Research, 2023, 33, .	4.2	0
1607	Investigating the Effectiveness of Different Disinfectants in Removing the Coronavirus: A Review Study. , 2022, 9, 295-312.		0
1608	Synthesis and investigation of pure and doped-ZnO nanoparticles as efficient material for photocatalytic degradation of methylene blue under solar radiations. Indian Journal of Physics, 0, , .	1.8	0
1609	Metal-organic framework composites for photocatalysis. EnergyChem, 2024, 6, 100115.	19.1	1
1611	Controlling the Sensitivity of Pentaerythritol Tetranitrate to Visible Laser Radiation by the Addition of ZnO:Ag Nanopowder. Russian Journal of Physical Chemistry B, 2023, 17, 1135-1142.	1.3	0
1612	An efficient interface modification material for improved efficiency and stability in inverted organic solar cells. Materials Chemistry Frontiers, 0, , .	5.9	0
1613	The Enhanced Photoâ€Catalytic Properties of ZnO Under the Synergistic Effect of CaCO<sub>3</sub>. Crystal Research and Technology, 2024, 59, .	1.3	0
1614	The role of extracellular polymeric substances (EPS) in chemical-degradation of persistent organic pollutants in soil: A review. Science of the Total Environment, 2024, 912, 168877.	8.0	1
1615	Atomic reconstructions and dynamic-evolutionary pathways on a polar surface of a wurtzite ionic crystal: Ga-doped ZnO(0001). Applied Surface Science, 2024, 648, 158993.	6.1	0
1616	Investigation of the Self-Cleaning Property of Photocatalytic Coatings at a Laboratory Scale. Photochem, 2023, 3, 461-476.	2.2	0
1617	Sunlight light-driven degradation of anthracene and naphthalene on robust Cu<sup>2+</sup>doped ZnO nanoparticles from simulated rainwater: optimization factors, kinetics, and reusability. Environmental Science Advances, 2024, 3, 249-265.	2.7	0
1618	Homogeneous Photocatalyst of ZnO Microflowers by Spray Pyrolysis Technique on Stainless Steel Mesh. , 2023, , .		0

#	ARTICLE	IF	CITATIONS
1619	Enhanced photocatalytic activity of ZnO thin films with labyrinth-like architecture by thermal-shock-fluorination on novel zinc-coated copper substrate for sustainable applications. Journal of the Australian Ceramic Society, 0, , .	1.9	0
1620	Insight into the role of Mg/B and Mg/Cu dual dopant on the properties of ZnO nanoparticles prepared by facile one-step combustion route for photocatalytic and antibacterial application. Optical Materials, 2024, 147, 114586.	3.6	0
1621	Impact of surfactant-assisted synthesis on the structural, optical, and dielectric characteristics of ZnO nanoparticles. Nano Express, 0, , .	2.4	0
1622	ZnO-Nanorod/Ag <sub>2</sub> O-Nanoparticle/rGO-Nanosheet Heterostructures as Photocatalysts for Enhanced Degradation of Harmful Aqueous Phase Contaminants under Extended Visible Light Exposure. ACS Applied Nano Materials, 0, , .	5.0	2
1623	Aqueous solution processed electron-transporting layer based on organosilica nanodots for highly efficient and stable inverted organic solar cells. Organic Electronics, 2024, 125, 106974.	2.6	0
1624	Stabilizing Undercoordinated Zn Active Sites through Confinement in CeO <sub>2</sub> Nanotubes for Efficient Electrochemical CO <sub>2</sub> Reduction. Angewandte Chemie - International Edition, 2024, 63, .	13.8	4
1625	Stabilizing Undercoordinated Zn Active Sites through Confinement in CeO <sub>2</sub> Nanotubes for Efficient Electrochemical CO <sub>2</sub> Reduction. Angewandte Chemie, 2024, 136, .	2.0	1
