Zhenyi Zhang

List of Publications by Year
in descending order

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75 papers	9,893 citations	44069 48 h-index	76900 74 g-index
75 all docs	75 docs citations	75 times ranked	11993 citing authors

#	Article	IF	Citations
1	Ultrathin hexagonal SnS2 nanosheets coupled with g-C3N4 nanosheets as 2D/2D heterojunction photocatalysts toward high photocatalytic activity. Applied Catalysis B: Environmental, 2015, 163, 298-305.	20.2	616
2	Electrospun Nanofibers of p-Type NiO/n-Type ZnO Heterojunctions with Enhanced Photocatalytic Activity. ACS Applied Materials & Interfaces, 2010, 2, 2915-2923.	8.0	574
3	In situ assembly of well-dispersed Ag nanoparticles (AgNPs) on electrospun carbon nanofibers (CNFs) for catalytic reduction of 4-nitrophenol. Nanoscale, 2011, 3, 3357.	5.6	566
4	High Photocatalytic Activity of ZnOâ^'Carbon Nanofiber Heteroarchitectures. ACS Applied Materials & Interfaces, 2011, 3, 590-596.	8.0	415
5	Electrospun Nanofibers of ZnOâ^'SnO₂ Heterojunction with High Photocatalytic Activity. Journal of Physical Chemistry C, 2010, 114, 7920-7925.	3.1	345
6	A Nonmetal Plasmonic Zâ€Scheme Photocatalyst with UVâ€to NIRâ€Driven Photocatalytic Protons Reduction. Advanced Materials, 2017, 29, 1606688.	21.0	345
7	Hierarchical assembly of ultrathin hexagonal SnS₂nanosheets onto electrospun TiO₂nanofibers: enhanced photocatalytic activity based on photoinduced interfacial charge transfer. Nanoscale, 2013, 5, 606-618.	5.6	344
8	Enhancement of the Visible-Light Photocatalytic Activity of In₂O₃â€“TiO₂ Nanofiber Heteroarchitectures. ACS Applied Materials & Interfaces, 2012, 4, 424-430.	8.0	320
9	Highly dispersed Fe3O4 nanosheets on one-dimensional carbon nanofibers: Synthesis, formation mechanism, and electrochemical performance as supercapacitor electrode materials. Nanoscale, 2011, 3, 5034.	5.6	299
10	Au/Pt Nanoparticle-Decorated TiO₂ Nanofibers with Plasmon-Enhanced Photocatalytic Activities for Solar-to-Fuel Conversion. Journal of Physical Chemistry C, 2013, 117, 25939-25947.	3.1	277
11	Hierarchical Sheet-on-Sheet ZnIn2S4/g-C3N4 Heterostructure with Highly Efficient Photocatalytic H2 production Based on Photoinduced Interfacial Charge Transfer. Scientific Reports, 2016, 6, 19221.	3.3	277
12	In situ assembly of well-dispersed gold nanoparticles on electrospun silica nanotubes for catalytic reduction of 4-nitrophenol. Chemical Communications, 2011, 47, 3906.	4.1	276
13	Tubular nanocomposite catalysts based on size-controlled and highly dispersed silver nanoparticles assembled on electrospun silicananotubes for catalytic reduction of 4-nitrophenol. Journal of Materials Chemistry, 2012, 22, 1387-1395.	6.7	251
14	Multichannelâ€Improved Chargeâ€Carrier Dynamics in Wellâ€Designed Heteroâ€nanostructural Plasmonic Photocatalysts toward Highly Efficient Solarâ€toâ€Fuels Conversion. Advanced Materials, 2015, 27, 5906-5914.	21.0	239
15	One-dimensional Bi2MoO6/TiO2 hierarchical heterostructures with enhanced photocatalytic activity. CrystEngComm, 2012, 14, 605-612.	2.6	228
16	Facile in situ synthesis of plasmonic nanoparticles-decorated g-C₃N₄/TiO₂heterojunction nanofibers and comparison study of their photosynergistic effects for efficient photocatalytic H₂evolution. Nanoscale, 2016, 8, 11034-11043.	5.6	204
17	Hierarchical heterostructures of Bi2MoO6 on carbon nanofibers: controllable solvothermal fabrication and enhanced visible photocatalytic properties. Journal of Materials Chemistry, 2012, 22, 577-584.	6.7	196
18	Hierarchical Nanostructures of Copper(II) Phthalocyanine on Electrospun TiO₂ Nanofibers: Controllable Solvothermal-Fabrication and Enhanced Visible Photocatalytic Properties. ACS Applied Materials & Interfaces, 2011, 3, 369-377.	8.0	194

