Yong Zhou

List of Publications by Citations

291 papers	18,444 citations	61 h-index	130 g-index
309 ext. papers	20,798 ext. citations	8.4 avg, IF	7.04 L-index

#	Paper	IF	Citations
291	Hydrothermal Dehydration for the "Green" Reduction of Exfoliated Graphene Oxide to Graphene and Demonstration of Tunable Optical Limiting Properties. *Chemistry of Materials*, **2009**, 21, 2950-2956	9.6	1285
290	Ionic liquids for the convenient synthesis of functional nanoparticles and other inorganic nanostructures. *Angewandte Chemie - International Edition*, **2004**, 43, 4988-92	16.4	1054
289	Photocatalytic conversion of CO(2) into renewable hydrocarbon fuels: state-of-the-art accomplishment, challenges, and prospects. *Advanced Materials*, **2014**, 26, 4607-26	24	1043
288	State-of-the-Art Progress in Diverse Heterostructured Photocatalysts toward Promoting Photocatalytic Performance. *Advanced Functional Materials*, **2015**, 25, 998-1013	15.6	582
287	High-yield synthesis of ultralong and ultrathin Zn2GeO4 nanoribbons toward improved photocatalytic reduction of CO2 into renewable hydrocarbon fuel. *Journal of the American Chemical Society*, **2010**, 132, 14385-7	16.4	553
286	Synthesis of very small TiO2 nanocrystals in a room-temperature ionic liquid and their self-assembly toward mesoporous spherical aggregates. *Journal of the American Chemical Society*, **2003**, 125, 14960-1	16.4	533
285	Room-Temperature Ionic Liquids as Template to Monolithic Mesoporous Silica with Wormlike Pores via a Sol−Gel Nanocasting Technique. *Nano Letters*, **2004**, 4, 477-481	11.5	458
284	Z-Scheme Photocatalytic Systems for Promoting Photocatalytic Performance: Recent Progress and Future Challenges. *Advanced Science*, **2016**, 3, 1500389	13.6	446
283	A Novel Ultraviolet Irradiation Photoreduction Technique for the Preparation of Single-Crystal Ag Nanorods and Ag Dendrites. *Advanced Materials*, **1999**, 11, 850-852	24	366
282	Robust Hollow Spheres Consisting of Alternating Titania Nanosheets and Graphene Nanosheets with High Photocatalytic Activity for CO2 Conversion into Renewable Fuels. *Advanced Functional Materials*, **2012**, 22, 1215-1221	15.6	339
281	High-yield synthesis of ultrathin and uniform Bi2WO6 square nanoplates benefitting from photocatalytic reduction of CO2 into renewable hydrocarbon fuel under visible light. *ACS Applied Materials & Interfaces*, **2011**, 3, 3594-601	9.5	324
280	An In Situ Simultaneous Reduction-Hydrolysis Technique for Fabrication of TiO2-Graphene 2D Sandwich-Like Hybrid Nanosheets: Graphene-Promoted Selectivity of Photocatalytic-Driven Hydrogenation and Coupling of CO2 into Methane and Ethane. *Advanced Functional Materials*, **2013**, 23, 1743-1749	15.6	318
279	Versatile Graphene-Promoting Photocatalytic Performance of Semiconductors: Basic Principles, Synthesis, Solar Energy Conversion, and Environmental Applications. *Advanced Functional Materials*, **2013**, 23, 4996-5008	15.6	309
278	Ultrathin, single-crystal WO(3) nanosheets by two-dimensional oriented attachment toward enhanced photocatalystic reduction of CO(2) into hydrocarbon fuels under visible light. *ACS Applied Materials & Interfaces*, **2012**, 4, 3372-7	9.5	290
277	A room-temperature reactive-template route to mesoporous ZnGa2O4 with improved photocatalytic activity in reduction of CO2. *Angewandte Chemie - International Edition*, **2010**, 49, 6400-4	16.4	286
