

Yi-Han Zhu

List of Publications by Citations

Source: <https://exaly.com/author-pdf/6295836/yi-han-zhu-publications-by-citations.pdf>

Version: 2024-04-27

This document has been generated based on the publications and citations recorded by exaly.com. For the latest version of this publication list, visit the link given above.

The third column is the impact factor (IF) of the journal, and the fourth column is the number of citations of the article.

118
papers

11,624
citations

52
h-index

107
g-index

121
ext. papers

13,809
ext. citations

12.6
avg. IF

6.35
L-index

#	Paper	IF	Citations
118	Hydrogen evolution by a metal-free electrocatalyst. <i>Nature Communications</i> , 2014 , 5, 3783	17.4	1572
117	Molecule-Level g-CN Coordinated Transition Metals as a New Class of Electrocatalysts for Oxygen Electrode Reactions. <i>Journal of the American Chemical Society</i> , 2017 , 139, 3336-3339	16.4	816
116	High Electrocatalytic Hydrogen Evolution Activity of an Anomalous Ruthenium Catalyst. <i>Journal of the American Chemical Society</i> , 2016 , 138, 16174-16181	16.4	586
115	Sub-10 nm Fe ₃ O ₄ @Cu(2-x)S core-shell nanoparticles for dual-modal imaging and photothermal therapy. <i>Journal of the American Chemical Society</i> , 2013 , 135, 8571-7	16.4	510
114	Monolayer MoSe ₂ grown by chemical vapor deposition for fast photodetection. <i>ACS Nano</i> , 2014 , 8, 8582-8597	16.4	413
113	Enhanced binding affinity, remarkable selectivity, and high capacity of CO ₂ by dual functionalization of a rht-type metal-organic framework. <i>Angewandte Chemie - International Edition</i> , 2012 , 51, 1412-5	16.4	398
112	Thermally stable single atom Pt/m-AlO for selective hydrogenation and CO oxidation. <i>Nature Communications</i> , 2017 , 8, 16100	17.4	390
111	Out-of-Plane Piezoelectricity and Ferroelectricity in Layered HnSe Nanoflakes. <i>Nano Letters</i> , 2017 , 17, 5508-5513	11.5	317
110	Ultrathin Two-Dimensional Covalent Organic Framework Nanosheets: Preparation and Application in Highly Sensitive and Selective DNA Detection. <i>Journal of the American Chemical Society</i> , 2017 , 139, 8698-8704	16.4	301
109	CoP nanosheet assembly grown on carbon cloth: A highly efficient electrocatalyst for hydrogen generation. <i>Nano Energy</i> , 2015 , 15, 634-641	17.1	290
108	Lanthanide-doped Na(x)ScF(3+x) nanocrystals: crystal structure evolution and multicolor tuning. <i>Journal of the American Chemical Society</i> , 2012 , 134, 8340-3	16.4	286
107	Atomic-resolution transmission electron microscopy of electron beam-sensitive crystalline materials. <i>Science</i> , 2018 , 359, 675-679	33.3	242
106	Highly mesoporous single-crystalline zeolite beta synthesized using a nonsurfactant cationic polymer as a dual-function template. <i>Journal of the American Chemical Society</i> , 2014 , 136, 2503-10	16.4	214
105	Imaging defects and their evolution in a metal-organic framework at sub-unit-cell resolution. <i>Nature Chemistry</i> , 2019 , 11, 622-628	17.6	211
104	Unravelling surface and interfacial structures of a metal-organic framework by transmission electron microscopy. <i>Nature Materials</i> , 2017 , 16, 532-536	27	207
103	Charge-Redistribution-Enhanced Nanocrystalline Ru@IrOx Electrocatalysts for Oxygen Evolution in Acidic Media. <i>Chem</i> , 2019 , 5, 445-459	16.2	205
102	Site-specific growth of Au-Pd alloy horns on Au nanorods: a platform for highly sensitive monitoring of catalytic reactions by surface enhancement Raman spectroscopy. <i>Journal of the American Chemical Society</i> , 2013 , 135, 8552-61	16.4	198

