

# Zhu-Rui Shen

## List of Publications by Year in descending order

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71  
papers

3,914  
citations

117625

34  
h-index

123424

61  
g-index

72  
all docs

72  
docs citations

72  
times ranked

4817  
citing authors

#	ARTICLE	IF	CITATIONS
1	The role of Cs dopants for improved activation of molecular oxygen and degradation of tetracycline over carbon nitride. Chinese Chemical Letters, 2022, 33, 4756-4760.	9.0	30
2	Photoassisted highly efficient activation of persulfate over a single-atom Cu catalyst for tetracycline degradation: Process and mechanism. Journal of Hazardous Materials, 2022, 429, 128398.	12.4	58
3	A photo-assisted electrochemical-based demonstrator for green ammonia synthesis. Journal of Energy Chemistry, 2022, 68, 826-834.	12.9	7
4	Modulating the oxidative active species by regulating the valence of palladium cocatalyst in photocatalytic degradation of ciprofloxacin. Applied Catalysis B: Environmental, 2022, 306, 121092.	20.2	53
5	Elemental phosphorus for recent sustainable processes: rules and strategies in preparation and applications. Green Chemistry, 2022, 24, 3475-3501.	9.0	14
6	Enhanced localized dipole of Pt-Au single-site catalyst for solar water splitting. Proceedings of the National Academy of Sciences of the United States of America, 2022, 119, .	7.1	17
7	In-situ-formed red phosphorus nanosheet on bulk red phosphorus for boosting charge separation in photocatalysis: The role of multiple interfacial effects. Applied Catalysis B: Environmental, 2022, 312, 121373.	20.2	9
8	Identification of the Stable Pt Single Sites in the Environment of Ions: From Mechanism to Design Principle. Advanced Materials, 2022, 34, e2108504.	21.0	6
9	Novel Cerium-Based Sulfide Nano-Photocatalyst for Highly Efficient CO <sub>2</sub> Reduction. Small, 2022, 18, e2201332.	10.0	5
10	Conjugated $\pi$ -Electrons of MOFs Drive Charge Separation at Heterostructures Interface for Enhanced Photoelectrochemical Water Oxidation. Small, 2021, 17, e2100367.	10.0	33
11	Ultra-Thin Red Phosphor Nanosheets as an Efficient Photocatalyst for Hydrogen Evolution Under Visible Light. Topics in Catalysis, 2021, 64, 559-566.	2.8	3
12	Amorphous carbon-linked TiO <sub>2</sub> /carbon nanotube film composite with enhanced photocatalytic performance: The effect of interface contact and hydrophilicity. Chinese Chemical Letters, 2021, 32, 2151-2154.	9.0	33
13	Strategic Defect Engineering of Metal-Organic Frameworks for Optimizing the Fabrication of Single-Atom Catalysts. Advanced Functional Materials, 2021, 31, 2103597.	14.9	68
14	Boosting the activation of molecular oxygen and the degradation of tetracycline over high loading Ag single atomic catalyst. Water Research, 2021, 201, 117314.	11.3	99
15	Enhanced sensing performance toward alcohols using copper oxide based on exposed crystal facet driven catalytic oxidation. Journal of Materials Science: Materials in Electronics, 2021, 32, 26676-26687.	2.2	2
16	A WO <sub>3</sub> -CuWO <sub>4</sub> nanostructured heterojunction for enhanced n-butanol sensing performance. Chinese Chemical Letters, 2020, 31, 1114-1118.	9.0	21
17	Band-Gap and Charge Transfer Engineering in Red Phosphorus-Based Composites for Enhanced Visible-Light-Driven H <sub>2</sub> Evolution. Chemistry - A European Journal, 2020, 26, 2285-2292.	3.3	19
18	Mechanistic insights for efficient inactivation of antibiotic resistance genes: a synergistic interfacial adsorption and photocatalytic-oxidation process. Science Bulletin, 2020, 65, 2107-2119.	9.0	37