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19	ZnO Hollow Nanofibers: Fabrication from Facile Single Capillary Electrospinning and Applications in Gas Sensors. Journal of Physical Chemistry C, 2009, 113, 19397-19403.	3.1	189
20	TiO2@carbon core/shell nanofibers: Controllable preparation and enhanced visible photocatalytic properties. Nanoscale, 2011, 3, 2943.	5.6	187
21	Au@TiO₂â€“CdS Ternary Nanostructures for Efficient Visible-Light-Driven Hydrogen Generation. ACS Applied Materials & Interfaces, 2013, 5, 8088-8092.	8.0	177
22	IR-Driven strong plasmonic-coupling on Ag nanorices/W18O49 nanowires heterostructures for photo/thermal synergistic enhancement of H2 evolution from ammonia borane. Applied Catalysis B: Environmental, 2019, 252, 164-173.	20.2	176
23	Direct evidence of plasmonic enhancement on catalytic reduction of 4-nitrophenol over silver nanoparticles supported on flexible fibrous networks. Applied Catalysis B: Environmental, 2016, 188, 245-252.	20.2	158
24	Core/shell nanofibers of TiO2@carbon embedded by Ag nanoparticles with enhanced visible photocatalytic activity. Journal of Materials Chemistry, 2011, 21, 17746.	6.7	143
25	Direct evidence of plasmon enhancement on photocatalytic hydrogen generation over Au/Pt-decorated TiO₂nanofibers. Nanoscale, 2014, 6, 5217-5222.	5.6	143
26	Enhanced visible-light-driven photocatalytic hydrogen generation over g-C3N4 through loading the noble metal-free NiS2 cocatalyst. RSC Advances, 2014, 4, 6127.	3.6	136
27	Electrospun nanofibers of V-doped TiO2 with high photocatalytic activity. Journal of Colloid and Interface Science, 2010, 351, 57-62.	9.4	121
28	Polyacrylonitrile and Carbon Nanofibers with Controllable Nanoporous Structures by Electrospinning. Macromolecular Materials and Engineering, 2009, 294, 673-678.	3.6	119
29	IRâ€Driven Ultrafast Transfer of Plasmonic Hot Electrons in Nonmetallic Branched Heterostructures for Enhanced H₂ Generation. Advanced Materials, 2018, 30, 1705221.	21.0	119
30	Bi4Ti3O12 nanosheets/TiO2 submicron fibers heterostructures: in situ fabrication and high visible light photocatalytic activity. Journal of Materials Chemistry, 2011, 21, 6922.	6.7	113
31	Intercalated graphitic carbon nitride: a fascinating two-dimensional nanomaterial for an ultra-sensitive humidity nanosensor. Nanoscale, 2014, 6, 9250.	5.6	108
32	Plasmonic Active â€œHot Spotsâ€â€Confined Photocatalytic CO₂ Reduction with High Selectivity for CH₄ Production. Advanced Materials, 2022, 34, e2109330.	21.0	108
33	Selective photocatalytic decomposition of formic acid over AuPd nanoparticle-decorated TiO 2 nanofibers toward high-yield hydrogen production. Applied Catalysis B: Environmental, 2015, 162, 204-209.	20.2	107
34	Efficient CO₂ Capture and Photoreduction by Amineâ€Functionalized TiO₂. Chemistry - A European Journal, 2014, 20, 10220-10222.	3.3	95
35	Wide-range and highly-sensitive optical thermometers based on the temperature-dependent energy transfer from Er to Nd in Er/Yb/Nd codoped NaYF4 upconversion nanocrystals. Chemical Engineering Journal, 2020, 385, 123906.	12.7	91
36	An electron-donating strategy to guide the construction of MOF photocatalysts toward co-catalyst-free highly efficient photocatalytic H₂ evolution. Journal of Materials Chemistry A, 2019, 7, 24180-24185.	10.3	90