101	Sinter-resistant metal nanoparticle catalysts achieved by immobilization within zeolite crystals via seed-directed growth. <i>Nature Catalysis</i> , 2018 , 1, 540-546	36.5	175
100	Synthesis and Gas Transport Properties of Hydroxyl-Functionalized Polyimides with Intrinsic Microporosity. <i>Macromolecules</i> , 2012 , 45, 3841-3849	5.5	163
99	Inside Perovskites: Quantum Luminescence from Bulk Cs ₄ PbBr ₆ Single Crystals. <i>Chemistry of Materials</i> , 2017 , 29, 7108-7113	9.6	160
98	Surface modification-induced phase transformation of hexagonal close-packed gold square sheets. <i>Nature Communications</i> , 2015 , 6, 6571	17.4	157
97	Multicolour synthesis in lanthanide-doped nanocrystals through cation exchange in water. <i>Nature Communications</i> , 2016 , 7, 13059	17.4	144
96	Controlled growth of high-density CdS and CdSe nanorod arrays on selective facets of two-dimensional semiconductor nanoplates. <i>Nature Chemistry</i> , 2016 , 8, 470-5	17.6	142
95	Ultrathin graphdiyne film on graphene through solution-phase van der Waals epitaxy. <i>Science Advances</i> , 2018 , 4, eaat6378	14.3	134
94	Crystal Phase and Architecture Engineering of Lotus-Thalamus-Shaped Pt-Ni Anisotropic Superstructures for Highly Efficient Electrochemical Hydrogen Evolution. <i>Advanced Materials</i> , 2018 , 30, e1801741	24	128
93	Strain Effect in Bimetallic Electrocatalysts in the Hydrogen Evolution Reaction. <i>ACS Energy Letters</i> , 2018 , 3, 1198-1204	20.1	124
92	Single-site catalyst promoters accelerate metal-catalyzed nitroarene hydrogenation. <i>Nature Communications</i> , 2018 , 9, 1362	17.4	111
91	Strong Metal-Support Interactions Achieved by Hydroxide-to-Oxide Support Transformation for Preparation of Sinter-Resistant Gold Nanoparticle Catalysts. <i>ACS Catalysis</i> , 2017 , 7, 7461-7465	13.1	109
90	Rugae-like FeP nanocrystal assembly on a carbon cloth: an exceptionally efficient and stable cathode for hydrogen evolution. <i>Nanoscale</i> , 2015 , 7, 10974-81	7.7	107
89	Hydrogen release from amminelithium borohydride, LiBH ₄ x NH ₃ . <i>Chemical Communications</i> , 2010 , 46, 2599-601	5.8	100
88	Two-dimensional gold nanostructures with high activity for selective oxidation of carbon-hydrogen bonds. <i>Nature Communications</i> , 2015 , 6, 6957	17.4	98
87	Short-Range Ordered Iridium Single Atoms Integrated into Cobalt Oxide Spinel Structure for Highly Efficient Electrocatalytic Water Oxidation. <i>Journal of the American Chemical Society</i> , 2021 , 143, 5201-5211	16.4	98
86	Harnessing structural darkness in the visible and infrared wavelengths for a new source of light. <i>Nature Nanotechnology</i> , 2016 , 11, 60-6	28.7	94
85	Synthesis of ultrathin face-centered-cubic au@pt and au@pd core-shell nanoplates from hexagonal-close-packed au square sheets. <i>Angewandte Chemie - International Edition</i> , 2015 , 54, 5672-6	16.4	94
84	Edge Epitaxy of Two-Dimensional MoSe and MoS Nanosheets on One-Dimensional Nanowires. <i>Journal of the American Chemical Society</i> , 2017 , 139, 8653-8660	16.4	90