276	In situ construction of hierarchical WO3/g-C3N4 composite hollow microspheres as a Z-scheme photocatalyst for the degradation of antibiotics. *Applied Catalysis B: Environmental*, **2018**, 220, 417-428	21.8	284
275	Microstructuring of graphene oxide nanosheets using direct laser writing. *Advanced Materials*, **2010**, 22, 67-71	24	278

274	Multilayer Hybrid Films Consisting of Alternating Graphene and Titania Nanosheets with Ultrafast Electron Transfer and Photoconversion Properties. *Advanced Functional Materials*, **2009**, 19, 3638-3643	15.6	276
273	Formation of uniform CuO nanorods by spontaneous aggregation: Selective synthesis of CuO, Cu2O, and Cu nanoparticles by a solid-liquid phase arc discharge process. *Journal of Physical Chemistry B*, **2005**, 109, 14011-6	3.4	248
272	Preparation and characterization of Pt supported on graphene with enhanced electrocatalytic activity in fuel cell. *Journal of Power Sources*, **2011**, 196, 1012-1018	8.9	240
271	Hexahedron Prism-Anchored Octahedronal CeO2: Crystal Facet-Based Homojunction Promoting Efficient Solar Fuel Synthesis. *Journal of the American Chemical Society*, **2015**, 137, 9547-50	16.4	237
270	A Novel Ultraviolet Irradiation Technique for Shape-Controlled Synthesis of Gold Nanoparticles at Room Temperature. *Chemistry of Materials*, **1999**, 11, 2310-2312	9.6	230
269	Investigating the Role of Tunable Nitrogen Vacancies in Graphitic Carbon Nitride Nanosheets for Efficient Visible-Light-Driven H2 Evolution and CO2 Reduction. *ACS Sustainable Chemistry and Engineering*, **2017**, 5, 7260-7268	8.3	224
268	Preparation of Highly Ordered Monolithic Super-Microporous Lamellar Silica with a Room-Temperature Ionic Liquid as Template via the Nanocasting Technique. *Advanced Materials*, **2003**, 15, 1452-1455	24	197
267	A Series of Highly Ordered, Super-Microporous, Lamellar Silicas Prepared by Nanocasting with Ionic Liquids. *Chemistry of Materials*, **2004**, 16, 544-550	9.6	196
266	Construction and Nanoscale Detection of Interfacial Charge Transfer of Elegant Z-Scheme WO3/Au/In2S3 Nanowire Arrays. *Nano Letters*, **2016**, 16, 5547-52	11.5	171
265	Formation of Silver Nanowires by a Novel Solid□Liquid Phase Arc Discharge Method. *Chemistry of Materials*, **1999**, 11, 545-546	9.6	163
264	Recent Advances in Ionic Liquids for Synthesis of Inorganic Nanomaterials. *Current Nanoscience*, **2005**, 1, 35-42	1.4	145
263	Zn2GeO4 crystal splitting toward sheaf-like, hyperbranched nanostructures and photocatalytic reduction of CO2 into CH4 under visible light after nitridation. *Journal of Materials Chemistry*, **2012**, 22, 2033-2038		139
262	High-yield synthesis of millimetre-long, semiconducting carbon nitride nanotubes with intense photoluminescence emission and reproducible photoconductivity. *Nanoscale*, **2012**, 4, 3687-92	7.7	138
261	Controllable synthesis of nanocrystalline CdS with different morphologies and particle sizes by a novel solvothermal process. *Journal of Materials Chemistry*, **1999**, 9, 1283-1287		138
260	Single-crystalline, ultrathin ZnGa(2)O(4) nanosheet scaffolds to promote photocatalytic activity in CO(2) reduction into methane. *ACS Applied Materials & Interfaces*, **2014**, 6, 2356-61	9.5	131
259	Au@TiO□yolk-shell hollow spheres for plasmon-induced photocatalytic reduction of CO□to solar fuel via a local electromagnetic field. *Nanoscale*, **2015**, 7, 14232-6	7.7	127
