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Recent developments of zinc oxide based photocatalyst in water treatment technology: A review

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1334	Preparation of Zinc Oxide Nanoparticles-Based Starch Paste and its Antifungal Performance as a Paper Adhesive. <b>2018</b> , 70, 1700211	9
1333	The role of zinc metal salts on size, morphology and photocatalytic activity of ZnO. <b>2018</b> , 3, 2653-2665	2
1332	Easily separable N-doped ZnO microspheres with high photocatalytic activity under visible light. <b>2018</b> , 102, 319-323	29
1331	Self-assembled hierarchical carbon/g-C3N4 composite with high photocatalytic activity. <b>2018</b> , 51, 135501	9
1330	Zinc oxide nano-enabled microfluidic reactor for water purification and its applicability to volatile organic compounds. <b>2018</b> , 4,	51
1329	Photocatalytic degradation of bisphenol A in aqueous media: A review. <b>2018</b> , 213, 189-205	95
1328	Photocatalytic degradation of caffeine as a model pharmaceutical pollutant on Mg doped ZnO-Al2O3 heterostructure. <b>2018</b> , 10, 63-72	41
1327	Flexible electrospun MWCNTs/Ag3PO4/PAN ternary composite fiber membranes with enhanced photocatalytic activity and stability under visible-light irradiation. <b>2018</b> , 53, 10147-10159	13
1326	Gold nanobipyramid@cuprous oxide jujube-like nanostructures for plasmon-enhanced photocatalytic performance. <b>2018</b> , 234, 26-36	36
1325	Pulsed laser synthesis in liquid of efficient visible-light-active ZnO/rGO nanocomposites for improved photo-catalytic activity. <b>2018</b> , 5, 035050	18
1324	Electrospinning preparation of NiO/ZnO composite nanofibers for photodegradation of binary mixture of rhodamine B and methylene blue in aqueous solution: Central composite optimization. <b>2018</b> , 32, e4335	40
1323	Seedless-grown of ZnO thin films for photoelectrochemical water splitting application. 2018,	
1322	Core/shell structured Zn/ZnO nanoparticles synthesized by gaseous laser ablation with enhanced photocatalysis efficiency. <b>2018</b> , 442, 101-105	33
1321	Photonic crystal-assisted visible light activated TiO2 photocatalysis. <b>2018</b> , 230, 269-303	125
1320	Facile method to immobilize ZnO particles on glass spheres for the photocatalytic treatment of tannery wastewater. <b>2018</b> , 518, 192-199	43
1319	Thin-film composite (TFC) membrane modified by hybrid ZnO-graphene nanoparticles (ZnO-Gr NPs) for water desalination. <b>2018</b> , 6, 1109-1117	24

1318	Ultrasonic chemical synthesis of CdS-reduced graphene oxide nanocomposites with an enhanced visible light photoactivity. <b>2018</b> , 440, 1227-1234	21
1317	Synthesis, properties and applications of ZnO nanomaterials with oxygen vacancies: A review. <b>2018</b> , 44, 7357-7377	219
1316	Comparison of ball milling-hydrothermal and hydrothermal methods for synthesis of ZnO nanostructures and evaluation of their photocatalytic performance. <b>2018</b> , 62, 265-272	41
1315	Review on the criteria anticipated for the fabrication of highly efficient ZnO-based visible-light-driven photocatalysts. <b>2018</b> , 62, 1-25	576
1314	Combination of Ag2CrO4 and AgI semiconductors with g-C3N4: Novel nanocomposites with substantially improved photocatalytic performance under visible light. <b>2018</b> , 77, 62-73	14
1313	Hierarchical growth of BiOCl on SrO-Bi2O3-B2O3 glass-ceramics for self-cleaning applications. <b>2018</b> , 101, 2901-2913	10
1312	Synergistic effect of supported ZnO/Bi2O3 heterojunctions for photocatalysis under visible light. <b>2018</b> , 153, 106-116	46
1311	Barium removal by photocatalytic process: An alternative for water treatment. <b>2018</b> , 22, 163-171	8
1310	ZnO1½/carbon dots composite hollow spheres: Facile aerosol synthesis and superior CO2 photoreduction under UV, visible and near-infrared irradiation. <b>2018</b> , 230, 36-48	44
1309	Photodegradation behavior of ZnO nanorods on various types of organic dyes. <b>2018</b> , 4, 272-280	2
1308	Role of Photo-catalysis in Water Remediation. <b>2018</b> , 117-134	O
1307	Zinc oxide-hydroxyapatite nanocomposite photocatalysts for the degradation of ciprofloxacin and ofloxacin antibiotics. <b>2018</b> , 539, 364-370	51
1306	Large-scale synthesis of ZnO nanostructures by pulse electrochemical method and their photocatalytic properties. <b>2018</b> , 76, 7-13	18
1305	Water Remediation. 2018,	5
1304	Electrochemically active biofilm-assisted biogenic synthesis of an Ag-decorated ZnO@C corelhell ternary plasmonic photocatalyst with enhanced visible-photocatalytic activity. <b>2018</b> , 42, 1995-2005	19
1303	Enhanced catalytic ozonation performance of highly stabilized mesoporous ZnO doped g-C 3 N 4 composite for efficient water decontamination. <b>2018</b> , 551, 129-138	49
1302	Silver-modified ZnO highly UV-photoactive. <b>2018</b> , 356, 112-122	43
1301	Synthesis of graphenized Au/ZnO plasmonic nanocomposites for simultaneous sunlight mediated photo-catalysis and anti-microbial activity. <b>2018</b> , 347, 378-389	29

1300	Synthesis and characterization of Fe3O4/ZnO-GO nanocomposites with improved photocatalytic degradation methyl orange under visible light irradiation. <b>2018</b> , 737, 197-206	51
1299	High-throughput surface preparation for flexible slot die coated perovskite solar cells. <b>2018</b> , 54, 72-79	21
1298	Construction of highly efficient and stable ternary AgBr/Ag/PbBiOBr Z-scheme photocatalyst under visible light irradiation: Performance and mechanism insight. <b>2018</b> , 513, 852-865	91
1297	Thermal decomposition of sol-gel derived Zn0.8Ga0.2O precursor-gel: A kinetic, thermodynamic, and DFT studies. <b>2018</b> , 146, 152-159	5
1296	Reverse Ostwald ripening process induced dispersion of Cu2O nanoparticles in silver-matrix and their interfacial mechanism mediated sunlight driven photocatalytic properties. <b>2018</b> , 356, 150-158	10
1295	Noble metal sandwich-like TiO@Pt@CN hollow spheres enhance photocatalytic performance. <b>2018</b> , 514, 791-800	31
1294	Facet-dependent photocatalysis of nanosize semiconductive metal oxides and progress of their characterization. <b>2018</b> , 18, 15-34	66
1293	Rare earth metal Gd influenced defect sites in N doped TiO2: Defect mediated improved charge transfer for enhanced photocatalytic hydrogen production. <b>2018</b> , 43, 2073-2082	47
1292	Oxygen-defected ZnO: Facial Synthesis and high photocatalytic performance under visible light. <b>2018</b> , 158, 1123-1130	14
1291	Hierarchical magnetic petal-like FeO-ZnO@g-CN for removal of sulfamethoxazole, suppression of photocorrosion, by-products identification and toxicity assessment. <b>2018</b> , 205, 463-474	29
1290	The relationship between iron and Ilmenite for photocatalyst degradation. 2018, 29, 1779-1786	4
1289	Decoration of Fe3O4 and CoWO4 nanoparticles over graphitic carbon nitride: Novel visible-light-responsive photocatalysts with exceptional photocatalytic performances. <b>2018</b> , 105, 159-171	59
1288	Surfactant-stabilized nano-metal hexacyanoferrates with electrocatalytic and heterogeneous catalytic applications. <b>2018</b> , 43, 409-420	10
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1286	Aerosol-Based Self-Assembly of a Ag-ZnO Hybrid Nanoparticle Cluster with Mechanistic Understanding for Enhanced Photocatalysis. <b>2018</b> , 34, 5030-5039	11
1285	Enhanced photodegradation ability of solvothermally synthesized metallic copper coated ZnO microrods. <b>2018</b> , 548, 19-26	13
1284	CNT supported Mn-doped ZnO nanoparticles: simple synthesis and improved photocatalytic activity for degradation of malachite green dye under visible light. <b>2018</b> , 8, 1179-1188	58
1283	Effective shell wall thickness of vertically aligned ZnO-ZnS core-shell nanorod arrays on visible photocatalytic and photo sensing properties. <b>2018</b> , 237, 128-139	58