1626	Recent Progress in Photocatalytic Degradation of Water Pollution by Bismuth Tungstate. Molecules, 2023, 28, 8011.	3.8	2
1627	Transformation of 5-hydroxymethylfurfural to 5-hydroxymethyl-2-furan carboxylic acid mediated by silver nanoparticles biosynthesized from Spartium junceum flower extract. Materials Today Sustainability, 2024, 25, 100622.	4.1	1
1628	Deposition and characterization of ZnO/CdSe/SnSe ternary thin film based photocatalyst for an enhanced visible light-driven photodegradation of model pollutants. Journal of Sol-Gel Science and Technology, 2024, 109, 362-375.	2.4	0
1629	Recent advances in metal organic frameworks for the catalytic degradation of organic pollutants. , 2023, 5, .		2
1630	Z-Scheme Heterostructures Using Band-Gap-Tunable ZnO by Metal Doping and Coupling with Polypyrrole for Enhanced Photocatalytic Water Splitting. ACS Applied Polymer Materials, 2023, 5, 9918-9930.	4.4	0
1631	Illuminating new frontiers: Harnessing nanoscale photocatalysis for sustainable C-H functionalization reactions with visible light. Coordination Chemistry Reviews, 2024, 502, 215607.	18.8	0
1632	Photocatalytic Degradation of Oxytetracycline Dihydrate from Aqueous Solution Using Nano ZnO and ZnO.xBaTiO <sub>3</sub> (x = 3%, 18%, 33% and 48%). Materials Sciences and Applications, 2023, 14, 515-525.	0.4	0
1633	Properties of MZO/ceramic and MZO/glass thin layers based on the substrate's quality. Optical and Quantum Electronics, 2024, 56, .	3.3	2
1634	Development of a novel semi-empirical kinetic model applied to photocatalysis under UVC and solar radiation. Brazilian Journal of Chemical Engineering, 0, , .	1.3	0
1635	Hexavalent chromium removal using reduced graphene oxide-zinc oxide composite fabricated via simple pyrolysis method. Applied Surface Science Advances, 2024, 19, 100535.	6.8	0
1636	Acoustofluidics-assisted strategy of zinc oxide nanoarrays for enhancement of phase-change chip cooling. Materials Today Nano, 2024, 25, 100443.	4.6	0



#	ARTICLE	IF	CITATIONS
1637	Enhanced photocatalytic activity of graphene oxide incorporated ZnO nanorods doped with post-transition metals. <i>Ceramics International</i> , 2024, 50, 9081-9088.	4.8	0
1638	<i>Croton macrostachyus</i> Leaf Extract-Mediated Green Synthesis of ZnO Nanoparticles and ZnO/CuO Nanocomposites for the Enhanced Photodegradation of Methylene Blue Dye with the COMSOL Simulation Model. <i>ACS Omega</i> , 0, , .	3.5	0
1639	Biowastes-derived enzyme-powered zinc oxide and titanium oxide nanomaterials synthesis for anticancer and eco-friendly photocatalytic activity. <i>Applied Materials Today</i> , 2024, 36, 102024.	4.3	0
1640	Optimization of Calcination Temperature to Synthesis ZnO Nanostructures as Photocatalyst Using Pineapple as Chelating Agent. <i>Journal of Physics: Conference Series</i> , 2023, 2673, 012015.	0.4	0
1641	Constructing of GQDs/ZnO S-scheme heterojunction as efficient piezocatalyst for environmental remediation and understanding the charge transfer mechanism. <i>Carbon</i> , 2024, 218, 118772.	10.3	3
1643	Decade Milestone Advancement of Defect-Engineered g-C3N4 for Solar Catalytic Applications. <i>Nano-Micro Letters</i> , 2024, 16, .	27.0	0
1644	Photocatalysis on Selective Hydroxylation of Benzene to Phenol. , 2024, , 235-292.		0