258	Urchin-like hierarchical CoZnAl-LDH/RGO/g-C3N4 hybrid as a Z-scheme photocatalyst for efficient and selective CO2 reduction. *Applied Catalysis B: Environmental*, **2019**, 255, 117771	21.8	126
257	Convincing Synthesis of Atomically Thin, Single-Crystalline InVO Sheets toward Promoting Highly Selective and Efficient Solar Conversion of CO into CO. *Journal of the American Chemical Society*, **2019**, 141, 4209-4213	16.4	124

256	All-solid-state Z-scheme system arrays of Fe2V4O13/RGO/CdS for visible light-driving photocatalytic CO2 reduction into renewable hydrocarbon fuel. *Chemical Communications*, **2015**, 51, 800-3	5.8	120
255	Lipid Nanotubes: A Unique Template To Create Diverse One-Dimensional Nanostructures *Chemistry of Materials*, **2008**, 20, 625-633	9.6	119
254	Preparation and rate capability of Li4Ti5O12 hollow-sphere anode material. *Journal of Power Sources*, **2007**, 166, 514-518	8.9	119
253	Polyhedral 30-Faceted BiVO Microcrystals Predominantly Enclosed by High-Index Planes Promoting Photocatalytic Water-Splitting Activity. *Advanced Materials*, **2018**, 30, 1703119	24	117
252	Synthesis of Novel Stable Nanometer-Sized Metal (M = Pd, Au, Pt) Colloids Protected by a Conjugated Polymer. *Langmuir*, **2002**, 18, 277-283	4	113
251	Enhanced Photocatalytic Performance through Magnetic Field Boosting Carrier Transport. *ACS Nano*, **2018**, 12, 3351-3359	16.7	111
250	A novel tailored bimodal porous silica with well-defined inverse opal microstructure and super-microporous lamellar nanostructure. *Chemical Communications*, **2003**, 2564-5	5.8	105
249	Multi-channeled hierarchical porous carbon incorporated Co3O4 nanopillar arrays as 3D binder-free electrode for high performance supercapacitors. *Nano Energy*, **2016**, 20, 94-107	17.1	104
248	Preparation of a novel core-shell nanostructured gold colloid-silk fibroin bioconjugate by the protein in situ redox technique at room temperature. *Chemical Communications*, **2001**, 2518-9	5.8	103
247	Photocatalytic reduction of CO2 over Ag/TiO2 nanocomposites prepared with a simple and rapid silver mirror method. *Nanoscale*, **2016**, 8, 11870-4	7.7	101
246	A Room-Temperature Reactive-Template Route to Mesoporous ZnGa2O4 with Improved Photocatalytic Activity in Reduction of CO2. *Angewandte Chemie*, **2010**, 122, 6544-6548	3.6	97
245	Construction of unique two-dimensional MoS-TiO hybrid nanojunctions: MoS as a promising cost-effective cocatalyst toward improved photocatalytic reduction of CO to methanol. *Nanoscale*, **2017**, 9, 9065-9070	7.7	95
244	One-step growth of CoNi2S4 nanoribbons on carbon fibers as platinum-free counter electrodes for fiber-shaped dye-sensitized solar cells with high performance: Polymorph-dependent conversion efficiency. *Nano Energy*, **2015**, 11, 697-703	17.1	94
243	Making patterns on graphene. *Advanced Materials*, **2010**, 22, 3615-20	24	91
242	Preparation and Characterization of a Novel Cocrystal Explosive. *Crystal Growth and Design*, **2011**, 11, 1759-1765	3.5	89
241	Foam ke Co9S8/Ni3S2 heterostructure nanowire arrays for efficient bifunctional overall water splitting. *Applied Catalysis B: Environmental*, **2019**, 253, 246-252	21.8	88
240	Hexagonal Nanoplate-Textured Micro-Octahedron Zn2SnO4: Combined Effects toward Enhanced Efficiencies of Dye-Sensitized Solar Cell and Photoreduction of CO2 into Hydrocarbon Fuels. *Crystal Growth and Design*, **2012**, 12, 1476-1481	3.5	86