1282	ZnO flowers and graphene oxide hybridization for efficient photocatalytic degradation of o-xylene in water. <b>2018</b> , 212, 479-489	11
1281	Postillumination Activity in a Single-Phase Photocatalyst of Mo-Doped TiO2 Nanotube Array from Its Photocatalytic Memory <b>2018</b> , 6, 6166-6174	31
1280	Photocatalytic oxidation of six endocrine disruptor chemicals in wastewater using ZnO at pilot plant scale under natural sunlight. <b>2018</b> , 25, 34995-35007	33
1279	Preparation, characterizations, and antibacterial properties of Cu/SnO2 nanocomposite bilayer coatings. <b>2018</b> , 15, 437-443	7
1278	Ultrafast Charge Separation for Full Solar Spectrum-Activated Photocatalytic H2 Generation in a Black Phosphorus Aut dS Heterostructure. <b>2018</b> , 3, 932-939	93
1277	Recent advances and emerging opportunities in phytochemical synthesis of ZnO nanostructures. <b>2018</b> , 80, 143-161	60
1276	Photocatalytic activity of wool fabrics deposited at low temperature with ZnO or TiO2 nanoparticles: Methylene blue degradation as a test reaction. <b>2018</b> , 306, 251-259	33
1275	Bio-extract-mediated ZnO nanoparticles: microwave-assisted synthesis, characterization and antidiabetic activity evaluation. <b>2018</b> , 46, 730-739	47
1274	Sono-coprecipitation synthesis and physicochemical characterization of CdO-ZnO nanophotocatalyst for removal of acid orange 7 from wastewater. <b>2018</b> , 40, 323-332	55
1273	Titania versus zinc oxide nanoparticles on mesoporous silica supports as photocatalysts for removal of dyes from wastewater at neutral pH. <b>2018</b> , 310, 32-41	66
1272	Double Z-scheme ZnO/ZnS/g-C3N4 ternary structure for efficient photocatalytic H2 production. <b>2018</b> , 430, 293-300	138
1271	Application of nanotechnologies for removing pharmaceutically active compounds from water: development and future trends. <b>2018</b> , 5, 27-47	162
1270	Recent Advancements in the Architecting Schemes of Zinc Oxide-Based Photocatalytic Assemblies. <b>2018</b> , 47, 267-287	14
1269	A facile and cost-effective method for removal of indoor airborne psychrotrophic bacterial and fungal flora based on silver and zinc oxide nanoparticles decorated on fibrous air filter. <b>2018</b> , 9, 172-177	12
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1267	Enhanced visible-light driven photocatalytic activity of hybrid ZnO/g-C3N4 by high performance ball milling. <b>2018</b> , 350, 1-9	29
1266	Experimental and theoretical study on the structural, electrical and optical properties of tantalum-doped ZnO nanoparticles prepared via sol-gel acetate route. <b>2018</b> , 44, 703-711	13
1265	One pot synthesis of Ag-SnO2 quantum dots for highly enhanced sunlight-driven photocatalytic activity. <b>2018</b> , 731, 162-171	37

1264	Nanohybrids of Two-Dimensional Transition-Metal Dichalcogenides and Titanium Dioxide for Photocatalytic Applications. <b>2018</b> , 24, 18-31	45
1263	Synthesis of iron and copper cluster-grafted zinc oxide nanorod with enhanced visible-light-induced photocatalytic activity. <b>2018</b> , 509, 68-72	23
1262	Nanocomposite materials based on poly(vinyl chloride) and bovine serum albumin modified ZnO through ultrasonic irradiation as a green technique: Optical, thermal, mechanical and morphological properties. <b>2018</b> , 41, 85-99	20
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1259	Experimental and Theoretical Study of Enhanced Photocatalytic Activity of Mg-Doped ZnO NPs and ZnO/rGO Nanocomposites. <b>2018</b> , 13, 194-203	67
1258	Fabrication of Bi2S3/ZnO heterostructures: an excellent photocatalyst for visible-light-driven hydrogen generation and photoelectrochemical properties. <b>2018</b> , 42, 541-554	64
1257	Black ZnO/C nanocomposite photocatalytic films formed by one-step solgel technique. <b>2018</b> , 85, 413-420	6
1256	Novel g-C3N4 wrapped EAl2O3 microspheres heterojunction for efficient photocatalytic application under visible light irradiation. <b>2018</b> , 29, 4509-4516	7
1255	Visible light-assisted room temperature gas sensing with ZnO-Ag heterostructure nanoparticles. <b>2018</b> , 259, 269-281	110
1254	High-sensitivity UV photodetector based on oblique and vertical Co-doped ZnO nanorods. <b>2018</b> , 214, 254-256	30
1253	Photocatalytic study on SrBi2B2O7 (SrO-Bi2O3-B2O3) transparent glass ceramics. <b>2018</b> , 99, 453-459	19
1252	Aqueous Mechanical Oxidation of Zn Dust: An Inventive Technique for Bulk Production of ZnO Nanorods. <b>2018</b> , 6, 143-154	4
1251	Sulfide oxide XZnSO (X = Ca or Sr) as novel active photocatalytic water splitting solar-to-hydrogen energy conversion. <b>2018</b> , 225, 273-283	16
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1249	ZnO/NiWO4/Ag2CrO4 nanocomposites with p-n-n heterojunctions: highly improved activity for degradations of water contaminants under visible light. <b>2018</b> , 193, 69-80	74
1248	Microstructures and photocatalytic properties of ZnO films fabricated by Zn electrodeposition and heat treatment. <b>2018</b> , 74, 232-237	13
1247	Fabrication of ZnO-Zn2TiO4 nanocomposite from zinc hydroxide nitrate and its photocatalytic efficiency. <b>2018</b> , 353, 46-52	10

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1244	Halide-Modulated Functionality of Wide Band Gap Zinc Oxide Semiconductor Nanoparticle. <b>2018</b> , 3, 6382-639	34
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1242	Growth and Electrical Properties of Epitaxial ZnO Films Prepared by Chemical Bath Deposition Using a Flow Reactor. <b>2018</b> , 59, 1761-1766	1
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1240	Customizable 3D-printed architecture with ZnO-based hierarchical structures for enhanced photocatalytic performance. <b>2018</b> , 10, 21696-21702	33
1239	A promising visible light-driven photocatalytic activity of conjugated polymer nanocrystals <b>2018</b> , 8, 38773-38779	4
1238	The photocatalytic degradation of methylene blue using graphene oxide (GO)/ZnO nanodrums. <b>2018</b> ,	7
1237	Photoactive ZnO Materials for Solar Light-Induced CuO-ZnO Catalyst Preparation. 2018, 11,	11
1236	Botanically Templated Monolithic Macrostructured Zinc Oxide Materials for Photocatalysis. <b>2018</b> , 6, 103	1
1235	Photocurrent Response and Progesterone Degradation by Employing WO Films Modified with Platinum and Silver Nanoparticles. <b>2018</b> , 83, 1153-1161	9
1234	Photocatalysis: From Fundamental Principles to Materials and Applications. 2018, 1, 6657-6693	168
1233	Stability of custom-designed photoreactor for photocatalytic oxidation of Reactive Black 5 dye using zinc oxide. <b>2018</b> , 53, 462-467	1
1232	Photoactive ZnO nanosuspension for intensification of organics contaminations decomposition. <b>2018</b> , 134, 45-50	13
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1229	Photocatalytic degradation of ciprofloxacin in aqueous media: a short review. <b>2018</b> , 100, 518-539	25