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19	Enhanced activation of molecular oxygen and degradation of tetracycline over Cu-S4 atomic clusters. Applied Catalysis B: Environmental, 2020, 272, 118966.	20.2	97
20	Efficient Electrochemical Nitrogen Fixation over Isolated Pt Sites. Small, 2020, 16, e2000015.	10.0	63
21	Interfacial charge dominating major active species and degradation pathways: An example of carbon based photocatalyst. Journal of Colloid and Interface Science, 2019, 554, 743-751.	9.4	22
22	Unraveling the Interfacial Charge Migration Pathway at the Atomic Level in a Highly Efficient Zn-Scheme Photocatalyst. Angewandte Chemie, 2019, 131, 11451-11456.	2.0	22
23	Unraveling the Interfacial Charge Migration Pathway at the Atomic Level in a Highly Efficient Zn-Scheme Photocatalyst. Angewandte Chemie - International Edition, 2019, 58, 11329-11334.	13.8	152
24	MOF-derived Fe2O3: Phase control and effects of phase composition on gas sensing performance. Sensors and Actuators B: Chemical, 2019, 292, 171-179.	7.8	83
25	The Role of Alkali Metal in MnO <sub>2</sub> Catalyzed Ammonia-Selective Catalysis. Angewandte Chemie, 2019, 131, 6417-6422.	2.0	4
26	Eosin Y sensitized BiPO <sub>4</sub> nanorods for bi-functionally enhanced visible-light-driven photocatalysis. Photochemical and Photobiological Sciences, 2019, 18, 1408-1418.	2.9	10
27	The Role of Alkali Metal in MnO <sub>2</sub> Catalyzed Ammonia-Selective Catalysis. Angewandte Chemie - International Edition, 2019, 58, 6351-6356.	13.8	110
28	Rational shape control of porous Co <sub>3</sub> O <sub>4</sub> assemblies derived from MOF and their structural effects on n-butanol sensing. Journal of Hazardous Materials, 2019, 371, 352-361.	12.4	96
29	2020 Roadmap on gas-involved photo- and electro- catalysis. Chinese Chemical Letters, 2019, 30, 2089-2109.	9.0	71
30	Atomic Insights for Optimum and Excess Doping in Photocatalysis: A Case Study of Few-Layer Cu <sub>2</sub> ZnS <sub>4</sub> . Advanced Functional Materials, 2019, 29, 1807013.	14.9	165
31	A WO <sub>3</sub> nanorod-Cr <sub>2</sub> O <sub>3</sub> nanoparticle composite for selective gas sensing of 2-butanone. Chinese Chemical Letters, 2018, 29, 538-542.	9.0	43
32	BiVO <sub>4</sub> quantum dot-decorated BiPO <sub>4</sub> nanorods OD/1D heterojunction for enhanced visible-light-driven photocatalysis. Dalton Transactions, 2018, 47, 10288-10298.	3.3	37
33	Isolated Platinum Atoms Stabilized by Amorphous Tungstenic Acid: Metal-Support Interaction for Synergistic Oxygen Activation. Angewandte Chemie - International Edition, 2018, 57, 9351-9356.	13.8	80
34	Isolated Platinum Atoms Stabilized by Amorphous Tungstenic Acid: Metal-Support Interaction for Synergistic Oxygen Activation. Angewandte Chemie, 2018, 130, 9495-9500.	2.0	7
35	Fullerene (C <sub>60</sub> )/CdS nanocomposite with enhanced photocatalytic activity and stability. Applied Surface Science, 2017, 403, 151-158.	6.1	80
36	Converting Carbohydrates to Carbon-Based Photocatalysts for Environmental Treatment. Environmental Science & Technology, 2017, 51, 7076-7083.	10.0	107

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37	A nanostructured Cr <sub>2</sub> O <sub>3</sub> /WO <sub>3</sub> p-n junction sensor for highly sensitive detection of butanone. <i>Journal of Materials Science: Materials in Electronics</i> , 2017, 28, 12056-12062.	2.2	19
38	Phosphorus containing materials for photocatalytic hydrogen evolution. <i>Green Chemistry</i> , 2017, 19, 588-613.	9.0	148
39	0D/2D Heterojunctions of Vanadate Quantum Dots/Graphitic Carbon Nitride Nanosheets for Enhanced Visible-Light-Driven Photocatalysis. <i>Angewandte Chemie - International Edition</i> , 2017, 56, 8407-8411.	13.8	421
40	0D/2D Heterojunctions of Vanadate Quantum Dots/Graphitic Carbon Nitride Nanosheets for Enhanced Visible-Light-Driven Photocatalysis. <i>Angewandte Chemie</i> , 2017, 129, 8527-8531.	2.0	44
41	Atomic structure-dominated enhancement of acetone sensing for a ZnO nanoplate with highly exposed (0001) facet. <i>CrystEngComm</i> , 2017, 19, 6711-6718.	2.6	34
42	One-step hydrothermal method to synthesize Bi/Bi <sub>2</sub> MoO <sub>6</sub> composite for photoelectric catalyst. <i>Functional Materials Letters</i> , 2017, 10, 1750053.	1.2	2
43	Intrinsic defect based homojunction: A novel quantum dots photoanode with enhanced charge transfer kinetics. <i>Applied Catalysis B: Environmental</i> , 2017, 203, 829-838.	20.2	30
44	Hydrothermal Carbonation Carbon-Coated CdS Nanocomposite with Enhanced Photocatalytic Activity and Stability. <i>Catalysts</i> , 2017, 7, 194.	3.5	19
45	Innenrücktitelbild: An Elemental Phosphorus Photocatalyst with a Record High Hydrogen Evolution Efficiency (Angew. Chem. 33/2016). <i>Angewandte Chemie</i> , 2016, 128, 9947-9947.	2.0	2
46	An Elemental Phosphorus Photocatalyst with a Record High Hydrogen Evolution Efficiency. <i>Angewandte Chemie - International Edition</i> , 2016, 55, 9580-9585.	13.8	171
47	Enhancing Charge Separation in Metallic Photocatalysts: A Case Study of the Conducting Molybdenum Dioxide. <i>Advanced Functional Materials</i> , 2016, 26, 4445-4455.	14.9	154
48	Nanostructured Elemental Photocatalysts: Development and Challenges. <i>Nanostructure Science and Technology</i> , 2016, , 295-312.	0.1	2
49	Metallic Photocatalysts: Enhancing Charge Separation in Metallic Photocatalysts: A Case Study of the Conducting Molybdenum Dioxide (Adv. Funct. Mater. 25/2016). <i>Advanced Functional Materials</i> , 2016, 26, 4444-4444.	14.9	1
50	Template-free synthesis of dispersed MoO <sub>x</sub> hollow microspheres toward enhanced reversible capacity of lithium storage. <i>Integrated Ferroelectrics</i> , 2016, 170, 168-174.	0.7	0
51	An Elemental Phosphorus Photocatalyst with a Record High Hydrogen Evolution Efficiency. <i>Angewandte Chemie</i> , 2016, 128, 9732-9737.	2.0	41
52	Cobalt oxide 2D nano-assemblies from infinite coordination polymer precursors mediated by a multidentate pyridyl ligand. <i>Dalton Transactions</i> , 2016, 45, 7866-7874.	3.3	10
53	Enhanced acetone sensing properties of Co <sub>3</sub> O <sub>4</sub> nanosheets with highly exposed (111) planes. <i>Journal of Materials Science: Materials in Electronics</i> , 2016, 27, 2086-2095.	2.2	51
54	A CuO-ZnO nanostructured p-n junction sensor for enhanced N-butanol detection. <i>RSC Advances</i> , 2016, 6, 2504-2511.	3.6	48