83	Towards super-clean graphene. <i>Nature Communications</i> , 2019 , 10, 1912	17.4	89
82	Platinum-nickel hydroxide nanocomposites for electrocatalytic reduction of water. <i>Nano Energy</i> , 2017 , 31, 456-461	17.1	88
81	A general solid-state synthesis of chemically-doped fluorescent graphene quantum dots for bioimaging and optoelectronic applications. <i>Nanoscale</i> , 2015 , 7, 10162-9	7.7	85
80	Enabling Superior Sodium Capture for Efficient Water Desalination by a Tubular Polyaniline Decorated with Prussian Blue Nanocrystals. <i>Advanced Materials</i> , 2020 , 32, e1907404	24	76
79	A tightly-bonded and flexible mesoporous zeolite-cotton hybrid hemostat. <i>Nature Communications</i> , 2019 , 10, 1932	17.4	72
78	Highly Selective and Complete Conversion of Cellobiose to Gluconic Acid over Au/Cs ₂ HPW ₁₂ O ₄₀ Nanocomposite Catalyst. <i>ChemCatChem</i> , 2011 , 3, 1294-1298	5.2	72
77	Investigating the Influence of Mesoporosity in Zeolite Beta on Its Catalytic Performance for the Conversion of Methanol to Hydrocarbons. <i>ACS Catalysis</i> , 2015 , 5, 5837-5845	13.1	68
76	Direct conversion of cellulose using carbon monoxide and water on a PtMo ₂ C/C catalyst. <i>Energy and Environmental Science</i> , 2014 , 7, 393-398	35.4	68
75	Thickness-Dependent Dielectric Constant of Few-Layer InBe Nanoflakes. <i>Nano Letters</i> , 2015 , 15, 8136-40	11.5	67
74	Epitaxial growth of unusual 4H hexagonal Ir, Rh, Os, Ru and Cu nanostructures on 4H Au nanoribbons. <i>Chemical Science</i> , 2017 , 8, 795-799	9.4	64
73	Cu-TDPAT, an rht-Type Dual-Functional Metal-Organic Framework Offering Significant Potential for Use in H ₂ and Natural Gas Purification Processes Operating at High Pressures. <i>Journal of Physical Chemistry C</i> , 2012 , 116, 16609-16618	3.8	64
72	Self-templated synthesis of single-crystal and single-domain ferroelectric nanoplates. <i>Angewandte Chemie - International Edition</i> , 2012 , 51, 9283-7	16.4	64
71	Direct Imaging of Atomically Dispersed Molybdenum that Enables Location of Aluminum in the Framework of Zeolite ZSM-5. <i>Angewandte Chemie - International Edition</i> , 2020 , 59, 819-825	16.4	63
70	The Development of Yolk-Shell-Structured Pd&ZnO@Carbon Submicroreactors with High Selectivity and Stability. <i>Advanced Functional Materials</i> , 2018 , 28, 1801737	15.6	60
69	Fabricating a Homogeneously Alloyed AuAg Shell on Au Nanorods to Achieve Strong, Stable, and Tunable Surface Plasmon Resonances. <i>Small</i> , 2015 , 11, 5214-21	11	59
68	High-performance gas sensing achieved by mesoporous tungsten oxide mesocrystals with increased oxygen vacancies. <i>Journal of Materials Chemistry A</i> , 2013 , 1, 8653	13	55
67	PbTiO ₃ nanofibers with edge-shared TiO ₆ octahedra. <i>Journal of the American Chemical Society</i> , 2010 , 132, 5572-3	16.4	53
66	Beyond Creation of Mesoporosity: The Advantages of Polymer-Based Dual-Function Templates for Fabricating Hierarchical Zeolites. <i>Advanced Functional Materials</i> , 2016 , 26, 1881-1891	15.6	51