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1225	Direct -Scheme CsO-BiO-ZnO Heterostructures as Efficient Sunlight-Driven Photocatalysts. <b>2018</b> , 3, 12260-127	<u> 269</u>
1224	Self-assembly of the Ag deposited ZnO/carbon nanospheres: A resourceful photocatalyst for efficient photocatalytic degradation of methylene blue dye in water. <b>2018</b> , 29, 3483-3492	20
1223	Facile fabrication of direct solid-state Z-scheme g-CN/FeO heterojunction: a cost-effective photocatalyst with high efficiency for the degradation of aqueous organic pollutants. <b>2018</b> , 47, 15382-15390	39
1222	Preparation of transparent nanostructured N-doped TiO2 thin films by combination of sonochemical and CVD methods with visible light photocatalytic activity. <b>2018</b> , 7, 185-196	26
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1220	Different routes of synthesized CdO nanoparticles through microwave-assisted methods and photocatalytic study. <b>2018</b> ,	O
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1218	ZnO-pHEMA Nanocomposites: An Ecofriendly and Reusable Material for Water Remediation. <b>2018</b> , 10, 40100-40110	30
1217	Fabrication of ZnO/Red Phosphorus Heterostructure for Effective Photocatalytic HŒvolution from Water Splitting. <b>2018</b> , 8,	20
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1207	Optical Properties of Multilayered Solfiel Zinc-Oxide Films. <b>2018</b> , 52, 723-728	5
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1200	Hierarchical flower-like NiAl-layered double hydroxide microspheres encapsulated with black Cu-doped TiO nanoparticles: Highly efficient visible-light-driven composite photocatalysts for environmental remediation. <b>2018</b> , 357, 19-29	59
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1196	Efficient metal adsorption and microbial reduction from Rawal Lake wastewater using metal nanoparticle coated cotton. <b>2018</b> , 639, 26-39	20
1195	Sonoprecipitation dispersion of ZnO nanoparticles over graphene oxide used in photocatalytic degradation of methylene blue in aqueous solution: Influence of irradiation time and power. <b>2018</b> , 48, 370-382	46
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1191	Photocatalytic degradation of phenol over visible light active ZnO/Ag2CO3/Ag2O nanocomposites heterojunction. <b>2018</b> , 364, 602-612	38
1190	Enhanced Red Emission in Ultrasound-Assisted Sol-Gel Derived ZnO/PMMA Nanocomposite. <b>2018</b> , 2018, 1-8	2
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445	Comparison of photocatalytic activity of ZnO, Ag-ZnO, Cu-ZnO, Ag, Cu-ZnO and TPPS/ZnO for the degradation of methylene blue under UV and visible light irradiation. <b>2021</b> , 84, 1813-1825	3
444	Effect of g-C3N4 on structural, optical, and photocatalytic properties of hexagonal cylinder-like twinned ZnO microcrystals prepared by the hydrothermal method. <b>2021</b> , 32, 24095-24106	3
443	Efficient photodegradation of 4-chlorophenol under solar radiation using a new ZnO/ZnS/carbon xerogel composite as a photocatalyst. <b>2021</b> , 418, 113377	O
442	Designing heterointerface in BiOBr/g-C3N4 photocatalyst to enhance visible-light-driven photocatalytic performance in water purification. <b>2021</b> , 624, 126796	5
441	Photocatalytic degradation of tetracycline in a stirred tank: computational fluid dynamic modeling and data validation. <b>2021</b> , 134, 553	O
440	Facile synthesis of ZnO/CuO/AgO ternary metal oxide nanocomposite for effective photodegradation of organic water pollutants. <b>2021</b> , 84, 2615-2634	4
439	Photocatalysts synthesized via plant mediated extracts for degradation of organic compounds: A review of formation mechanisms and application in wastewater treatment. <b>2021</b> , 22, 100453	3
438	Photocatalytically active ZnO flaky nanoflowers for environmental remediation under solar light irradiation: effect of morphology on photocatalytic activity. <b>2021</b> , 44, 1	1
437	Variation of Alkali Concentration and Temperature: Its Effect on the Morphology of ZnO Nanoparticles Synthesized via Solvothermal Technique. 411, 3-15	1

436	Structural and morphological optimization of Ni doped ZnO decorated silicon nanowires for photocatalytic degradation of methylene blue. <b>2021</b> , 131, 108763		7
435	Ag-loaded and Pd-loaded ZnO nanofiber membranes: preparation via electrospinning and application in photocatalytic antibacterial and dye degradation. 1		O
434	Gold anchoring to CuFe2F8(H2O)2 oxyfluoride for robust sono-photodegradation of Rhodamine-B. <b>2021</b> , 313, 127916		11
433	Targeted degradation of refractory organic compounds in wastewaters based on molecular imprinting catalysts. <i>Water Research</i> , <b>2021</b> , 203, 117541	12.5	7
432	Excellent UV-Light Triggered Photocatalytic Performance of ZnO.SiO Nanocomposite for Water Pollutant Compound Methyl Orange Dye. <b>2021</b> , 11,		5
431	Synthesis and characterisation of ammonia intercalated zinc hydroxide chloride hydrate: a potential photocatalyst for methyl orange degradation under sunlight. 1-10		
430	Immobilization of ZnO nanoparticles onto glass spheres: effects of annealing temperature, zinc oxide concentration, and number of coating rounds on the photocatalytic activity under visible light. 1		0
429	Ultra-high adsorption behavior of zeolitic imidazole framework-67 nanoparticles for removing brilliant green dye. <b>2021</b> , 11, 095304		
428	Predicting the trend and utility of different photocatalysts for degradation of pharmaceutically active compounds: A special emphasis on photocatalytic materials, modifications, and performance comparison. <b>2021</b> , 293, 112858		13
427	Petcoke Revalorization as Support for ZnO-based Photocatalyst. 1		1
426	Synthesis and characterization of composite catalysts comprised of ZnO/MoS2/rGO for photocatalytic decolorization of BR 18 dye. <b>2021</b> , 626, 126945		3
425	Performance analysis of novel La6WO12/Ag2WO4 nano-system for efficient visible-light photocatalysis and antimicrobial activity. <b>2021</b> , 879, 160075		1
424	The effect of TiO2 coatings on the formation of ozone and nitrogen oxides in non-thermal atmospheric pressure plasma. <b>2021</b> , 9, 106046		2
423	Vapor-solid growth ZnO:ZrO2 micro and nanocomposites. <b>2021</b> , 877, 160219		3
422	Photocatalytic anti-biofouling performance of nanoporous ceramic membranes treated by atomic layer deposited ZnO. <b>2021</b> , 272, 118935		7
421	Metal cyanamides: Open-framework structure and energy conversion/storage applications. <b>2021</b> , 61, 347-367		O
420	Ecofriendly K-decorated ZnO/Zn(Al,La)2O4 catalyst for hydrogen production Effect of heterostructure on catalyst activity at steam-lean process gas. <b>2021</b> , 302, 121067		
419	Engineering-safer-by design ZnO nanoparticles incorporated cellulose nanofiber hybrid for high UV protection and low photocatalytic activity with mechanism. <b>2021</b> , 9, 105845		6

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417	Efficient photocatalytic performance of Mg doping ZnO for the photodegradation of the rhodamine B. <b>2021</b> , 133, 108906	4
416	Construction of Ag2WO4 decorated CoWO4 nano-heterojunction with recombination delay for enhanced visible light photocatalytic performance and its antibacterial applications. <b>2021</b> , 629, 127416	7
415	Fe2O3 fibers: An efficient photocatalyst for dye degradation under visible light. <b>2021</b> , 882, 160683	7
414	Advancement in upconversion nanoparticles based NIR-driven photocatalysts. <b>2021</b> , 151, 111631	6
413	Green synthesis of zinc oxide nanoparticles by Ziziphus jujuba leaves extract: Environmental application, kinetic and thermodynamic studies. <b>2021</b> , 158, 110237	3
412	Synthesis of novel ZnO/Geopolymer nanocomposite photocatalyst for degradation of congo red dye under visible light. <b>2021</b> , 16, 100521	2
411	Photocatalysis using zinc oxide-zinc phthalocyanine composite for effective mineralization of organic pollutants. <b>2021</b> , 160, 106357	6
410	Citric acid-assisted ultrasmall CeO2 nanoparticles for efficient photocatalytic degradation of glyphosate. <b>2021</b> , 425, 130640	13
409	Optimization of photocatalytic degradation conditions and toxicity assessment of norfloxacin under visible light by new lamellar structure magnetic ZnO/g-CN. <b>2021</b> , 225, 112742	2
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406	A review of photocatalytic characterization, and environmental cleaning, of metal oxide nanostructured materials. <b>2021</b> , 30, e00343	4
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404	ZnO-CdO nanocomposites incorporated with graphene oxide nanosheets for efficient photocatalytic degradation of bisphenol A, thymol blue and ciprofloxacin. <b>2022</b> , 424, 127332	2
403	Photocatalytic fuel cell [A review. <b>2022</b> , 428, 131074	9
402	Photocatalytic removal of emerging contaminants in water and wastewater treatments: a review. <b>2022</b> , 543-572	1
401	Green synthesis of Cu-doped ZnO nanoparticles and its application for the photocatalytic degradation of hazardous organic pollutants. <b>2022</b> , 287, 132081	55