239	Zinc Gallogermanate Solid Solution: A Novel Photocatalyst for Efficiently Converting CO2 into Solar Fuels. *Advanced Functional Materials*, **2013**, 23, 1839-1845	15.6	79

238	Multilayer Hybrid Films of Titania Semiconductor Nanosheet and Silver Metal Fabricated via Layer-by-Layer Self-Assembly and Subsequent UV Irradiation. *Chemistry of Materials*, **2006**, 18, 1235-1239	9.6	79
237	Enhanced photovoltaic performance of a dye-sensitized solar cell using graphene-TiO2 photoanode prepared by a novel in situ simultaneous reduction-hydrolysis technique. *Nanoscale*, **2013**, 5, 3481-5	7.7	78
236	Highly Flexible Self-Powered Organolead Trihalide Perovskite Photodetectors with Gold Nanowire Networks as Transparent Electrodes. *ACS Applied Materials & Interfaces*, **2016**, 8, 23868-75	9.5	77
235	Instant Preparation of Self-Assembled Metal-Complexed Lipid Nanotubes That Act as Templates to Produce Metal-Oxide Nanotubes. *Advanced Materials*, **2007**, 19, 242-246	24	65
234	Rational and scalable fabrication of high-quality WO3/CdS core/shell nanowire arrays for photoanodes toward enhanced charge separation and transport under visible light. *Nanoscale*, **2013**, 5, 11933-9	7.7	63
233	An Ion-Exchange Phase Transformation to ZnGa2O4 Nanocube Towards Efficient Solar Fuel Synthesis. *Advanced Functional Materials*, **2013**, 23, 758-763	15.6	63
232	Helical Arrays of CdS Nanoparticles Tracing on a Functionalized Chiral Template of Glycolipid Nanotubes. *Chemistry of Materials*, **2006**, 18, 403-406	9.6	62
231	Enriching Hot Electrons via NIR-Photon-Excited Plasmon in WS2@Cu Hybrids for Full-Spectrum Solar Hydrogen Evolution. *Advanced Functional Materials*, **2018**, 28, 1804055	15.6	62
230	Rational construction of a CdS/reduced graphene oxide/TiO2 core□shell nanostructure as an all-solid-state Z-scheme system for CO2 photoreduction into solar fuels. *RSC Advances*, **2015**, 5, 88409-88413	3.7	61
229	Unique Zn-doped SnO2 nano-echinus with excellent electron transport and light harvesting properties as photoanode materials for high performance dye-sensitized solar cell. *CrystEngComm*, **2012**, 14, 6462	3.3	59
228	In3+-doped BiVO4 photoanodes with passivated surface states for photoelectrochemical water oxidation. *Journal of Materials Chemistry A*, **2018**, 6, 10456-10465	13	57
227	Nitrated graphene oxide and its catalytic activity in thermal decomposition of ammonium perchlorate. *Materials Research Bulletin*, **2014**, 50, 73-78	5.1	57
226	Preparation, Optical Spectroscopy, and Electrochemical Studies of Novel □Conjugated Polymer-Protected Stable PbS Colloidal Nanoparticles in a Nonaqueous Solution. *Langmuir*, **2002**, 18, 5287-5292	4	57
225	Hollow spheres consisting of Ti0.91O2/CdS nanohybrids for CO2 photofixation. *Chemical Communications*, **2015**, 51, 13354-7	5.8	55
224	Fabrication of hierarchically assembled microspheres consisting of nanoporous ZnO nanosheets for high-efficiency dye-sensitized solar cells. *Journal of Materials Chemistry*, **2012**, 22, 14341		54
223	Facile Face-Down Annealing Triggered Remarkable Texture Development in CHNHPbI Films for High-Performance Perovskite Solar Cells. *ACS Applied Materials & Interfaces*, **2017**, 9, 6104-6113	9.5	52
222	Double-shelled plasmonic Ag-TiO2 hollow spheres toward visible light-active photocatalytic conversion of CO2 into solar fuel. *APL Materials*, **2015**, 3, 104416	5.7	50