65	Chiral gold nanowires with Boerdijk-Coxeter-Bernal structure. <i>Journal of the American Chemical Society</i> , 2014 , 136, 12746-52	16.4	49
64	Syngas production from electrocatalytic CO ₂ reduction with high energetic efficiency and current density. <i>Journal of Materials Chemistry A</i> , 2019 , 7, 7675-7682	13	47
63	Direct Imaging of Tunable Crystal Surface Structures of MOF MIL-101 Using High-Resolution Electron Microscopy. <i>Journal of the American Chemical Society</i> , 2019 , 141, 12021-12028	16.4	47
62	Unravelling Thiol's Role in Directing Asymmetric Growth of Au Nanorod-Au Nanoparticle Dimers. <i>Nano Letters</i> , 2016 , 16, 617-23	11.5	46
61	Sodium-Induced Reordering of Atomic Stacks in Black Phosphorus. <i>Chemistry of Materials</i> , 2017 , 29, 1350-1356	16.3	44
60	Confined Lithium-Sulfur Reactions in Narrow-Diameter Carbon Nanotubes Reveal Enhanced Electrochemical Reactivity. <i>ACS Nano</i> , 2018 , 12, 9775-9784	16.7	44
59	Selective modification of surface and bulk V ⁵⁺ /V ⁴⁺ ratios and its effects on the catalytic performance of MoVTeO catalysts. <i>Journal of Catalysis</i> , 2007 , 246, 382-389	7.3	43
58	Imaging Beam-Sensitive Materials by Electron Microscopy. <i>Advanced Materials</i> , 2020 , 32, e1907619	24	42
57	Boosting Electrocatalytic Activity of 3d-Block Metal (Hydro)oxides by Ligand-Induced Conversion. <i>Angewandte Chemie - International Edition</i> , 2021 , 60, 10614-10619	16.4	42
56	Microporous cokes formed in zeolite catalysts enable efficient solar evaporation. <i>Journal of Materials Chemistry A</i> , 2017 , 5, 6860-6865	13	41
55	Atomic Origins of Monoclinic-Tetragonal (Rutile) Phase Transition in Doped VO ₂ Nanowires. <i>Nano Letters</i> , 2015 , 15, 7179-88	11.5	39
54	Effect of acidity and ruthenium species on catalytic performance of ruthenium catalysts for acetylene hydrochlorination. <i>Catalysis Science and Technology</i> , 2018 , 8, 6143-6149	5.5	30
53	Intramolecular Hydrogen Bonding-Based Topology Regulation of Two-Dimensional Covalent Organic Frameworks. <i>Journal of the American Chemical Society</i> , 2020 , 142, 13162-13169	16.4	29
52	Catalytic Activity Control via Crossover between Two Different Microstructures. <i>Journal of the American Chemical Society</i> , 2017 , 139, 13740-13748	16.4	29
51	Epitaxial TiO ₂ /SnO ₂ core-shell heterostructure by atomic layer deposition. <i>Journal of Materials Chemistry</i> , 2012 , 22, 10665		28
50	Synthesis of Ultrathin Face-Centered-Cubic Au@Pt and Au@Pd Core-Shell Nanoplates from Hexagonal-Close-Packed Au Square Sheets. <i>Angewandte Chemie</i> , 2015 , 127, 5764-5768	3.6	26
49	Molecular Scalpel to Chemically Cleave Metal-Organic Frameworks for Induced Phase Transition. <i>Journal of the American Chemical Society</i> , 2021 , 143, 6681-6690	16.4	26
48	Evoking ordered vacancies in metallic nanostructures toward a vacated Barlow packing for high-performance hydrogen evolution. <i>Science Advances</i> , 2021 , 7,	14.3	25