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398	The application of a three-dimensional flower-like heterojunction containing zinc oxide nanoparticles and modified carbon nitride for enhanced photodegradation. <b>2022</b> , 890, 161744	1
397	On the diatomite-based nanostructure-preserving material synthesis for energy applications <b>2021</b> , 11, 31884-31922	1
396	Nanomaterials for Photocatalytic Environmental Remediation. 2021, 85-116	
395	Geopolymer coating paste on concrete for photocatalytic performance. 2021,	1
394	Parallel Synthesis and Optimization of Magnesium Oxide Nanoparticles Using Tridax Procumbens and Myristica Fragrance.	
393	Non-noble metallic Cu with three different roles in a Cu doped ZnO/Cu/g-C3N4 heterostructure for enhanced Z-scheme photocatalytic activity. <b>2021</b> , 45, 13499-13511	4
392	Heterojunction-based photocatalyst. <b>2021</b> , 85-130	1
391	Biogenic Synthesis of Metal Oxide Nanoparticle Semiconductors for Wastewater Treatment. <b>2020</b> , 1-31	4
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390	Nano Based Photocatalytic Degradation of Pharmaceuticals. <b>2017</b> , 221-238  Photocatalytic activity of ZnO + CuO thin films deposited by dip coating: coupling effect between oxides. <b>2020</b> , 93, 517-526  Response of bioaerosol cells to photocatalytic inactivation with ZnO and TiO impregnated onto	5
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390 389 388 387 386	Nano Based Photocatalytic Degradation of Pharmaceuticals. 2017, 221-238  Photocatalytic activity of ZnO + CuO thin films deposited by dip coating: coupling effect between oxides. 2020, 93, 517-526  Response of bioaerosol cells to photocatalytic inactivation with ZnO and TiO impregnated onto Perlite and Poraver carriers. 2021, 15, 43  Graphene oxide\( \text{ZnO} \) nanocomposite: an efficient visible light photocatalyst for degradation of rhodamine B. 2021, 11, 1291-1302  Doped zinc oxide nanomaterials: structure\( \text{Blectronic properties and photocatalytic applications.} \) 2020, 285-312  Control the energy band potential of ZnMgO solid solution with enhanced photocatalytic hydrogen	5 4 2 20 5

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381	Ultrasonication and hydrothermal assisted synthesis of cloud-like zinc molybdate nanospheres for enhanced detection of flutamide. <b>2020</b> , 61, 104823	15
380	Zinc oxide nanoparticles for therapeutic purposes in cancer medicine. <b>2020</b> , 8, 4973-4989	42
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378	Antioxidant activity and antifungal fractional inhibitory concentration indices of zinc oxide nanoparticles in combination with carbendazim, mancozeb, and thiram. <b>2019</b> , 14, 1037-1040	2
377	Recent Research on Development and Modification of Nontoxic Semiconductor for Environmental Application. <b>2021</b> , 50, 244-261	6
376	Improvement of Bi doping in ZnO nanocrystals by co-doping with Al: crystal geometry calculations and photocatalytic activity. <b>2020</b> , 31, 505716	7
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374	Photocatalytic performance of ZnO carbon composites for the degradation of methyl orange dye. <b>2020</b> , 7, 015512	1
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372	Enhanced Photocatalytic Performance of ZnO through Coupling with Carbon Materials. 2017, 3, 113	5
371	Photoluminescence of ZnO Nanowires: A Review. <b>2020</b> , 10,	95
370	Heterogeneous Photocatalytic Degradation of Dyes in Water/Alcohol Solution Used by the Brazilian Agate Industry. <b>2019</b> , 09, 29-39	4
369	Summary on Adsorption and Photocatalysis for Pollutant Remediation: Mini Review. <b>2018</b> , 08, 225-255	24
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366	Two-dimensional polarized MoTe/GeS heterojunction with an intrinsic electric field for photocatalytic water-splitting <b>2021</b> , 11, 34048-34058	2
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364	Sol-gel synthesis of nanostructured ZnO/SrZnO2 with boosted antibacterial and photocatalytic activity. <b>2021</b> ,	15
363	Progress in the application of surface engineering methods in immobilizing TiO2 and ZnO coatings for environmental photocatalysis. 1-52	6
362	Extraction of Chlorobenzenes and PCBs from Water by ZnO Nanoparticles. 2021, 9, 1764	
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356	Formation of Zn-rich ZnO films with improved bulk and surface characteristics by approach of magnetron sputtering technique. <b>2021</b> , 738, 138967	2
355	High efficiency hydrogen production with visible light layered MgAl-LDH coupled with CoSx. <b>2021</b> , 784, 139124	1
354	Recovery of palladium (II) from aqueous solution through photocatalytic deposition in presence of ZnO under UV/Visible-light radiation. <b>2021</b> , 9, 106523	2
353	Novel ZnO/CuBiS2 nanocomposites with p-n heterojunctions for persulfate-promoted photocatalytic mitigation of pollutants under visible light. <b>2021</b> , 27, 101518	1
352	Removal of Malachite Green from Waste Waters by Bentonite Based Photocatalyst Technology. 261-270	
351	CHARACTERIZATION-PERFORMANCE OF ZnO AND ZnO/ZnFe2O4 CATALYST USING ARTIFICIAL AND SOLAR LIGHT FOR MERCURY (II) REDUCTION. <b>2019</b> , 36, 797-810	
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349	Advanced Nanomaterials for Water Engineering and Treatment. <b>2020</b> , 642-675	
348	Facile Synthesis of Amorphous C3N4ZnxOy (x, y = $0.321.10$ ) with High Photocatalytic Efficiency for Antibiotic Degradation. <b>2020</b> , 10, 514	О
347	Transition metal incorporated, modified bismuth oxide (Bi2O3) nano photo catalyst for deterioration of rosaniline hydrochloride dye as resource for environmental rehabilitation. <b>2021</b> , 100225	3

346	Microwave Assisted ZnO Nanoparticles by Simple Precipitation Method: A Novel Approach. <b>2021</b> , 20, 2150010	O
345	Review on green carbon dot-based materials for the photocatalytic degradation of dyes: fundamentals and future perspective.	2
344	Role of Photocatalysis in Green Energy Production. <b>2022</b> , 590-596	O
343	Advances in Photocatalytic Materials for Waste Water Treatment Applications. 2022, 759-767	
342	Synthesis of La9.33Si6O26 nano-photocatalysts by ultrasonically accelerated method for comparing water treatment efficiency with changing conditions. <b>2022</b> , 15, 103481	O
341	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. <b>2022</b> , 424, 127416	6
340	Degradation of Caffeine by Heterogeneous Photocatalysis Using ZnO with Fe and Ag. 63,	1
339	Characterization and Photoactivity of Cotton Loaded with ZnO NPs. <b>2020</b> , 10, 111-117	
338	EFFECT OF OPERATIONAL PARAMETERS ON PHOTOCATALYTIC DEGRADATION OF TOLUIDINE BLUE UTILIZING BIOCI NANOPLATES IN SOLAR LIGHT. <b>2017</b> , 4, 43-54	
337	Catalytic hydrogen evolution reaction on surfaces of metal-nanoparticle-coated zinc-based oxides by first-principles calculations. <b>2021</b> ,	1
336	Advanced Nanomaterials for Water Engineering and Treatment. 84-126	
335	Photoremediation of methylene blue by biosynthesized ZnO/Fe3O4 nanocomposites using Callistemon viminalis leaves aqueous extract: A comparative study. <b>2021</b> , 10, 1912-1925	1
334	Photocatalysis in alkali activated cementitious materials. <b>2022</b> , 46, 103749	2
333	Electrospun Ceramic Nanofibers for Photocatalysis <b>2021</b> , 11,	2
332	Nickel Ferrite/Zinc Oxide Nanocomposite Photocatalytic and Antibacterial Properties. 2021, 101388	3
331	Knowledge extraction of sonophotocatalytic treatment for acid blue 113 dye removal by artificial neural networks. <b>2022</b> , 204, 112359	1
330	Photodegradation assessment of RB5 dye by utilizing WO/TiO nanocomposite: a cytotoxicity study. <b>2021</b> , 1	1
329	Enhancing the structural, optical, electrical, properties and photocatalytic applications of ZnO/PMMA nanocomposite membranes: towards multifunctional membranes. 1	6