221	Vertically building Zn2SnO4 nanowire arrays on stainless steel mesh toward fabrication of large-area, flexible dye-sensitized solar cells. *Nanoscale*, **2012**, 4, 3490-4	7.7	50

220	State-of-the-art advancements of crystal facet-exposed photocatalysts beyond TiO2: Design and dependent performance for solar energy conversion and environment applications. *Materials Today* , **2020**, 33, 75-86	21.8	50
219	Monodispersed Nb2O5 Microspheres: Facile Synthesis, Air/Water Interfacial Self-Assembly, Nb2O5-Based Composite Films, and Their Selective NO2 Sensing. *Advanced Materials Interfaces*, **2015**, 2, 1500167	4.6	49
218	Preparation of □conjugated polymer-protected gold nanoparticles in stable colloidal form. *Chemical Communications*, **2001**, 613-614	5.8	49
217	One-step growth of 3D CoNi2S4 nanorods and cross-linked NiCo2S4 nanosheet arrays on carbon paper as anodes for high-performance lithium ion batteries. *Chemical Communications*, **2016**, 52, 5258-61	5.8	46
216	Gram-Scale Synthesis of Graphene Quantum Dots from Single Carbon Atoms Growth via Energetic Material Deflagration. *Chemistry of Materials*, **2015**, 27, 4319-4327	9.6	46
215	Na□VO□kH□O nanoribbons: large-scale synthesis and visible-light photocatalytic activity of CO□ into solar fuels. *Nanoscale*, **2014**, 6, 1896-900	7.7	44
214	Broad spectral response photodetector based on individual tin-doped CdS nanowire. *AIP Advances*, **2014**, 4, 123005	1.5	44
213	Synthesis of a mesoporous single crystal Ga2O3 nanoplate with improved photoluminescence and high sensitivity in detecting CO. *Chemical Communications*, **2010**, 46, 6388-90	5.8	44
212	A convenient ultraviolet irradiation technique for in situ synthesis of CdS nanocrystallites at room temperature. *Journal of Materials Chemistry*, **2000**, 10, 607-608		44
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210	Improved Surface Charge Transfer in MoO3/BiVO4 Heterojunction Film for Photoelectrochemical Water Oxidation. *Electrochimica Acta*, **2017**, 257, 181-191	6.7	42
209	Surfactant-Assisted Preparation of Novel Layered Silver Bromide-Based Inorganic/Organic Nanosheets by Pulsed Laser Ablation in Aqueous Media. *Advanced Functional Materials*, **2007**, 17, 3554-3561	15.6	41
208	Beyond CN □conjugated metal-free polymeric semiconductors for photocatalytic chemical transformations. *Chemical Society Reviews*, **2021**, 50, 2147-2172	58.5	41
207	State-of-the-art progress in the use of ternary metal oxides as photoelectrode materials for water splitting and organic synthesis. *Nano Today*, **2019**, 28, 100763	17.9	40
206	Porous, single crystalline titanium nitride nanoplates grown on carbon fibers: excellent counter electrodes for low-cost, high performance, fiber-shaped dye-sensitized solar cells. *Chemical Communications*, **2014**, 50, 14321-4	5.8	39
205	Prussian blue analogue-derived Ni and Co bimetallic oxide nanoplate arrays block-built from porous and hollow nanocubes for the efficient oxygen evolution reaction. *Nanoscale*, **2019**, 11, 11765-11773	7.7	38
204	Controllable growth of dendritic ZnO nanowire arrays on a stainless steel mesh towards the fabrication of large area, flexible dye-sensitized solar cells. *Nanoscale*, **2012**, 4, 5454-60	7.7	38
203	Direct Growth of Fe2V4O13 Nanoribbons on a Stainless-Steel Mesh for Visible-Light Photoreduction of CO2 into Renewable Hydrocarbon Fuel and Degradation of Gaseous Isopropyl Alcohol. *ChemPlusChem*, **2013**, 78, 274-278	2.8	38

