

# Zhi-Ming Zhang

## List of Publications by Year in descending order

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96  
papers

6,936  
citations

61857

43  
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58464

82  
g-index

100  
all docs

100  
docs citations

100  
times ranked

6535  
citing authors

#	ARTICLE	IF	CITATIONS
1	Encapsulating Perovskite Quantum Dots in Iron-Based Metal-Organic Frameworks (MOFs) for Efficient Photocatalytic CO <sub>2</sub> Reduction. <i>Angewandte Chemie - International Edition</i> , 2019, 58, 9491-9495.	7.2	503
2	Polyoxometalate-Based Cobalt-Phosphate Molecular Catalysts for Visible Light-Driven Water Oxidation. <i>Journal of the American Chemical Society</i> , 2014, 136, 5359-5366.	6.6	414
3	Photosensitizing Metal-Organic Framework Enabling Visible-Light-Driven Proton Reduction by a Wells-Dawson-Type Polyoxometalate. <i>Journal of the American Chemical Society</i> , 2015, 137, 3197-3200.	6.6	374
4	Polyoxometalate-Based Nickel Clusters as Visible Light-Driven Water Oxidation Catalysts. <i>Journal of the American Chemical Society</i> , 2015, 137, 5486-5493.	6.6	341
5	Fe-Co-P Electrocatalyst Derived from a Bimetallic Prussian Blue Analogue for Large-Current-Density Oxygen Evolution and Overall Water Splitting. <i>Advanced Science</i> , 2018, 5, 1800949.	5.6	318
6	Extraction of nickel from NiFe-LDH into Ni <sub>2</sub> P@NiFe hydroxide as a bifunctional electrocatalyst for efficient overall water splitting. <i>Chemical Science</i> , 2018, 9, 1375-1384.	3.7	257
7	Incorporating Polyoxometalates into a Porous MOF Greatly Improves Its Selective Adsorption of Cationic Dyes. <i>Chemistry - A European Journal</i> , 2014, 20, 6927-6933.	1.7	237
8	Hierarchical Integration of Photosensitizing Metal-Organic Frameworks and Nickel-Containing Polyoxometalates for Efficient Visible-Light-Driven Hydrogen Evolution. <i>Angewandte Chemie - International Edition</i> , 2016, 55, 6411-6416.	7.2	230
9	Simultaneous Trapping of C <sub>2</sub> H <sub>2</sub> and C <sub>2</sub> H <sub>6</sub> from a Ternary Mixture of C <sub>2</sub> H <sub>2</sub> /C <sub>2</sub> H <sub>4</sub> /C <sub>2</sub> H <sub>6</sub> in a Robust Metal-Organic Framework for the Purification of C <sub>2</sub> H <sub>4</sub> . <i>Angewandte Chemie - International Edition</i> , 2018, 57, 16067-16071.	7.2	223
10	In Situ Synthesis of CdS/Graphdiyne Heterojunction for Enhanced Photocatalytic Activity of Hydrogen Production. <i>ACS Applied Materials &amp; Interfaces</i> , 2019, 11, 2655-2661.	4.0	161
11	Enantiomerically Pure Chiral {Fe <sub>28</sub> } Wheels. <i>Angewandte Chemie - International Edition</i> , 2009, 48, 1581-1584.	7.2	144
12	Protein-Sized Chiral Fe <sub>168</sub> Cages with NbO-Type Topology. <i>Journal of the American Chemical Society</i> , 2009, 131, 14600-14601.	6.6	128
13	Polyoxoniobate-based 3D framework materials with photocatalytic hydrogen evolution activity. <i>Chemical Communications</i> , 2014, 50, 6017.	2.2	124
14	Photosensitizing single-site metal-organic framework enabling visible-light-driven CO <sub>2</sub> reduction for syngas production. <i>Applied Catalysis B: Environmental</i> , 2019, 245, 496-501.	10.8	119
15	Facile electron delivery from graphene template to ultrathin metal-organic layers for boosting CO <sub>2</sub> photoreduction. <i>Nature Communications</i> , 2021, 12, 813.	5.8	114
16	Polyoxometalate-assisted synthesis of transition-metal cubane clusters as artificial mimics of the oxygen-evolving center of photosystem II. <i>Coordination Chemistry Reviews</i> , 2016, 313, 94-110.	9.5	111
17	Single-atom molybdenum immobilized on photoactive carbon nitride as efficient photocatalysts for ambient nitrogen fixation in pure water. <i>Journal of Materials Chemistry A</i> , 2019, 7, 19831-19837.	5.2	108
18	New trimeric polyoxotungstate aggregates based on [P <sub>2</sub> W <sub>12</sub> O <sub>48</sub> ] <sub>14</sub> building blocks. <i>Chemical Communications</i> , 2008, , 1650.	2.2	106