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37	Tin oxide (SnO2) nanoparticles/electrospun carbon nanofibers (CNFs) heterostructures: Controlled fabrication and high capacitive behavior. Journal of Colloid and Interface Science, 2011, 356, 706-712.	9.4	88
38	Bi2MoO6 ultrathin nanosheets on ZnTiO3 nanofibers: A 3D open hierarchical heterostructures synergistic system with enhanced visible-light-driven photocatalytic activity. Journal of Hazardous Materials, 2012, 217-218, 422-428.	12.4	86
39	Highly Efficient Decomposition of Organic Dye by Aqueous-Solid Phase Transfer and In Situ Photocatalysis Using Hierarchical Copper Phthalocyanine Hollow Spheres. ACS Applied Materials & Interfaces, 2011, 3, 2573-2578.	8.0	78
40	In₂O₃nanocubes/carbon nanofibers heterostructures with high visible light photocatalytic activity. Journal of Materials Chemistry, 2012, 22, 1786-1793.	6.7	72
41	Nearâ€Infraredâ€Plasmonic Energy Upconversion in a Nonmetallic Heterostructure for Efficient H₂ Evolution from Ammonia Borane. Advanced Science, 2018, 5, 1800748.	11.2	71
42	Iron phthalocyanine/TiO2 nanofiber heterostructures with enhanced visible photocatalytic activity assisted with H2O2. Journal of Hazardous Materials, 2012, 219-220, 156-163.	12.4	67
43	In situ Generation of Well-Dispersed ZnO Quantum Dots on Electrospun Silica Nanotubes with High Photocatalytic Activity. ACS Applied Materials & Interfaces, 2012, 4, 785-790.	8.0	63
44	BiOBr nanosheets-decorated TiO2 nanofibers as hierarchical pâ€“n heterojunctions photocatalysts for pollutant degradation. Journal of Materials Science, 2019, 54, 8426-8435.	3.7	61
45	Self-assembly of highly-dispersed phosphotungstic acid clusters onto graphitic carbon nitride nanosheets as fascinating molecular-scale Z-scheme heterojunctions for photocatalytic solar-to-fuels conversion. Applied Catalysis B: Environmental, 2021, 281, 119473.	20.2	59
46	Dandelion-like Fe3O4@CuTNPc hierarchical nanostructures as a magnetically separable visible-light photocatalyst. Journal of Materials Chemistry, 2011, 21, 12083.	6.7	54
47	Photo-assisted self-optimizing of charge-carriers transport channel in the recrystallized multi-heterojunction nanofibers for highly efficient photocatalytic H2 generation. Applied Catalysis B: Environmental, 2017, 203, 599-606.	20.2	53
48	Study on the modified montmorillonite for adsorbing formaldehyde. Applied Surface Science, 2015, 356, 150-156.	6.1	52
49	UVâ€Visâ€NIRâ€Driven Plasmonic Photocatalysts with Dualâ€Resonance Modes for Synergistically Enhancing H₂ Generation. Solar Rrl, 2018, 2, 1800039.	5.8	47
50	RGO-functionalized polymer nanofibrous membrane with exceptional surface activity and ultra-low airflow resistance for PM_{2.5} filtration. Environmental Science: Nano, 2018, 5, 1813-1820.	4.3	47
51	Multidimensionâ€Controllable Synthesis of Ant Nestâ€Structural Electrode Materials with Unique 3D Hierarchical Porous Features toward Electrochemical Applications. Advanced Functional Materials, 2019, 29, 1808994.	14.9	46
52	Enhanced ultraviolet emission from highly dispersed ZnO quantum dots embedded in poly(vinyl) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 50 1	9.4	44
53	Up-Conversion Luminescence of NaYF₄:Yb³⁺/Er³⁺ Nanoparticles Embedded into PVP Nanotubes with Controllable Diameters. Journal of Physical Chemistry C, 2012, 116, 5787-5791.	3.1	43
54	Controllable fabrication of cadmium phthalocyanine nanostructures immobilized on electrospun polyacrylonitrile nanofibers with high photocatalytic properties under visible light. Catalysis Communications, 2011, 12, 880-885.	3.3	42