328	Tuning of Photoluminescence and Antibacterial Properties of ZnO Nanoparticles through Sr Doping for Biomedical Applications. <b>2021</b> , 2021, 1-7	1
327	Loading Rh single atoms onto hollow cubic Cu2MoS4 nanoparticles for decreased electron/hole recombination and increased photocatalytic performance. <b>2021</b> , 162832	1
326	Advances in preparation, mechanism and applications of graphene quantum dots/semiconductor composite photocatalysts: A review. <b>2021</b> , 424, 127721	4
325	Response of rotating biological contactor started up by heterotrophic nitrification-aerobic denitrification bacteria to various C/N ratios. <b>2021</b> , 291, 133048	1
324	Effect of the Type of Heterostructures on Photostimulated Alteration of the Surface Hydrophilicity: TiO2/BiVO4 vs. ZnO/BiVO4 Planar Heterostructured Coatings. <b>2021</b> , 11, 1424	2
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322	Developing fine-tuned metal®rganic frameworks for photocatalytic treatment of wastewater: A review. <b>2021</b> , 133605	2
321	Simultaneous removal of micropollutants, antibiotic resistant bacteria, and antibiotic resistance genes using graphitic carbon nitride under simulated solar irradiation. <b>2021</b> , 433, 133839	2
320	Photocatalytic activity of cobalt aluminate nanoparticles synthesized by microwave-assisted combustion method. <b>2021</b> , 161, 110482	0
319	Layered g-C3N4/TiO2 nanocomposites for efficient photocatalytic water splitting and CO2 reduction: A review. <b>2021</b> , 23, 100904	7
318	Bismuth silicates: preparation by pulsed laser ablation and photocatalytic activity. 2021,	
317	A comparative study of 0D and 1D Ce-ZnO nanocatalysts in photocatalytic decomposition of organic pollutants <b>2021</b> , 11, 36078-36088	O
316	High flow rate microreactors integrating in situ grown ZnO nanowires for photocatalytic degradation.	1
315	Zn1-xCoxO vs Ag-ZnO photoanodes design via combustion: Characterization and application in photoelectrocatalysis. <b>2022</b> , 638, 128261	1
314	Enhanced photocatalytic degradation of toxic contaminants using DyO-SiO ceramic nanostructured materials fabricated by a new, simple and rapid sonochemical approach <b>2021</b> , 82, 105892	11
313	Photocatalytic performance of 3D engineered chitosan hydrogels embedded with sulfur-doped CN/ZnO nanoparticles for Ciprofloxacin removal: Degradation and mechanistic pathways <b>2021</b> , 198, 87-100	3
312	Silver nanoparticles decorated two dimensional MoS2 nanosheets for enhanced photocatalytic activity. <b>2022</b> , 635, 128102	1
311	High photocatalytic efficiency of ⊞e2O3 - ZnO composite using solar energy for methylene blue degradation. <b>2022</b> , 627, 413567	3

310	Photocatalytic MIL101(Fe)/ZnO chitosan composites for adsorptive removal of tetracycline antibiotics from the aqueous stream. <b>2022</b> , 1252, 132128	7
309	Z-scheme 0D/3D p-Ag6Si2O7 nanoparticles-decorated n-Bi2O2CO3 micro-flowers heterojunction photocatalyst for efficient degradation of organic contaminants. <b>2022</b> , 899, 163150	O
308	Solar Photocatalytic Efficiency of Zinc Oxide for Water Decontamination. 2021, 1, 92-102	
307	Rational Design of Novel C/N-Doped ZnO/Bi 2WO 6 Z-Scheme Heterojunction for Efficient Photocatalytic Degradation of Antibiotics.	
306	Comparative photocatalytic performance and therapeutic applications of zinc oxide (ZnO) and neodymium-doped zinc oxide (Nd᠒nO) nanocatalysts against Acid Yellow-3 dye: kinetic and thermodynamic study of the reaction and effect of various parameters. <b>2022</b> , 33, 2781	2
305	Research progress on photocatalytic reduction of CO based on LDH materials 2022,	12
304	Response surface methodology for the high efficiency removal of lead and zinc from effluents using natural sepiolite particles on the corn silk. 1-18	0
303	A review on improving the efficiency of photocatalytic water decontamination using ZnO nanorods. 1	3
302	Green synthesis ZnO/TiO2 for high recyclability rapid sunlight photodegradation wastewater. 1	O
301	Enhanced Photocatalytic Activity of ZnOtdS Composite Nanostructures towards the Degradation of Rhodamine B under Solar Light. <b>2022</b> , 12, 84	4
300	Influence of aqueous chloride and bromide ions on bisphenol A degradation efficiency with zinc oxide nanoparticles. <b>2022</b> , 32,	
299	Microwave-Assisted Green Synthesis of Pure and Mn-Doped ZnO Nanocomposites: In Vitro Antibacterial Assay and Photodegradation of Methylene Blue. <b>2022</b> , 8,	O
298	Photocatalytic treatment of detergent-contaminated wastewater: A short review on current progress. <b>2022</b> , 39, 484	1
297	Ag-doped FeCo2O4 nanoparticles and their composite with flat 2D reduced graphene oxide sheets for photocatalytic degradation of colored and colorless compounds. <b>2022</b> , 31, 100325	12
296	Removal of antimicrobial resistance determinants from wastewater: a risk perspective on conventional and emerging technologies. <b>2022</b> , 603-642	0
295	Review on Methylene Blue: Its Properties, Uses, Toxicity and Photodegradation. <b>2022</b> , 14, 242	39
294	A review on hierarchical Bi2MoO6 nanostructures for photocatalysis applications. <b>2022</b> , 46, 906-918	3
293	Current status, research gaps, and future scope for nanomaterials toward visible light photocatalysis. <b>2022</b> , 569-608	

292	Sustainable Green Nanotechnologies for Innovative Purifications of Water: Synthesis of the Nanoparticles from Renewable Sources <b>2022</b> , 12,	3
291	Zinc oxide hollow spheres decorated with cerium dioxide. The role of morphology in the photoactivity of semiconducting oxides <b>2021</b> ,	O
290	Agricultural application of visible light photocatalyst. <b>2022</b> , 467-489	О
289	Green approach to synthesize MnxZn1-xO nanocomposite with enhanced photocatalytic, fluorescence and antibacterial activity. <b>2022</b> , 5, 100244	O
288	Sunlight assisted photocatalytic removal of trypan blue dye using g-carbon nitrides sheets as sunlight-active photocatalyst. <b>2022</b> , 7, 1-8	O
287	Morphology, luminescence and optical properties of Tb- and Li- codoped ZnO elongated nano- and microstructures	O
286	Enhanced photocatalytic activity of chemically deposited ZnO nanowires using doping and annealing strategies for water remediation. <b>2022</b> , 582, 152323	1
285	Benchmarking tertiary water treatments for the removal of micropollutants and pathogens based on operational and sustainability criteria. <b>2022</b> , 46, 102587	2
284	Structural differences and adsorption behaviour of alkaline metals doped zinc oxide nanoparticles <b>2022</b> , 12, 2292	0
283	Study of Photocatalytic Degradation Efficiency of rGO/ZnO Nano-Photocatalyst and their Performance Analysis using Scanning Kelvin Probe. <b>2022</b> , 107293	1
282	Wastewater treatment and emerging contaminants: Bibliometric analysis 2022, 133932	5
281	Construction of 2D MoS2@ZnO heterojunction as superior photocatalyst for highly efficient and selective CO2 conversion into liquid fuel. <b>2022</b> , 10, 107337	Ο
280	Impact of Reaction Parameters and Water Matrices on the Removal of Organic Pollutants by TiO/LED and ZnO/LED Heterogeneous Photocatalysis Using 365 and 398 nm Radiation <b>2021</b> , 12,	6
279	Fabrication of a zinc oxide/alginate (ZnO/Alg) bionanocomposite for enhanced dye degradation and its optimization study <b>2022</b> , 12, 7210-7228	2
278	Synthesis and Photocatalytic Activity of Hexagonal Plate-like Shaped Au Nanoparticles/ZnO Composite Particles under Visible-light Irradiation <b>2022</b> ,	
277	Photocatalytic activity of zinc oxide for dye and drug degradation: A review. <b>2022</b> , 52, 1653-1656	3
276	Zinc acetate amine complexes: Single-source precursors to zinc oxide films and nanoparticles; the influence of amines on photocatalysis. <b>2022</b> , 507-529	
275	On the interface reactions and stability of nonfullerene organic solar cells.	2