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55	Covalent Fixation of Surface Oxygen Atoms on Hematite Photoanode for Enhanced Water Oxidation. <i>Chemistry of Materials</i> , 2016, 28, 564-572.	6.7	118
56	A nanostructured chromium(iii) oxide/tungsten(vi) oxide p-n junction photoanode toward enhanced efficiency for water oxidation. <i>Journal of Materials Chemistry A</i> , 2015, 3, 14046-14053.	10.3	57
57	A black-red phosphorus heterostructure for efficient visible-light-driven photocatalysis. <i>Journal of Materials Chemistry A</i> , 2015, 3, 3285-3288.	10.3	232
58	Red Phosphorus: An Earth-Abundant Elemental Photocatalyst for "Green" Bacterial Inactivation under Visible Light. <i>Environmental Science &amp; Technology</i> , 2015, 49, 6264-6273.	10.0	226
59	Crystalline phosphorus fibers: controllable synthesis and visible-light-driven photocatalytic activity. <i>Nanoscale</i> , 2014, 6, 14163-14167.	5.6	91
60	Bottom-up synthesis of cerium-citric acid coordination polymers hollow microspheres with tunable shell thickness and their corresponding porous CeO <sub>2</sub> hollow spheres for Pt-based electrocatalysts. <i>CrystEngComm</i> , 2014, 16, 3387-3394.	2.6	34
61	Lanthanum-based coordination polymers microplates using a "green ligand" EDTA with tailorable morphology and fluorescent property. <i>RSC Advances</i> , 2014, 4, 12844.	3.6	18
62	Solvent induced rapid modulation of micro/nano structures of metal carboxylates coordination polymers: mechanism and morphology dependent magnetism. <i>Scientific Reports</i> , 2014, 4, 6023.	3.3	32
63	Induced morphology control of Ln-asparagine coordination polymers from the macro to nanoscopic regime in polar solvent-water mixtures. <i>Dalton Transactions</i> , 2013, 42, 1174-1179.	3.3	11
64	Hyperbranched microspheres formed by an EDTA-based coordination polymer with ternary architectures assembled by ultrathin nanoribbons and their tricolor luminescent properties. <i>CrystEngComm</i> , 2012, 14, 3653.	2.6	5
65	Transparent luminescent bulk nanocomposites of polysiloxane embedded with CdS nanocrystallines by a direct dispersion process. <i>Nanoscale</i> , 2012, 4, 1652.	5.6	9
66	Porous lanthanide oxides via a precursor method: Morphology control through competitive interaction of lanthanide cations with oxalate anions and amino acids. <i>Dalton Transactions</i> , 2010, 39, 6112.	3.3	3
67	Facile preparation of Pd/organoclay catalysts with high performance in solvent-free aerobic selective oxidation of benzyl alcohol. <i>Green Chemistry</i> , 2009, 11, 1499.	9.0	47
68	Fabrication of lanthanide oxide microspheres and hollow spheres by thermolysis of pre-molding lanthanide coordination compounds. <i>Chemical Communications</i> , 2009, , 1742.	4.1	29
69	Hydrothermal preparation of nanostructured MnO <sub>2</sub> and morphological and crystalline evolution. <i>Frontiers of Chemistry in China: Selected Publications From Chinese Universities</i> , 2008, 3, 128-132.	0.4	4
70	Synthesis of nanoporous silica with interior composite cells with synthetic block copolypeptide as template. <i>Science Bulletin</i> , 2006, 51, 493-497.	1.7	5
71	Hydrothermal Synthesis and Formation Mechanism of Micrometer-sized MoO <sub>2</sub> Hollow Spheres. <i>Chinese Journal of Chemical Physics</i> , 2006, 19, 543-548.	1.3	28