202	Synthesis of one-molecule-thick single-crystalline nanosheets of energetic material for high-sensitive force sensor. *Scientific Reports*, **2012**, 2, 698	4.9	37
201	Antimicrobial Nanotubes Consisting of Ag-Embedded Peptidic Lipid-Bilayer Membranes as Delivery Vehicles. *Advanced Materials*, **2009**, 21, 1742-1745	24	37
200	Necklace-like chains of hybrid nanospheres consisting of Pd nanocystals and peptidic lipids. *Journal of the American Chemical Society*, **2009**, 131, 2456-7	16.4	37
199	Simple method for the fluorinated functionalization of graphene oxide. *RSC Advances*, **2013**, 3, 3881	3.7	36
198	Fluorescent Nanotubes Consisting of CdS-Embedded Bilayer Membranes of a Peptide Lipid. *Advanced Materials*, **2007**, 19, 1055-1058	24	36
197	Fiber dye-sensitized solar cells consisting of TiO2 nanowires arrays on Ti thread as photoanodes through a low-cost, scalable route. *Journal of Materials Chemistry A*, **2013**, 1, 11790	13	34
196	Porous ZnO nanosheet arrays constructed on weaved metal wire for flexible dye-sensitized solar cells. *Nanoscale*, **2013**, 5, 5102-8	7.7	34
195	Synthesis of highly crystalline In2Ge2O7(En) hybrid sub-nanowires with ultraviolet photoluminescence emissions and their selective photocatalytic reduction of CO2 into renewable fuel. *RSC Advances*, **2012**, 2, 3247	3.7	33
194	Elegant Construction of ZnInS/BiVO Hierarchical Heterostructures as Direct Z-Scheme Photocatalysts for Efficient CO Photoreduction. *ACS Applied Materials & Interfaces*, **2021**, 13, 15092-15100	9.5	33
193	Artificial Trees for Artificial Photosynthesis: Construction of Dendrite-Structured □Fe2O3/g-C3N4 Z-Scheme System for Efficient CO2 Reduction into Solar Fuels. *ACS Applied Energy Materials*, **2020**, 3, 6561-6572	6.1	32
192	Lipid Nanotubes: Formation, Templating Nanostructures and Drug Nanocarriers. *Critical Reviews in Solid State and Materials Sciences*, **2008**, 33, 183-196	10.1	32
191	Electrodeposited amorphous cobalt phosphosulfide on Ni foams for highly efficient overall water splitting. *Journal of Power Sources*, **2019**, 431, 182-188	8.9	31
190	Lead Selenide Colloidal Quantum Dot Solar Cells Achieving High Open-Circuit Voltage with One-Step Deposition Strategy. *Journal of Physical Chemistry Letters*, **2018**, 9, 3598-3603	6.4	31
189	Ultralong metahewettite CaV6O16□3H2O nanoribbons as novel host materials for lithium storage: Towards high-rate and excellent long-term cyclability. *Nano Energy*, **2016**, 22, 38-47	17.1	31
188	Quasi-Topotactic Transformation of FeOOH Nanorods to Robust FeO Porous Nanopillars Triggered with a Facile Rapid Dehydration Strategy for Efficient Photoelectrochemical Water Splitting. *ACS Applied Materials & Interfaces*, **2018**, 10, 10141-10146	9.5	30
187	Generalized synthesis of a family of multishelled metal oxide hollow microspheres. *Journal of Materials Chemistry A*, **2013**, 1, 3575	13	30
186	Facile room-temperature surface modification of unprecedented FeB co-catalysts on Fe2O3 nanorod photoanodes for high photoelectrochemical performance. *Journal of Catalysis*, **2017**, 352, 113-119	7.3	29
185	Anchoring of black phosphorus quantum dots onto WO nanowires to boost photocatalytic CO conversion into solar fuels. *Chemical Communications*, **2020**, 56, 7777-7780	5.8	29

184	Enhanced photoelectrochemical water oxidation on WO3 nanoflake films by coupling with amorphous TiO2. *Electrochimica Acta*, **2018**, 283, 871-881	6.7	29