274	Enhanced Photocatalytic Activity of ZnO Nanorods/(Graphene Oxide, Reduced Graphene Oxide) for Degradation of Methyl Orange Dye. <b>2022</b> , 2172, 012013	
273	Energy-levels well-matched direct Z-scheme ZnNiNdO/CdS heterojunction for elimination of diverse pollutants from wastewater and microbial disinfection <b>2022</b> , 1	O
272	Hydrothermally Grown ZnO Nanostructures for Water Purification via Photocatalysis. 2022, 12, 308	2
271	Thermal crosslinking synthesis of ethylene-vinyl acetate copolymer supported floating TiO photocatalyst: characterization and photocatalytic performance <b>2022</b> , 1	O
270	Synthesis, Analysis and Visible-Light-Driven Photocatalysis of 08% Pr-Doped ZnO Nanoparticles. 1	О
269	Ag-doped nickel ferrites and their composite with rGO: Synthesis, characterization, and solar light induced degradation of coloured and colourless effluents. <b>2022</b> ,	7
268	Multifunctional ZnO-CoO @ polymer hybrid nanocoatings with controlled adsorption, photocatalytic and anti-microbial functions for polluted water systems <b>2022</b> , 1	
267	La-substituted AgNbO3 for photocatalytic degradation of Rhodamine B and methylene blue dyes. 1	O
266	Photocatalytic degradation of tetracycline in aqueous medium using ZnWO4/Bi2MoO6 nanocomposites under natural sunlight. 1	0
265	Metal-Organic-Framework-Derived Ball-Flower-like Porous CoO/FeO Heterostructure with Enhanced Visible-Light-Driven Photocatalytic Activity <b>2022</b> , 12,	5
264	Degradation of bisphenol A: a contaminant of emerging concern, using catalytic ozonation by activated carbon impregnated nanocomposite-bimetallic catalyst <b>2022</b> , 1	О
263	Synthesis and structure of amorphous SiO2/ZnO composites with potential application for azo dye degradation. <b>2022</b> ,	O
262	Porous ZnO Microspheres Grafted with Poly-( N -isopropylacrylamide) via SI-ATRP: Reversible Temperature-Controlled Switching of Photocatalysis**. <b>2022</b> , 7,	
261	Tetragonal multilayered ZnO/CuO composites derived from Zn- and Cu-containing metal-organic framework: Effect of calcination temperature on physicochemical properties and photocatalytic activity. 2022,	O
260	Photocatalytic degradation of atrazine in aqueous solution using La-doped ZnO/PAN nanofibers <b>2022</b> , 1	1
259	Kinetic Study and Modeling of the Degradation of Aqueous Ammonium/Ammonia Solutions by Heterogeneous Photocatalysis with TiO2 in a UV-C Pilot Photoreactor. <b>2022</b> , 12, 352	2
258	Recent advances on gadolinium-based nano-photocatalysts for environmental remediation and clean energy production: Properties, fabrication, defect engineering and toxicity. <b>2022</b> , 345, 131139	1
257	Vanadium modified di-bismuth tetra-oxide thin films; synthesis, characterization and properties. <b>2022</b> , 282, 125944	

256	Interface engineering of ZnO/In2O3 Z-scheme heterojunction with yolk-shell structure for efficient photocatalytic hydrogen evolution. <b>2022</b> , 153306	3
255	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.	Ο
254	Ni doped zinc oxide nanoparticles supported bentonite clay for photocatalytic degradation of anionic and cationic synthetic dyes in water treatment. <b>2022</b> , 113947	1
253	The Ecological Compensation Mechanism in a Cross-Regional Water Diversion Project Using Evolutionary Game Theory: The Case of the Hanjiang River Basin, China. <b>2022</b> , 14, 1151	5
252	Novel BiVO4/ZnO heterojunction for amended photoreduction of mercury (II) ions. <b>2022</b> , 127, 112251	1
251	Biosynthesis of zinc oxide nanoparticles using Euphorbia milii leaf constituents: Characterization and improved photocatalytic degradation of methylene blue dye under natural sunlight. <b>2022</b> , 99, 100436	O
250	Ball-milled synthesis of maize biochar-ZnO nanocomposite (MB-ZnO) and estimation of its photocatalytic ability against different organic and inorganic pollutants. <b>2022</b> , 26, 101445	2
249	Visible-light driven photocatalytic performance of eco-friendly cobalt-doped ZnO nanoarrays: Influence of morphology, cobalt doping, and photocatalytic efficiency <b>2022</b> , 274, 121103	4
248	Construction of Ag-decorated ZnO with oxygen vacancies for enhanced antibacterial activity via increased HO production <b>2022</b> , 231, 111778	0
247	Interfacial engineering in Pickering emulsion photocatalytic microreactors: From mechanisms to prospects. <b>2022</b> , 438, 135655	1
246	Exploration of grown cobalt-doped zinc oxide nanoparticles and photodegradation of industrial dye. <b>2022</b> , 150, 111795	0
245	Regeneration study of MB in recycling runs over nickel vanadium oxide by solvent extraction for photocatalytic performance for wastewater treatments <b>2022</b> , 211, 112970	5
244	Carbon quantum dots supported zinc oxide (ZnO/CQDs) efficient photocatalyst for organic pollutant degradation [A systematic review. <b>2022</b> , 18, 100681	1
243	Synthesis of Photoactive ZnOBnO2Ag(AgCl) Nanomaterials for Medical and Ecological Applications and Study of Their Structure and Properties. <b>2021</b> , 129, 746-753	1
242	Recent Progress and Prospects in Catalytic Water Treatment. 2021,	12
241	Cerium-, Europium- and Erbium-Modified ZnO and ZrO2 for Photocatalytic Water Treatment Applications: A Review. <b>2021</b> , 11, 1520	1
240	Design and characterization of single bilayer ZnO/Al2O3 film by ultrasonically spray pyrolysis and its application in photocatalysis. <b>2021</b> , 107113	0
239	Recent advances in constructing heterojunctions of binary semiconductor photocatalysts for visible light responsive CO 2 reduction to energy efficient fuels: A review. <b>2022</b> , 46, 5523-5584	О

238	Performance of Metal-Based Nanoparticles and Nanocomposites for Water Decontamination. <b>2022</b> , 65-112	
237	Tailor-Engineered 2D Cocatalysts: Harnessing Electron Hole Redox Center of 2D g-C 3 N 4 Photocatalysts toward Solar-to-Chemical Conversion and Environmental Purification. 2111875	15
236	Enhanced Antimicrobial Cellulose/Chitosan/ZnO Biodegradable Composite Membrane 2022, 12,	1
235	Halloysite-Zinc Oxide Nanocomposites as Potential Photocatalysts. <b>2022</b> , 12, 476	1
234	Tannery wastewater treatment: conventional and promising processes, an updated 20-year review. <b>2022</b> , 4,	2
233	Density Functional Theory Study and Photocatalytic Activity of ZnO/N-Doped TiO2 Heterojunctions.	1
232	ZnSe/Ta2O5 heterojunction with high carrier separation efficiency: Experimental and theoretical calculations. <b>2022</b> , 153456	
231	Data_Sheet_1.ZIP. <b>2020</b> ,	
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229	Visible light-driven photocatalytic activity of Cu2O/ZnO/Kaolinite-based composite catalyst for the degradation of organic pollutant <b>2022</b> ,	О
228	Photocatalytic Degradation of Methylene Blue, Rhodamine B, Methyl Orange and Eriochrome Black T Dyes by Modified Zno Nanocatalysts: A Concise Review.	
227	Avalial das propriedades estruturais e fotocatallicas de complitos g-C3N4/ZnO/xerogel de carbono sintetizados com diferentes tipos de tanino. <b>2022</b> , 27,	
226	Synthesis of photocatalytic pore size-tuned ZnO molecular foams.	1
225	Type Ii Band Alignment Using Composite Heterostructure Zno/Mgzno in Fuel Cell.	
224	Recent progress in zinc oxide nanomaterials and nanocomposites: From synthesis to applications. <b>2022</b> ,	1
223	Decoration of alumina hollow fibers with zinc oxide: improvement of the photocatalytic system for methylene blue degradation <b>2022</b> , 1	O
222	Facile synthesis of NiO/ZnO nano-composite by Co-precipitation, characterization and photocatalytic study of colored and colorless organic pollutants by solar irradiation. <b>2022</b> , 413858	0
221	Impact of structural defects on the photocatalytic properties of ZnO. <b>2022</b> , 6, 100081	О