1645	Highly nanocrystalline Mg doped ZnFe2O4 powders for rapid and simultaneous adsorption of lead, copper, and cadmium heavy metals ions in synthetic/sea waters. <i>Journal of Alloys and Compounds</i> , 2024, 977, 173297.	5.5	0
1646	Solution Combustion Synthesis of ZnO Undoped and Doped with Fe, Co, Cu, and Mg Using Citric Acid as a Fuel for Photocatalytic Decomposition of Phenol. <i>International Journal of Self-Propagating High-Temperature Synthesis</i> , 2023, 32, 288-301.	0.5	0
1647	Progress in manipulating spin polarization for solar hydrogen production. <i>Materials Reports Energy</i> , 2024, 4, 100253.	3.2	0
1648	Tapping the Tunisian sunlight's potential to remove pharmaceuticals in tap water and secondary effluents: A comparison of Ag2O/TiO2 and BiOI photocatalysts and toxicological insights. <i>Separation and Purification Technology</i> , 2024, 335, 126221.	7.9	1
1649	Polyoxometalateâ€dependent Photocatalytic Activity of Radicalâ€doped Perylenediimideâ€based Hybrid Materials. <i>Chemistry - A European Journal</i> , 2024, 30, .	3.3	0
1650	Photodegradation of toxic malachite green dye by ZnO and ZnO/SiO2 nanocomposites under solar radiation: a green practice. <i>Chemical Papers</i> , 2024, 78, 2301-2311.	2.2	1
1651	Role of Zinc Oxide Nanomaterials for Photocatalytic Degradation of Environmental Pollutants. , 2024, , 287-311.		0
1652	Silicon-Based Nanoelectronic Semiconductor Material and Its Surface-Enhanced Raman Image Signals. <i>Journal of Nanoelectronics and Optoelectronics</i> , 2023, 18, 1296-1301.	0.5	0
1653	A review on valorization, management, and applications of the hazardous weed <i>Parthenium hysterophorus</i> . <i>Systems Microbiology and Biomanufacturing</i> , 0, , .	2.9	2
1654	Fabrication of conductive ceramic composite for electrothermal-assisted photocatalytic degradation of frozen organic pollutants and indoor climate control. <i>Ceramics International</i> , 2024, 50, 11862-11870.	4.8	0
1655	Ecological Risks of Zinc Oxide Nanoparticles for Early Life Stages of Obscure Puffer (Takifugu) TJ ETQq1 1 0.784314 rgBT /Overlock 10 T	3.7	0

#	ARTICLE	IF	CITATIONS
1656	Optimizing the structural and photocatalytic performance of Ag <sub>2</sub> Se decorated ZnO/Zn(OH) <sub>2</sub> nanoparticles for RhB degradation. International Journal of Applied Ceramic Technology, 2024, 21, 2010-2023.	2.1	0
1657	Photodegradation of methylene blue dye using graphene oxide incorporated, post-transition metal doped zinc oxide thin films by spray pyrolysis. Physica Scripta, 2024, 99, 025953.	2.5	0
1658	Photocatalytic activity of indium doped zinc oxide seed layers and one dimensional nanorods under solar irradiation. Journal of Materials Science: Materials in Electronics, 2024, 35, .	2.2	0
1659	Sunlight assisted degradation of methylene blue dye by zinc oxide nanoparticles green synthesized using Vitex negundo plant leaf extract. Results in Chemistry, 2024, 7, 101315.	2.0	0
1660	Enhanced charge carriers separation/transportation via S-scheme ZnCeS <sub>2</sub> /ZnWO <sub>4</sub> heterostructure nanocomposite for photodegradation of synthetic dyes under sunlight. Materials Chemistry and Physics, 2024, 314, 128938.	4.0	0
1661	Superior visible-light absorbing Ag@ZnO nanorods hybrid photocatalyst for efficient decomposition of commercial pharmaceuticals tetracycline and amoxicillin. Journal of Water Process Engineering, 2024, 58, 104765.	5.6	0