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19	Polyoxometalate-based purely inorganic porous frameworks with selective adsorption and oxidative catalysis functionalities. <i>Chemical Communications</i> , 2013, 49, 3673.	2.2	105
20	H-Bond-Mediated Selectivity Control of Formate versus CO during CO <sub>2</sub> Photoreduction with Two Cooperative Cu/X Sites. <i>Journal of the American Chemical Society</i> , 2021, 143, 6114-6122.	6.6	105
21	A broadband and strong visible-light-absorbing photosensitizer boosts hydrogen evolution. <i>Nature Communications</i> , 2019, 10, 3155.	5.8	103
22	Feeding Carbonylation with CO <sub>2</sub> via the Synergy of Single-Site/Nanocluster Catalysts in a Photosensitizing MOF. <i>Journal of the American Chemical Society</i> , 2021, 143, 20792-20801.	6.6	91
23	Highly Dispersed Polyoxometalate-Doped Porous Co <sub>3</sub> O <sub>4</sub> Water Oxidation Photocatalysts Derived from POM@MOF Crystalline Materials. <i>Chemistry - A European Journal</i> , 2016, 22, 15513-15520.	1.7	87
24	Cation-mediated optical resolution and anticancer activity of chiral polyoxometalates built from entirely achiral building blocks. <i>Chemical Science</i> , 2016, 7, 4220-4229.	3.7	87
25	Four Polyoxonibate-Based Inorganic-Organic Hybrids Assembly from Bicapped Heteropolyoxonibate with Effective Antitumor Activity. <i>Crystal Growth and Design</i> , 2014, 14, 110-116.	1.4	85
26	Charge-regulated sequential adsorption of anionic catalysts and cationic photosensitizers into metal-organic frameworks enhances photocatalytic proton reduction. <i>Applied Catalysis B: Environmental</i> , 2018, 224, 46-52.	10.8	81
27	A polyoxometalate-based single-molecule magnet with a mixed-valent {MnIV <sub>2</sub> MnIII <sub>6</sub> MnII <sub>4</sub> } core. <i>Chemical Communications</i> , 2013, 49, 2515.	2.2	80
28	Highly Efficient Cooperative Catalysis by Co <sup>III</sup> (Porphyrin) Pairs in Interpenetrating Metal-Organic Frameworks. <i>Angewandte Chemie - International Edition</i> , 2016, 55, 13739-13743.	7.2	78
29	Hexameric polyoxometalates decorated by six 3d-4f heterometallic clusters. <i>Dalton Transactions</i> , 2011, 40, 6475.	1.6	74
30	Polyoxometalate-Derived Ultrasmall Pt <sub>2</sub> /WO <sub>3</sub> Heterostructure Outperforms Platinum for Large-Current-Density H <sub>2</sub> Evolution. <i>Advanced Energy Materials</i> , 2019, 9, 1900597.	10.2	74
31	Photocatalytic coproduction of H <sub>2</sub> and industrial chemical over MOF-derived direct Z-scheme heterostructure. <i>Applied Catalysis B: Environmental</i> , 2020, 273, 119066.	10.8	73
32	Simultaneous Trapping of C <sub>2</sub> H <sub>2</sub> and C <sub>2</sub> H <sub>6</sub> from a Ternary Mixture of C <sub>2</sub> H <sub>2</sub> /C <sub>2</sub> H <sub>4</sub> /C <sub>2</sub> H <sub>6</sub> in a Robust Metal-Organic Framework for the Purification of C <sub>2</sub> H <sub>4</sub> . <i>Angewandte Chemie</i> , 2018, 130, 16299-16303.	1.6	71
33	Robust and Long-Lived Excited State Ru(II) Polyimine Photosensitizers Boost Hydrogen Production. <i>ACS Catalysis</i> , 2018, 8, 8659-8670.	5.5	69
34	Chiral recognition and selection during the self-assembly process of protein-mimic macroanions. <i>Nature Communications</i> , 2015, 6, 6475.	5.8	66
35	A new electrodeposition approach for preparing polyoxometalates-based electrochromic smart windows. <i>Journal of Materials Chemistry A</i> , 2013, 1, 216-220.	5.2	59
36	Encapsulation of Single Iron Sites in a Metal-Porphyrin Framework for High-Performance Photocatalytic CO <sub>2</sub> Reduction. <i>Inorganic Chemistry</i> , 2020, 59, 6301-6307.	1.9	57