220	Hierarchical Hollow Zinc Oxide Nanocomposites derived from Morphology-tunable Coordination Polymers for Enhanced Solar Hydrogen Production.	Ο
219	Photo-active catalysts in building and construction materials for air pollution treatment: A bibliometric analysis. <b>2022</b> ,	O
218	Reduction of Heavy Hydrocarbons from Oilfield Produced Water. <b>2022</b> , 2, 234-251	Ο
217	Hierarchical Hollow Zinc Oxide Nanocomposites derived from Morphology-tunable Coordination Polymers for Enhanced Solar Hydrogen Production <b>2022</b> ,	1
216	Resorcinol-based carbon xerogel/ZnO composite for solar-light-induced photodegradation of sulfamerazine. <b>2022</b> , 128, 112470	O
215	Synthesis and characterization of ZnO-GO composites with their piezoelectric catalytic and antibacterial properties. <b>2022</b> , 10, 107840	1
214	Zinc oxide-coated carboxyl-riched graphene oxide efficiently degrades microcystin-leucine arginine and antibiotics under visible light. <b>2022</b> , 10, 107829	
213	MOFsThetal oxides/sulfides/phosphides nanocomposites for supercapacitors. <b>2022</b> , 393-412	
212	Olive Mill Wastewater (OMW) Treatment Using Photocatalyst Media. 2022, 12, 539	2
211	Investigation of properties and applications of ZnO polymer nanocomposites.	1
210	Synthesis and Application of the Ternary Zn0.5Cd0.5S/ZnO/carbon Xerogel Composite in the Photocatalytic Degradation of 4-chlorophenol. <b>2022</b> , 25,	
209	Estimation of the Integral Toxicity of Photocatalysts Based on Graphitic Carbon Nitride in a Luminescent Test. <b>2022</b> , 63, 166-171	
208	SYNTHESIS OF NOVEL COSMETIC WHITE PIGMENT BY CONDENSED PHOSPHORIC ACID TREATMENT OF ZINC OXIDE. <b>2022</b> , 0-0	
207	Adsorption <b>P</b> hotocatalysis Dual-Modality Approach for Removal of PPCPs from Aquatic Environment. <b>2022</b> , 285-303	
206	Solar reclamation of groundwater and agro-wastewater polluted with pesticide residues using binary semiconductors and persulfates for their reuse in crop irrigation. <b>2022</b> , 267-293	O
205	Competence of tunable Cu2AlSnS4 chalcogenides hydrophilicity toward high efficacy photodegradation of spiramycin antibiotic resistance-bacteria from wastewater under visible light irradiation. <b>2022</b> , 114041	1
204	Natural solar activation of modified zinc oxides with rare earth elements (Ce, Yb and Fe) for the simultaneous disinfection and decontamination of urban wastewater. <b>2022</b> , 135017	0
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201	Emerging Contaminants in Wastewater and Associated Treatment Technologies. <b>2022</b> , 231-261	О
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199	Controlling the Morphology of Barrel-Shaped Nanostructures Grown via CuZn Electro-Oxidation. <b>2022</b> , 15, 3961	1
198	Global prevalence and visible light mediated photodegradation of pharmaceuticals and personal care products (PPCPs)-a review. <b>2022</b> , 14, 100469	1
197	Optimization of sludge supernatant treatment using advanced oxidation processes via Response surface methodology.	O
196	Enhanced photodegradation of acetaminophen over Sr@TiO2/UiO-66-NH2 heterostructures under solar light irradiation. <b>2022</b> , 446, 137229	0
195	Inorganic Oxide Semiconductors for Environmental Photocatalysis. <b>2022,</b> 1663-1684	
194	One-step fabrication and photocatalytic performance of sea urchin-like CuO/ZnO heterostructures.	0
193	Solar light induced photocatalytic degradation of sulfamethoxazole by ZnWO4/CNNs nanocomposites. <b>2022</b> , 114108	1
192	Modeling and optimizing Cd(II) ions adsorption onto Corn Silk/Zeolite-Y composite from industrial effluents applying response surface methodology: isotherm, kinetic, and reusability studies.	1
191	Synthesis of ZnO/Ag/phosphorene for photocatalytic reduction of hexavalent chromium (Cr-VI).	
190	Plasmonic and bi-piezoelectric enhanced photocatalysis using PVDF/ZnO/Au nanobrush. 2022, 11, 3339-3349	1
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187	Immobilized BiOCl0.75I0.25/g-C3N4 nanocomposites for photocatalytic degradation of bisphenol A in the presence of effluent organic matter. <b>2022</b> , 156828	О
186	Design of Photocatalytic Functional Coatings Based on the Immobilization of Metal Oxide Particles by the Combination of Electrospinning and Layer-by-Layer Deposition Techniques. <b>2022</b> , 12, 862	2
185	Recent advances in wastewater treatment using semiconductor photocatalysts. <b>2022</b> , 100644	1

184	Performance evaluation and optimization of ZnO-PVP nanoparticles for photocatalytic wastewater treatment: Interactions between UV light intensity and nanoparticles dosage. <b>2022</b> , 365, 132833	O
183	Photo-assisted (waste)water treatment technologies 🖪 scientometric-based critical review. <b>2022</b> , 538, 115905	1
182	An antibacterial and antifouling amidoxime-functionalized graphene oxide aerogel for selective uranium adsorption in Salt Lake water. <b>2022</b> , 649, 129367	1
181	Photocatalysis vs adsorption by metal oxide nanoparticles. <b>2022</b> , 131, 122-166	4
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179	Efficient Degradation of Bisphenol a Over Facilely Optimized Ternary Ag/Zno/Znal-Ldh Composite with Enhanced Photocatalytic Performance Under Visible Light Irradiation.	
178	Nanozymes 🖟 route to overcome microbial resistance: A viewpoint. <b>2022</b> , 11, 2575-2583	
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176	Effect of inert ambient annealing on structural and defect characteristics of coaxial N-CNTs@ZnO nanotubes coated by atomic layer deposition. <b>2022</b> ,	O
175	Comparative study on photocatalytic degradation of methylene blue using pristine ZnO and Ni/ZnO composite films. <b>2022</b> ,	
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173	Ultrasensitive Electrochemical Detection and Plasmon-Enhanced Photocatalytic Degradation of Rhodamine B Based on Dual-Functional, 3D, Hierarchical Ag/ZnO Nanoflowers. <b>2022</b> , 22, 5049	1
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169	Facile sonochemical preparation of La2Cu2O5 nanostructures, characterization, the evaluation of performance, mechanism, and kinetics of photocatalytic reactions for the removal of toxic pollutants. <b>2022</b> , 362, 119718	Ο
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167	Synthesis and Characterization of N and Fe-Doped TiO2 Nanoparticles for 2,4-Dimethylaniline Mineralization. <b>2022</b> , 12, 2538	O

166	Acoustofluidic bubble-driven micromixers for the rational engineering of multifunctional ZnO nanoarray. <b>2022</b> , 138273	О
165	Synthesis and characterization of TiO2/ZnO heterostructural composite for ultraviolet photocatalytic degrading DOM in landfill leachate.	O
164	Enhanced Visible-Light-Driven Photocatalysis of Ag/Ag2O/ZnO Nanocomposite Heterostructures. <b>2022</b> , 12, 2528	3
163	Review on synthesis of variety zinc nanostructures on metallic zinc foil via anodization method. 1-12	
162	Applications of electron spin resonance spectroscopy in photoinduced nanomaterial charge separation and reactive oxygen species generation. <b>2021</b> , 39, 435-459	
161	Recent developments in hydrogels containing copper and palladium for the catalytic reduction/degradation of organic pollutants. <b>2022</b> , 12, 23481-23502	O
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159	Green Derived Zinc Oxide (ZnO) for the Degradation of Dyes from Wastewater and Their Antimicrobial Activity: A Review. <b>2022</b> , 12, 833	1
158	Hybrid Metal Oxide/Biochar Materials for Wastewater Treatment Technology: A Review. <b>2022</b> , 7, 27062-2707	<b>'</b> 82
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156	ZnO Nanowires with Increasing Aspect Ratios for Room-Temperature NO2 Gas Sensing. <b>2022</b> , 5, 10603-10616	<b>5</b> o
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154	Facile synthesis, structural, morphological, photocatalytic and optical properties of CoFe2O4/ZnO hybrid nanostructures. <b>2022</b> ,	1
153	Photocatalytic degradation of Reactive Black dye using ZnOIIeO2 nanocomposites.	O
152	Microwave-Assisted Synthesis of Poly (Acrylamide-co-2-Hydroxyethyl Methacrylate)/Chitosan Semi-IPN ZnO Nanocomposite Membranes for Food Packaging Applications. <b>2022</b> ,	3
151	Tuning the workfunction of ZnO through surface doping with Mn from first-principles simulations. <b>2022</b> , 122175	1
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149	Impact of Heterovalent Cations (Ga, Co) Co-doping on the Physical Properties of ZnO Films for Optoelectronic Applications. <b>2022</b> , 52,	O