1662	Machine learning assisted dual-functional nanophotonic sensor for organic pollutant detection and degradation in water. Npj Clean Water, 2024, 7, .	8.0	1
1663	Biogenic Punica granatum Flower Extract Assisted ZnFe <sub>2</sub> O <sub>4</sub> and ZnFe <sub>2</sub> O <sub>4</sub> -Cu Composites for Excellent Photocatalytic Degradation of RhB Dye. Toxics, 2024, 12, 77.	3.7	0
1664	Plant axillary stem gall extract mediated bioengineered CuO nanoprisms as robust and reusable catalyst for photocatalytic and catalytic degradation of water pollutants. Journal of Molecular Structure, 2024, 1303, 137575.	3.6	0
1665	Improved Light Soaking and Thermal Stability of Organic Solar Cells by Robust Interfacial Modification. Advanced Energy and Sustainability Research, 2024, 5, .	5.8	0
1666	Simultaneous La <sup>3+</sup> and Cu <sup>2+</sup> cations insertion in the ZnO crystal structure and its effect on the structural, optical, and photocatalytic properties. Journal of Materials Science, 2024, 59, 1280-1297.	3.7	1
1667	Photocatalytic degradation of diclofenac amide in a fixed-bed reactor using TiO <sub>2</sub> /Bi <sub>2</sub> O <sub>3</sub> : Process optimization and stability analysis. Journal of Photochemistry and Photobiology A: Chemistry, 2024, 450, 115470.	3.9	0
1668	Biogenic plant decorated synthesis of (Cu,Fe)-ZnO/g-C <sub>3</sub> N <sub>4</sub> heterostructures catalysts by one-step calcination method for degradation of dye pollutants. Inorganic Chemistry Communication, 2024, 161, 112102.	3.9	0
1669	Electro-catalytic ozonation of contaminants in landfill leachate: Optimization by BBD, economic evaluation, mechanism, and reaction pathway. Colloids and Surfaces A: Physicochemical and Engineering Aspects, 2024, 686, 133263.	4.7	0
1670	Investigation on bare ZnO nanotubes and nanosheet as electrode materials for potassium-ion batteries: A DFT search. Inorganic Chemistry Communication, 2024, 161, 112063.	3.9	0
1671	The physical properties and photocatalytic activities of green synthesized ZnO nanostructures using different ginger extract concentrations. Scientific Reports, 2024, 14, .	3.3	0
1672	Green Synthesis of ZnO/Fe <sub>2</sub> O <sub>3</sub> Nano-photocatalyst for Efficient Removal of Carbamate Pesticides in Wastewater: Optimization, Mineralization, and Financial Analysis. Korean Journal of Chemical Engineering, 2024, 41, 249-269.	2.7	0
1673	Aloe vera assisted green synthesis of Ag and Cu co-doped ZnO nanoparticles and a comprehensive analysis of their structural, morphological, optical, electrical and antibacterial properties. Heliyon, 2024, 10, e25438.	3.2	0

#	ARTICLE	IF	CITATIONS
1674	ZnO hierarchical structures with tunable oxygen vacancies for high performance in photocatalytic degradation of phenol. <i>Journal of Molecular Structure</i> , 2024, 1304, 137656.	3.6	0
1675	Acoustofluidic bubble-driven assisted functionalized nano-array coated micro pin-fins surface for efficient liquid-vapor phase change chip cooling. <i>Chemical Engineering Journal</i> , 2024, 483, 149101.	12.7	0
1676	Efficient photocatalytic activity of ZnMn <sub>2</sub> O <sub>4</sub> nanopowder synthesized by mechano-thermal recycling of alkaline and Zn/C spent batteries. <i>Ceramics International</i> , 2024, 50, 14757-14772.	4.8	0