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37	Filling COFs with bimetallic nanoclusters for CO <sub>2</sub> -to-alcohols conversion with H <sub>2</sub> O oxidation. <i>Applied Catalysis B: Environmental</i> , 2021, 288, 120001.	10.8	56
38	Hierarchical Integration of Photosensitizing Metal-Organic Frameworks and Nickel-Containing Polyoxometalates for Efficient Visible-Light-Driven Hydrogen Evolution. <i>Angewandte Chemie</i> , 2016, 128, 6521-6526.	1.6	53
39	Encapsulating Perovskite Quantum Dots in Iron-Based Metal-Organic Frameworks (MOFs) for Efficient Photocatalytic CO <sub>2</sub> Reduction. <i>Angewandte Chemie</i> , 2019, 131, 9591-9595.	1.6	53
40	Recent progress in polyoxoniobates decorated and stabilized via transition metal cations or clusters. <i>CrystEngComm</i> , 2015, 17, 6261-6268.	1.3	51
41	Encapsulation of tungstophosphoric acid into harmless MIL-101(Fe) for effectively removing cationic dye from aqueous solution. <i>RSC Advances</i> , 2016, 6, 81622-81630.	1.7	48
42	Switching Excited State Distribution of Metal-Organic Framework for Dramatically Boosting Photocatalysis. <i>Angewandte Chemie - International Edition</i> , 2022, 61, .	7.2	48
43	A New Ni <sub>12</sub> Cluster Based on Polyoxometalate Ligands. <i>Inorganic Chemistry</i> , 2009, 48, 10889-10891.	1.9	47
44	Improving photosensitization for photochemical CO <sub>2</sub> -to-CO conversion. <i>National Science Review</i> , 2020, 7, 1459-1467.	4.6	44
45	Self-Template Synthesis of Co-Se-S-O Hierarchical Nanotubes as Efficient Electrocatalysts for Oxygen Evolution under Alkaline and Neutral Conditions. <i>ACS Applied Materials &amp; Interfaces</i> , 2018, 10, 8231-8237.	4.0	43
46	Extended structural materials composed of transition-metal-substituted arsenicniobates and their photocatalytic activity. <i>RSC Advances</i> , 2015, 5, 44198-44203.	1.7	40
47	Capped Polyoxometalate Pillars between Metal-Organic Layers for Transferring a Supramolecular Structure into a Covalent 3D Framework. <i>Inorganic Chemistry</i> , 2018, 57, 1342-1349.	1.9	40
48	Phosphorized polyoxometalate-etched iron-hydroxide porous nanotubes for efficient electrocatalytic oxygen evolution. <i>Journal of Materials Chemistry A</i> , 2018, 6, 24479-24485.	5.2	39
49	Construction of hierarchical photocatalysts by growing ZnIn <sub>2</sub> S <sub>4</sub> nanosheets on Prussian blue analogue-derived bimetallic sulfides for solar co-production of H <sub>2</sub> and organic chemicals. <i>Journal of Energy Chemistry</i> , 2021, 54, 386-394.	7.1	39
50	Boosting Photocatalytic Activities for Organic Transformations through Merging Photocatalyst and Transition-Metal Catalyst in Flexible Polymers. <i>ACS Catalysis</i> , 2020, 10, 11758-11767.	5.5	38
51	Charge Transfer from Donor to Acceptor in Conjugated Microporous Polymer for Enhanced Photosensitization. <i>Angewandte Chemie - International Edition</i> , 2021, 60, 22062-22069.	7.2	37
52	Inter-clusters synergy in iron-organic frameworks for efficient CO <sub>2</sub> photoreduction. <i>Applied Catalysis B: Environmental</i> , 2022, 300, 120487.	10.8	34
53	A polyoxometalate-based ionic crystal assembly from a heterometallic cluster and polyoxoanions with visible-light catalytic activity. <i>RSC Advances</i> , 2013, 3, 20829.	1.7	31
54	W Single-Atom Catalyst for CH <sub>4</sub> Photooxidation in Water Vapor. <i>Advanced Materials</i> , 2022, 34, .	11.1	31