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55	Rational tailoring of ZnSnO₃/TiO₂heterojunctions with bioinspired surface wettability for high-performance humidity nanosensors. Nanoscale, 2015, 7, 4149-4155.	5.6	40
56	Energy transfer from Er to Nd ions by the thermal effect and promotion of the photocatalysis of the NaYF₄:Yb,Er,Nd/W₁₈O₄₉ heterostructure. Nanoscale, 2019, 11, 7433-7439.	5.6	38
57	Multilevel polarization-fields enhanced capture and photocatalytic conversion of particulate matter over flexible schottky-junction nanofiber membranes. Journal of Hazardous Materials, 2020, 395, 122639.	12.4	38
58	Controllable assembly of SnO₂ nanocubes onto TiO₂ electrospun nanofibers toward humidity sensing applications. Journal of Materials Chemistry C, 2015, 3, 6701-6708.	5.5	37
59	Electrospun Semiconductorâ€Based Nanoâ€Heterostructures for Photocatalytic Energy Conversion and Environmental Remediation: Opportunities and Challenges. Energy and Environmental Materials, 2023, 6, .	12.8	37
60	AgBr/BiOBr Nano-Heterostructure-Decorated Polyacrylonitrile Nanofibers: A Recyclable High-Performance Photocatalyst for Dye Degradation under Visible-Light Irradiation. Polymers, 2019, 11, 1718.	4.5	36
61	Solvothermal synthesis and electrochemical properties of 3D flower-like iron phthalocyanine hierarchical nanostructure. Nanoscale, 2011, 3, 5126.	5.6	30
62	A self-cleaning coating material of TiO 2 porous microspheres/cement composite with high-efficient photocatalytic depollution performance. Materials Letters, 2017, 200, 1-5.	2.6	30
63	Controllable synthesis of Zn2TiO4@carbon core/shell nanofibers with high photocatalytic performance. Journal of Hazardous Materials, 2012, 229-230, 265-272.	12.4	26
64	In Situ Generation of Copper Species Nanocrystals in TiO₂ Electrospun Nanofibers: A Multi-hetero-junction Photocatalyst for Highly Efficient Water Reduction. ACS Sustainable Chemistry and Engineering, 2018, 6, 1934-1940.	6.7	25
65	Engineering 2D multi-hetero-interface in the well-designed nanosheet composite photocatalyst with broad electron-transfer channels for highly-efficient solar-to-fuels conversion. Applied Catalysis B: Environmental, 2021, 286, 119944.	20.2	22
66	Electrospun Pt/TiO 2 hybrid nanofibers for visible-light-driven H 2 evolution. International Journal of Hydrogen Energy, 2014, 39, 19434-19443.	7.1	19
67	Facile Synthesis of Lacunary Keggin-Type Phosphotungstates-Decorated g-C3N4 Nanosheets for Enhancing Photocatalytic H2 Generation. Polymers, 2020, 12, 1961.	4.5	18
68	Cu-ZSM-5 zeolite supported on SiC monolith with enhanced catalytic activity for NH3-SCR. Catalysis Communications, 2018, 108, 23-26.	3.3	17
69	Plasmon-enhanced photocatalytic cumulative effect on 2D semiconductor heterojunctions towards highly-efficient visible-light-driven solar-to-fuels conversion. Chemical Engineering Journal, 2022, 437, 135308.	12.7	16
70	Electrospinning preparation and photoluminescence properties of poly (methyl methacrylate)/Eu3+ ions composite nanofibers and nanoribbons. Materials Research Bulletin, 2012, 47, 321-327.	5.2	15
71	Strong up-conversion luminescence of rare-earth doped oxide films enhanced by gap modes on ZnO nanowires. Nanoscale, 2018, 10, 726-732.	5.6	11
72	Uniform decoration of UiO-66-NH₂ nanooctahedra on TiO₂ electrospun nanofibers for enhancing photocatalytic H₂ production based on multi-step interfacial charge transfer. Dalton Transactions, 2021, 50, 6152-6160.	3.3	10

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73	First-principles calculation of the structure and electronic properties of Fe-substituted Bi₂Ti₂O₇. Semiconductor Science and Technology, 2017, 32, 125007.	2.0	7
74	Switchable optical nonlinear properties of W18O49 nanowires by Ag nanoparticles supported. Science China: Physics, Mechanics and Astronomy, 2017, 60, 1.	5.1	2
75	Smart Design, Controllable Synthesis, and Functional Applications of Low-Dimensional Hetero-Structured Materials. Journal of Nanomaterials, 2021, 2021, 1-2.	2.7	0