1677	Bifunctional praseodymium-doped SnS <sub>2</sub> thin films for photocatalytic and antibacterial applications. <i>Colloids and Surfaces A: Physicochemical and Engineering Aspects</i> , 2024, 686, 133362.	4.7	0
1678	Recent Advances and Applications of Modified-Semiconductor Photocatalyst in Pollutant Degradation. <i>Advances in Material Research and Technology</i> , 2024, , 171-219.	0.6	0
1679	Bifunctional Ureaâ€“Polyethyleneimineâ€“Mediated Surface Engineering in SnO <sub>2</sub> Electronâ€“Transport Layer for Efficient and Stable Organic Solar Cells. <i>Solar Rrl</i> , 2024, 8, .	5.8	0
1680	Tailoring p-Type Behavior in ZnO Quantum Dots through Enhanced Solâ€“Gel Synthesis: Mechanistic Insights into Zinc Vacancies. <i>Journal of Physical Chemistry Letters</i> , 2024, 15, 1755-1764.	4.6	0
1681	Long-lived excitons in thermally annealed hydrothermal ZnO. <i>Heliyon</i> , 2024, 10, e26049.	3.2	0
1682	Enhancement of energy storage in nanocomposite thin films: Investigating PVDF-ZnO and PVDF-TZO for improved dielectric and ferroelectric characteristics. <i>Physica Scripta</i> , 2024, 99, 036101.	2.5	0
1683	Mn <sup>2+</sup> doped SrSn(PO <sub>4</sub> ) <sub>2</sub> nanopowder for new novel LED material. <i>Physica Scripta</i> , 2024, 99, 035953.	2.5	0
1684	Influence of electronic transport mechanism optimization on the thermoelectric properties of ZnO based functional ceramics. <i>Ceramics International</i> , 2024, 50, 16318-16325.	4.8	0
1685	Metalâ€“organic framework heterojunctions for photocatalysis. <i>Chemical Society Reviews</i> , 2024, 53, 3002-3035.	38.1	0
1686	Redeeming the photocatalytic potential of CuWO <sub>4</sub> incorporating Ag <sub>6</sub> Si <sub>2</sub> O <sub>7</sub> via S-scheme PN heterostructure. <i>Journal of Alloys and Compounds</i> , 2024, 983, 173895.	5.5	0
1687	Phase-separated polyvinylidene fluoride/ZnO composite microspheres as sunlight-driven photocatalysts. <i>Arabian Journal of Chemistry</i> , 2024, 17, 105670.	4.9	0
1688	Visible light-responsive Ce-doped ZnO ceramic nanostructures as effective photocatalysts for removal of persistent organic pollutants from contaminated waters. <i>Materials Today Sustainability</i> , 2024, 26, 100719.	4.1	0
1689	Synthesis of Zinc Oxide nano bars incorporated with activated Carbon (ZnO NBs/AC) nanocomposites for high specific capacitance value. <i>Journal of Sol-Gel Science and Technology</i> , 2024, 109, 896-904.	2.4	0
1690	TiO <sub>2</sub> -Fe <sub>2</sub> O <sub>3</sub> nanocomposite thin films prepared by magnetron sputtering for photocatalytic applications. <i>Materials Science and Engineering B: Solid-State Materials for Advanced Technology</i> , 2024, 302, 117261.	3.5	0
1691	Effect of Sr-doping toward the optoelectrical ZnO properties. <i>Inorganic Chemistry Communication</i> , 2024, 162, 112236.	3.9	0

#	ARTICLE	IF	CITATIONS
1692	Studies on elimination of nutrients from aqueous effluents using ZnO nanoparticles: the case of ammonium as a model. Experimental and theoretical insights. Journal of Materials Science, 2024, 59, 3363-3380.	3.7	0
1693	Effectual visible-driven photocatalytic performances on brilliant green dye by reduced graphene oxide-zinc oxide nanocomposite. Ionics, 2024, 30, 2927-2937.	2.4	0
1694	Construction of photoactive MOF for photocatalytic oxidative organic transformation. Journal of Solid State Chemistry, 2024, 333, 124634.	2.9	0