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55	Inorganic Crown Ethers: Sulfate-Based Preyssler Polyoxometalates. <i>Chemistry - A European Journal</i> , 2012, 18, 9184-9188.	1.7	30
56	Unveiling Single Atom Nucleation for Isolating Ultrafine fcc Ru Nanoclusters with Outstanding Dehydrogenation Activity. <i>Advanced Energy Materials</i> , 2020, 10, 2002138.	10.2	29
57	Hot-electron leading-out strategy for constructing photostable HOF catalysts with outstanding H <sub>2</sub> evolution activity. <i>Applied Catalysis B: Environmental</i> , 2021, 296, 120337.	10.8	28
58	Porous $\gamma$ -FeOOH nanotube stabilizing Au single atom for high-efficiency nitrogen fixation. <i>Nano Research</i> , 2022, 15, 3026-3033.	5.8	28
59	Thermotropic liquid crystals built from organic-inorganic hybrid polyoxometalates and a simple cationic surfactant. <i>Journal of Materials Chemistry C</i> , 2013, 1, 3681.	2.7	26
60	Strong Visible-Light-Absorbing Cuprous Sensitizers for Dramatically Boosting Photocatalysis. <i>Angewandte Chemie - International Edition</i> , 2020, 59, 12951-12957.	7.2	26
61	Highly Efficient Cooperative Catalysis by Co <sup>III</sup> (Porphyrin) Pairs in Interpenetrating Metal-Organic Frameworks. <i>Angewandte Chemie</i> , 2016, 128, 13943-13947.	1.6	24
62	Polyoxometalate-based supramolecular architecture constructed from a purely inorganic 1D chain and a metal-organic layer with efficient catalytic activity. <i>RSC Advances</i> , 2016, 6, 15513-15517.	1.7	24
63	Highly efficient oxygen evolution electrocatalysts prepared by using reduction-engraved ferrites on graphene oxide. <i>Inorganic Chemistry Frontiers</i> , 2018, 5, 310-318.	3.0	24
64	Nitrogen Coordination To Dramatically Enhance the Stability of In-MOF for Selectively Capturing CO <sub>2</sub> from a CO <sub>2</sub> /N <sub>2</sub> Mixture. <i>Crystal Growth and Design</i> , 2019, 19, 1322-1328.	1.4	24
65	Charge Transfer from Donor to Acceptor in Conjugated Microporous Polymer for Enhanced Photosensitization. <i>Angewandte Chemie</i> , 2021, 133, 22233-22240.	1.6	24
66	Construction of Low-Cost Zr-Scheme Heterostructure Cu <sub>2</sub> O/PCN for Highly Selective CO <sub>2</sub> Photoreduction to Methanol with Water Oxidation. <i>Small</i> , 2021, 17, e2103558.	5.2	23
67	Sensitizing Ru(II) polyimine redox center with strong light-harvesting coumarin antennas to mimic energy flow of biological model for efficient hydrogen evolution. <i>Applied Catalysis B: Environmental</i> , 2019, 253, 105-110.	10.8	22
68	Anchoring ultrafine Cu <sub>2</sub> O nanocluster on PCN for CO <sub>2</sub> photoreduction in water vapor with much improved stability. <i>Applied Catalysis B: Environmental</i> , 2022, 317, 121702.	10.8	22
69	Integration of Ln-Sandwich POMs into Molecular Porous Systems Leading to Self-Assembly of Metal-POM Framework Materials. <i>European Journal of Inorganic Chemistry</i> , 2013, 2013, 4770-4774.	1.0	21
70	Interfacial electronic interaction of atomically dispersed IrCl <sub>x</sub> on ultrathin Co(OH) <sub>2</sub> /CNTs for efficient electrocatalytic water oxidation. <i>Applied Catalysis B: Environmental</i> , 2020, 279, 119398.	10.8	21
71	Doping [Ru(bpy) <sub>3</sub> ] <sup>2+</sup> into metal-organic framework to facilitate the separation and reuse of noble-metal photosensitizer during CO <sub>2</sub> photoreduction. <i>Chinese Journal of Catalysis</i> , 2021, 42, 1790-1797.	6.9	20
72	Engineering the Surface Structure of Binary/Ternary Ferrite Nanoparticles as High-Performance Electrocatalysts for the Oxygen Evolution Reaction. <i>ChemCatChem</i> , 2018, 10, 1075-1083.	1.8	19