183	Al-ZnO/CdS Photoanode Modified with a Triple Functions Conformal TiO2 Film for Enhanced Photoelectrochemical Efficiency and Stability. *Applied Catalysis B: Environmental*, **2019**, 255, 117738	21.8	28
182	Synthesis of bionic-macro/microporous MgO-modified TiO2 for enhanced CO2 photoreduction into hydrocarbon fuels. *Chinese Journal of Catalysis*, **2016**, 37, 863-868	11.3	28
181	Bi MoO Nanostrip Networks for Enhanced Visible-Light Photocatalytic Reduction of CO to CH. *ChemPhysChem*, **2017**, 18, 3240-3244	3.2	28
180	Vacancy-defect modulated pathway of photoreduction of CO on single atomically thin AgInPS sheets into olefiant gas. *Nature Communications*, **2021**, 12, 4747	17.4	28
179	Decorating CoSe2 hollow nanospheres on reduced graphene oxide as advanced sulfur host material for performance enhanced lithium-sulfur batteries. *Nano Research*, **2019**, 12, 2743-2748	10	27
178	Nanowire-based hierarchical tin oxide/zinc stannate hollow microspheres: Enhanced solar energy utilization efficiency for dye-sensitized solar cells and photocatalytic degradation of dyes. *Journal of Power Sources*, **2015**, 274, 575-581	8.9	26
177	In situ direct growth of single crystalline metal (Co, Ni) selenium nanosheets on metal fibers as counter electrodes toward low-cost, high-performance fiber-shaped dye-sensitized solar cells. *Nanoscale*, **2016**, 8, 2304-8	7.7	26
176	Synthesis of Bi6Mo2O15 sub-microwires via a molten salt method and enhancing the photocatalytic reduction of CO2 into solar fuel through tuning the surface oxide vacancies by simple post-heating treatment. *CrystEngComm*, **2013**, 15, 9855	3.3	26
175	Preparation and studies of Ag□iO2 hybrid nanoparticles of core-shell structure. *Materials Science and Engineering B: Solid-State Materials for Advanced Technology*, **1999**, 67, 95-98	3.1	26
174	In situ no-slot joint integration of half-metallic C(CN)3 cocatalyst into g-C3N4 scaffold: An absolute metal-free in-plane heterosystem for efficient and selective photoconversion of CO2 into CO. *Applied Catalysis B: Environmental*, **2020**, 264, 118470	21.8	26
173	Electrophoretic deposition of graphene-TiO2 hierarchical spheres onto Ti thread for flexible fiber-shaped dye-sensitized solar cells. *Materials and Design*, **2016**, 105, 352-358	8.1	26
172	Construction of Visible-Light-Responsive SrTiO3 with Enhanced CO2 Adsorption Ability: Highly Efficient Photocatalysts for Artifical Photosynthesis. *Catalysis Letters*, **2015**, 145, 640-646	2.8	25
171	One step fabrication of Mn3O4/carbonated bacterial cellulose with excellent catalytic performance upon ammonium perchlorate decomposition. *Materials Research Bulletin*, **2014**, 60, 802-807	5.1	25
170	Metallic molybdenum sulfide nanodots as platinum-alternative co-catalysts for photocatalytic hydrogen evolution. *Journal of Catalysis*, **2019**, 374, 237-245	7.3	24
169	Multi-layered MoS2 phototransistors as high performance photovoltaic cells and self-powered photodetectors. *RSC Advances*, **2015**, 5, 45239-45248	3.7	24
168	Ultrathin LiFePO4 nanosheets self-assembled with reduced graphene oxide applied in high rate lithium ion batteries for energy storage. *Applied Energy*, **2017**, 195, 1079-1085	10.7	24
167	Recent Progress in Biomolecule-Templated Nanomaterials. *Current Nanoscience*, **2006**, 2, 123-134	1.4	24