1695	Carbon nitride- and graphene-based materials for the photocatalytic degradation of emerging water pollutants. Materials Advances, 2024, 5, 2668-2688.	5.4	0
1696	Visible-Light-Active Electrospun Membranes Based on Cobalt-Doped ZnO Nanohybrids: Applications for Food Packaging. ChemistrySelect, 2024, 9, .	1.5	0
1697	CO2 photocatalytic reduction with robust and stable metal-organic framework: a review. Materials for Renewable and Sustainable Energy, 2024, 13, 109-132.	3.6	0
1698	Robust cooperative of cadmium sulfide with highly ordered hollow microstructure coordination polymers for regulating the photocatalytic performance. Journal of Colloid and Interface Science, 2024, 663, 919-929.	9.4	0
1699	Green Synthesis of ZnO Nanoparticles Using Plant Extract as a Template. Macromolecular Symposia, 2024, 413, .	0.7	0
1700	Synthesis and Characterization of Broccoli-like Ag/Cu2O Nanostructures on ZnO Nanowires Using the Plasma-Liquid Interaction Method. Inorganics, 2024, 12, 80.	2.7	0
1701	Features of the Morphology and Properties of Disperse ZnO Powders, Obtained by Polymer-Salt Synthesis Using Polyvinylpyrrolidone. Glass Physics and Chemistry, 2023, 49, S77-S85.	0.7	0
1702	Enhanced mitigation of acidic and basic dyes by ZnO based nano-photocatalysis: current applications and future perspectives. Environmental Geochemistry and Health, 2024, 46, .	3.4	0
1703	Synthesis and investigation of multifunctional TiO2 photocatalysts modified by metal nanoparticles. Catalysis Communications, 2024, 187, 106907.	3.3	0
1704	Novel magnetic Carbon@BaBiFe12O19 photocatalyst for efficient pollutants degradation under peroxymonosulfate activation. Materials Science in Semiconductor Processing, 2024, 176, 108291.	4.0	0
1705	Boosted charge separation via Ce2S3 over dual Z-scheme ZnO-Ce2S3-MnO2 core double-shell nanocomposite for the degradation of diverse dye pollutants. Environmental Research, 2024, 251, 118675.	7.5	0
1706	Study on the Synthesis and Photocatalytic Performance of Modified TiO <sub>2</sub> Supported by Ga <sub>2</sub> N <sub>4</sub> in the Degradation of 2,4-Dichlorophenoxyacetic Acid. ChemistrySelect, 2024, 9, .	1.5	0
1707	Photo-supercapacitors based on zinc oxide/MXene paper dual acting electrodes. Journal of Energy Storage, 2024, 86, 111274.	8.1	0
1708	Effect of rGO weight percentage on structural, optical, and electrical properties of rGO-SnO2 nanocomposite for resistive memory device applications. Materials Science and Engineering B: Solid-State Materials for Advanced Technology, 2024, 303, 117274.	3.5	0
1709	SYNTHESIS OF SILVER NANOPARTICLES FROM LANNEA ACIDA VIA AQUEOUS AND METHANOLIC LEAF EXTRACT. FUDMA Journal of Sciences, 2024, 8, 25-28.	0.2	0

#	ARTICLE	IF	CITATIONS
1711	Remote Detection of Gaseous Hydrocarbons by a Fiber-Optic Sensor Using an Oxide Photocatalyst. Bulletin of the Lebedev Physics Institute, 2023, 50, S1476-S1483.	0.6	0
1712	The role of bio-inspired ZnO nanoparticles in the modification of MIL101(Cr) properties for visible light degradation of phenanthrene. Catalysis Communications, 2024, 187, 106905.	3.3	0
1713	Synergistic augmentation of dielectric and photocatalytic properties of ZnO via Ag nanoparticle integration. Journal of Molecular Structure, 2024, 1307, 138042.	3.6	0