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146	Rational construction of NH2-UiO-66/Bi2MoO6 nanocomposite with accelerating charge transfer for enhanced visible-light photocatalytic activity.	
145	ROS-mediated antibacterial response of ZnO and ZnO containing cerium under light.	O
144	Efficient degradation of bisphenol A over facilely optimized ternary Ag/ZnO/ZnAl-LDH composite with enhanced photocatalytic performance under visible light irradiation. <b>2022</b> , 132, 106992	О
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139	ZincAcetateAmine Complexes as Precursors to ZnO and the Effect of the Amine on Nanoparticle Morphology, Size, and Photocatalytic Activity. <b>2022</b> , 12, 1099	O
138	Immobilization of zinc oxide-based photocatalysts for organic pollutant degradation: A review. <b>2022</b> , 10, 108505	1
137	Facile synthesis of sunlight driven photocatalysts Zn0.9Ho0.05M0.05O (M´=´Pr, Sm, Er) for the removal of synthetic dyes from wastewater. <b>2022</b> , 34, 102376	O
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135	Visible-light-driven impressive activation of persulfate by Bi5O7Br-modified ZnO for photodegradation of tetracycline: Facile synthesis, kinetic and mechanism study. <b>2022</b> , 365, 120176	O
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133	Effective Materials in the Photocatalytic Treatment of Dyestuffs and Stained Wastewater. <b>2022</b> , 173-200	O
132	Efficient photoreduction of hexavalent uranium over defective ZnO nanoparticles by oxygen defect engineering. <b>2022</b> , 24, 6477-6485	О
131	Enhanced photocatalytic performance of carbon fiber paper supported TiO2 under the ultrasonic synergy effect. <b>2022</b> , 12, 22922-22930	О

130	Recent Advances in Photocatalytic Degradation of Dyes Using Heterogeneous Catalysts. 2022, 21-64	O
129	Porous zinc oxide plate with micro- and nanoelements of the surface structure for heterogeneous photocatalysis. <b>2022</b> , 26,	O
128	Laser-treated wood for high-efficiency solar thermal steam generation. <b>2022</b> , 12, 24861-24867	O
127	Characterization of SrMoO4 synthetized by soft chemistry: application to the degradation of Rhodamine B under UV light. <b>2022</b> , 33, 21588-21599	O
126	Visible light assisted surface plasmon resonance triggered Ag/ZnO nanocomposites: synthesis and performance towards degradation of indigo carmine dye.	1
125	Kraft lignin-based carbon xerogel/zinc oxide composite for 4-chlorophenol solar-light photocatalytic degradation: effect of pH, salinity, and simultaneous Cr(VI) reduction.	O
124	The Suitability of Photocatalyst Precursor Materials in Geopolymer Coating Applications: A Review. <b>2022</b> , 12, 1348	3
123	Synthesis and Application of Innovative and Environmentally Friendly Photocatalysts: A Review. <b>2022</b> , 12, 1074	1
122	Catalytic degradation of methylene blue by biosynthesized Au nanoparticles on titanium dioxide (Au@TiO2).	O
121	Metal-Catalyzed Formation of Organic Pollutants Intermediated by Organic Free Radicals.	O
120	Ag decorated ZnO based nanocomposites for visible light-driven photocatalytic degradation: basic understanding and outlook.	1
119	Photoactive Catalysts for Treatment of Air Pollutants: A Review through Bibliometric Analysis.	O
118	Photocatalytic and antimicrobial activities of pure and Mn doped ZnO nanoparticles synthesised by Annona Muricata leaf extract. 1-16	O
117	The Combined Effect of Bubble and Photo Catalysis Technology in BTEX Removal from Produced Water. <b>2022</b> , 17, 577-589	2
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115	Sunlight-driven photocatalytic per- and polyfluoroalkyl substances degradation over zinc oxide/cellulose nanofiber catalyst using a continuous flow reactor. <b>2022</b> , 10, 108686	O
114	Developing visible light responsive BN/NTCDA heterojunction with good degradation performance for tetracycline.	O
113	Nb/Starch-Doped ZnO Nanostructures for Polluted Water Treatment and Antimicrobial Applications: Molecular Docking Analysis. <b>2022</b> , 7, 39347-39361	1

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111	The Effect of Rare Earths on the Response of Photo UV-Activate ZnO Gas Sensors. <b>2022</b> , 22, 8150	2
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109	A Targeted Review of Current Progress, Challenges and Future Perspective of g-C 3 N 4 based Hybrid Photocatalyst Toward Multidimensional Applications.	O
108	Photocatalytic degradation of ofloxacin by ZnO combined with persulfate under simulated solar light irradiation: performance, kinetics and degradation pathways.	0
107	Photoactive Antimicrobial CuZnO Nanocrystals.	O
106	Photocatalytical degradation of methyl orange (MO) using ZnO nanoparticles from alkaline wasted batteries. The effect of the MO, catalyst, and organic loads. <b>2022</b> , 17, 1241-1248	0
105	Preparation of high-performance chitosan adsorbent by cross-linking for adsorption of Reactive Red 2 (RR2) dye wastewater. <b>2022</b> , 10, 108872	o
104	Status and opportunities in the treatment of tetracyclines from aquatic environments by metal-organic frameworks (MOFs) and MOFs-based composites. <b>2022</b> , 26, 101209	1
103	Novel Synthesis of Zinc Oxide Nanoparticles from Type IV Deep Eutectic Solvents. <b>2023</b> , 545, 121268	1
102	Strategic insight into enhanced photocatalytic remediation of pharmaceutical contaminants using spherical CdO nanoparticles in visible light region. <b>2023</b> , 311, 137040	O
101	Surfactants-assisted morphological regulation of BiVO4 nanostructures for photocatalytic degradation of organic pollutants in wastewater. <b>2023</b> , 172, 111079	o
100	Methylene blue dye degradation potential of zinc oxide nanoparticles bioreduced using Solanum trilobatum leaf extract. <b>2022</b> , 4, 100637	0
99	Synergistic Effect of Redox Dual PdOx/MnOx Cocatalysts on the Enhanced H2 Production Potential of a SnS/Fe2O3 Heterojunction via Ethanol Photoreforming.	O
98	A Review on Cement-Based Composites for Removal of Organic/Heavy Metal Contaminants from Water. <b>2022</b> , 12, 1398	0
97	Microwave-assisted biosynthesis of ZnO-GO particles using orange peel extract for photocatalytic degradation of methylene blue. <b>2022</b> , 10, 108924	O
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94	Entrapped Molecule-Like Europium-Oxide Clusters in Zinc Oxide with Nearly Unaffected Host Structure. 2203331	Ο
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92	Efficiency enhancement of photocatalytic activity under UV and visible light irradiation using ZnO/Fe3O4 heteronanostructures. <b>2023</b> , 249, 712-724	0
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90	Nanotechnology for the removal of pesticides hazardous to human health. 2023, 333-361	0
89	New approach for designing wrinkled and porous ZnO thin films for photocatalytic applications. <b>2023</b> , 658, 130628	O
88	Treatment of pharmaceutical wastewater using photocatalytic reactor and hybrid system integrated with biofilm based process: Mechanistic insights and degradation pathways. <b>2023</b> , 11, 109141	0
87	Synthesis, physicochemical characterization of ZnO and \(\frac{1}{2}\)MoO3/ZnO heterostructures and their photocatalytic activity for the methylene blue (MB) dye degradation. <b>2023</b> , 136, 113371	O
86	Highly functionalized photo-activated metal®rganic frameworks for dye degradation: Recent advancements. <b>2023</b> , 34, 105180	0
85	Heterostructures of Ag2FeSnS4 chalcogenide nanoparticles as potential photocatalysts. <b>2023</b> , 19, e01509	O
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83	Review of the performance of MOF/g-C3N4 composites for photocatalytic hydrogen production and CO2 reduction.	O
82	Sustainable Removal of Tolperisone from Waters by Application of Photocatalysis, Nanotechnology, and Chemometrics: Quantification, Environmental Toxicity, and Degradation Optimization. <b>2022</b> , 12, 4199	0
81	The Effect of Ag-Doping on the Cytotoxicity of ZnO Nanostructures Grown on Ag/Si Substrates by APMOCVD. <b>2022</b> , 84, 47-56	O
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79	Photoactive catalysts for treatment of air pollutants: a bibliometric analysis.	O
78	More than One Century of History for Photocatalysis, from Past, Present and Future Perspectives. <b>2022</b> , 12, 1572	0
77	ZnO Nanostructures Doped with Various Chloride Ion Concentrations for Efficient Photocatalytic Degradation of Methylene Blue in Alkaline and Acidic Media. <b>2022</b> , 27, 8726	O

76	New insights into the photocatalytic mechanism of pristine ZnO nanocrystals: From experiments to DFT calculations. <b>2022</b> , 156225	О
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74	Controllable synthesis of zinc oxide with ionic liquid and supramolecular gel as co-template for the degradation of organic dyes. <b>2022</b> , 39, 3277-3285	0
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39	Tuning the core-shell ratio in nanostructured CuS@In2S3 photocatalyst for efficient dye degradation. <b>2023</b> , 5, 100093	O
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