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73	Assembly of polyoxometalates and Ni-bpy cationic units into the molecular core-shell structures as bifunctional electrocatalysts. <i>RSC Advances</i> , 2016, 6, 99010-99015.	1.7	18
74	Two New {P8W49} Wheel-shaped Tungstophosphates Decorated by Co(II), Ni(II) Ions. <i>Journal of Cluster Science</i> , 2010, 21, 679-689.	1.7	17
75	Synthesis of a poly-pendant 1-D chain based on $\mu$ -trans-vanadium <sup>TM</sup> bicapped, Keggin-type vanadtungstate and its photocatalytic properties. <i>Dalton Transactions</i> , 2014, 43, 16265-16269.	1.6	17
76	Synergistic Effect over Sub-nm Pt Nanocluster@MOFs Significantly Boosts Photo-oxidation of N-alkyl(iso)quinolinium Salts. <i>IScience</i> , 2020, 23, 100793.	1.9	16
77	Heterometallic 3d-4f cluster-containing polyoxotungstate obtained by partial disassembly of preformed large clusters. <i>RSC Advances</i> , 2015, 5, 76206-76210.	1.7	15
78	Expansion of sodalite-type metal-organic frameworks with heterometallic metal-oxo cluster and its cation exchange property. <i>CrystEngComm</i> , 2013, 15, 459-462.	1.3	14
79	Heavy atom-free Keto-di-coumarin as earth-abundant strong visible light-harvesting photosensitizer for efficient photocatalytic hydrogen evolution. <i>Dyes and Pigments</i> , 2019, 166, 84-91.	2.0	14
80	Accelerating Anode Reaction with Electro-oxidation of Alcohols over Ru Nanoparticles to Reduce the Potential for Water Splitting. <i>ACS Applied Materials &amp; Interfaces</i> , 2022, 14, 1452-1459.	4.0	13
81	MOF/CC-derivatives with trace amount of cobalt oxides as efficient electrocatalysts for oxygen reduction reaction. <i>Chinese Chemical Letters</i> , 2019, 30, 989-994.	4.8	12
82	Grafting Transition Metal-Organic Fragments onto W/Ta Mixed-Addendum Nanoclusters for Broad-Spectrum-Driven Photocatalysis. <i>ChemPlusChem</i> , 2014, 79, 1153-1158.	1.3	11
83	A cobalt-containing pseudosandwich-type polyoxometalate based on a lacunary Lindqvist polyoxovanadate. <i>CrystEngComm</i> , 2014, 16, 1187.	1.3	9
84	Strong Visible-Light-Absorbing Cuprous Sensitizers for Dramatically Boosting Photocatalysis. <i>Angewandte Chemie</i> , 2020, 132, 13051-13057.	1.6	8
85	A (3,6)-connected metal-organic framework consisting of chair-like {Fe6} clusters and BTC linkers. <i>Journal of Coordination Chemistry</i> , 2012, 65, 48-54.	0.8	6
86	Two new ladder-like inorganic chains constructed from Cu-containing sandwich polyoxoanions. <i>Journal of Coordination Chemistry</i> , 2009, 62, 1415-1422.	0.8	5
87	Switching Excited State Distribution of Metal-Organic Framework for Dramatically Boosting Photocatalysis. <i>Angewandte Chemie</i> , 2022, 134, .	1.6	5
88	Extended structure constructed from sandwich-type tungstoantimonites fused together by water substitution on the sandwiching metal centers. <i>Journal of Coordination Chemistry</i> , 2012, 65, 1443-1450.	0.8	4
89	Crown Inorganic-Organic Hybrid Composed of Copper-Amino Acid Rings and the Classical Keggin Polyoxoanions. <i>Journal of Cluster Science</i> , 2014, 25, 253-259.	1.7	4
90	Design and construction of a thermotropic liquid crystal material based on high-nuclear transition-metal cluster-containing polyoxometalates. <i>RSC Advances</i> , 2014, 4, 43806-43810.	1.7	4

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91	Self-assembly and thermotropic liquid crystal properties of a hexavacant germanomolybdate: [Ge <sub>2</sub> Mo <sub>16</sub> O <sub>58</sub> ] <sub>12</sub> <sup>4-</sup> . CrystEngComm, 2014, 16, 6784.	1.3	4
92	Heavy-atom free organic photosensitizers for efficient hydrogen evolution with $\lambda > 600$ nm visible-light excitation. Applied Catalysis B: Environmental, 2022, 316, 121655.	10.8	3
93	Microenvironment Regulation of {Co <sub>4</sub> <sup>II</sup> O <sub>4</sub> } Cubane for Syngas Photosynthesis. Inorganic Chemistry, 2022, 61, 13058-13066.	1.9	3
94	Design and synthesis of {CaCo <sub>3</sub> }-based sandwich-type polyoxometalate. Journal of Coordination Chemistry, 2020, 73, 2373-2382.	0.8	2
95	Bidirectional sensitization in Ruthenium(II)-antenna dyad beyond energy flow of biological model for efficient photosynthesis. Dyes and Pigments, 2021, 196, 109811.	2.0	2
96	Extended structure constructed from {Co <sub>7</sub> } cluster-containing sandwich-type polyoxometalate. Inorganic Chemistry Communication, 2018, 95, 117-121.	1.8	1