166	Series of ZnSn(OH) Polyhedra: Enhanced CO Dissociation Activation and Crystal Facet-Based Homojunction Boosting Solar Fuel Synthesis. *Inorganic Chemistry*, **2017**, 56, 5704-5709	5.1	23
165	Unconventional gas-based bottom-up, meter-area-scale fabrication of hydrogen-bond free g-CN nanorod arrays and coupling layers with TiO toward high-efficiency photoelectrochemical performance. *Nanoscale*, **2018**, 10, 3342-3349	7.7	23
164	Synthesis of single-crystalline, porous TaON microspheres toward visible-light photocatalytic conversion of CO2 into liquid hydrocarbon fuels. *RSC Advances*, **2016**, 6, 90792-90796	3.7	23
163	Aligned Nanocables: Controlled Sheathing of CuO Nanowires by a Self-Assembled Tubular Glycolipid. *Advanced Materials*, **2007**, 19, 4194-4197	24	23
162	Star-shaped multi-arm polymeric ionic liquid based on tetraalkylammonium cation as high performance gel electrolyte for lithium metal batteries. *Electrochimica Acta*, **2019**, 301, 284-293	6.7	22
161	Exquisite design of porous carbon microtubule-scaffolding hierarchical InO-ZnInS heterostructures toward efficient photocatalytic conversion of CO into CO. *Nanoscale*, **2020**, 12, 14676-14681	7.7	22
160	Pyridinic-nitrogen highly doped nanotubular carbon arrays grown on a carbon cloth for high-performance and flexible supercapacitors. *Nanoscale*, **2018**, 10, 3981-3989	7.7	22
159	Versatile nanobead-scaffolded N-SnO2 mesoporous microspheres: one-step synthesis and superb performance in dye-sensitized solar cell, gas sensor, and photocatalytic degradation of dye. *Journal of Materials Chemistry A*, **2013**, 1, 524-531	13	22
158	Egg-white-mediated crystallization of calcium carbonate. *Journal of Crystal Growth*, **2012**, 361, 217-224	1.6	22
157	Passivation Strategy of Reducing Both Electron and Hole Trap States for Achieving High-Efficiency PbS Quantum-Dot Solar Cells with Power Conversion Efficiency over 12%. *ACS Energy Letters*, **2020**, 5, 3224-3236	20.1	22
156	Boosting the hydrogen evolution performance of a ternary MoxCo1−xP nanowire array by tuning the Mo/Co ratio. *Journal of Materials Chemistry A*, **2019**, 7, 14842-14848	13	21
155	Thermodynamic and Kinetic Influence of Oxygen Vacancies on the Solar Water Oxidation Reaction of αFeO Photoanodes. *ACS Applied Materials & Interfaces*, **2020**, 12, 11625-11634	9.5	21
154	Zn Cd S tunable band structure-directing photocatalytic activity and selectivity of visible-light reduction of CO into liquid solar fuels. *Nanotechnology*, **2018**, 29, 064003	3.4	21
153	A novel in situ simultaneous polymerization–hydrolysis technique for fabrication of polyacrylamide–semiconductor MS(M = Cd, Zn, Pb) nanocomposites. *Chemical Communications*, **1999**, 1229-1230	5.8	21
152	Stainless steel mesh-supported three-dimensional hierarchical SnO2/Zn2SnO4 composite for the applications in solar cell, gas sensor, and photocatalysis. *Applied Surface Science*, **2020**, 502, 144113	6.7	21
151	Self-assembly optimization of cadmium/molybdenum sulfide hybrids by cation coordination competition toward extraordinarily efficient photocatalytic hydrogen evolution. *Journal of Materials Chemistry A*, **2018**, 6, 18396-18402	13	21
150	Unique homo-heterojunction synergistic system consisting of stacked BiOCl nanoplate/Zn-Cr layered double hydroxide nanosheets promoting photocatalytic conversion of CO into solar fuels. *Chemical Communications*, **2018**, 54, 5126-5129	5.8	20
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