47	Controlled Synthesis of the Tricontinuous Mesoporous Material IBN-9 and Its Carbon and Platinum Derivatives. <i>Chemistry of Materials</i> , 2011 , 23, 3775-3786	9.6	24
46	A liquid-based eutectic system: LiBH ₄ /NH ₃ /NH ₃ BH ₃ with high dehydrogenation capacity at moderate temperature. <i>Journal of Materials Chemistry</i> , 2011 , 21, 14509		24
45	Strain-activated edge reconstruction of graphene nanoribbons. <i>Physical Review B</i> , 2012 , 85,	3.3	23
44	Direct Imaging of Atomically Dispersed Molybdenum that Enables Location of Aluminum in the Framework of Zeolite ZSM-5. <i>Angewandte Chemie</i> , 2020 , 132, 829-835	3.6	23
43	Observation of superconductivity in structure-selected Ti ₂ O ₃ thin films. <i>NPG Asia Materials</i> , 2018 , 10, 522-532	10.3	20
42	Synthesis of WO _x -WX (n=2.7, 2.9; X=S, Se) Heterostructures for Highly Efficient Green Quantum Dot Light-Emitting Diodes. <i>Angewandte Chemie - International Edition</i> , 2017 , 56, 10486-10490	16.4	20
41	Bulk and local structures of metal-organic frameworks unravelled by high-resolution electron microscopy. <i>Communications Chemistry</i> , 2020 , 3,	6.3	20
40	Lithiation-induced shuffling of atomic stacks. <i>Nano Letters</i> , 2014 , 14, 5301-7	11.5	17
39	Grafting nanometer metal/oxide interface towards enhanced low-temperature acetylene semi-hydrogenation. <i>Nature Communications</i> , 2021 , 12, 5770	17.4	14
38	Crystal phase regulation in noble metal nanocrystals. <i>Chinese Journal of Catalysis</i> , 2019 , 40, 1035-1056	11.3	12
37	Theoretical prediction of the mechanical properties of zeolitic imidazolate frameworks (ZIFs). <i>RSC Advances</i> , 2017 , 7, 41499-41503	3.7	12
36	Direct observation of surface reconstruction and termination on a complex metal oxide catalyst by electron microscopy. <i>Angewandte Chemie - International Edition</i> , 2012 , 51, 4176-80	16.4	12
35	Single-Site Au/Carbon Catalysts with Single-Atom and Au Nanoparticles for Acetylene Hydrochlorination. <i>ACS Applied Nano Materials</i> , 2020 , 3, 3004-3010	5.6	11
34	Investigation of the Linker Swing Motion in the Zeolitic Imidazolate Framework ZIF-90. <i>Journal of Physical Chemistry C</i> , 2018 , 122, 7203-7209	3.8	11
33	Facile synthesis of PbTiO ₃ truncated octahedra via solid-state reaction and their application in low-temperature CO oxidation by loading Pt nanoparticles. <i>Journal of Materials Chemistry A</i> , 2014 , 2, 9035-9039	13	11
32	Purification of hydrogen from carbon monoxide for fuel cell application over modified mesoporous CuO/FeO ₂ catalysts. <i>Applied Catalysis B: Environmental</i> , 2011 , 108-109, 72-72	21.8	11
31	Self-Templated Synthesis of Single-Crystal and Single-Domain Ferroelectric Nanoplates. <i>Angewandte Chemie</i> , 2012 , 124, 9417-9421	3.6	10
30	Room-Temperature Valley Polarization in Atomically Thin Semiconductors Chalcogenide Alloying. <i>ACS Nano</i> , 2020 , 14, 9873-9883	16.7	10

29	Isorecticular Series of Two-Dimensional Covalent Organic Frameworks with the kgd Topology and Controllable Micropores.. <i>Journal of the American Chemical Society</i> , 2022 ,	16.4	10
28	Synthesis of WOn-WX2 (n=2,7, 2,9; X=S, Se) Heterostructures for Highly Efficient Green Quantum Dot Light-Emitting Diodes. <i>Angewandte Chemie</i> , 2017 , 129, 10622-10626	3.6	7
27	Atomic Resolution Imaging of Nanoscale Structural Ordering in a Complex Metal Oxide Catalyst. <i>Chemistry of Materials</i> , 2012 , 24, 3269-3278	9.6	6
26	Synthesis and Visualization of Entangled 3D Covalent Organic Frameworks with High-Valency Stereoscopic Molecular Nodes for Gas Separation. <i>Angewandte Chemie - International Edition</i> ,	16.4	6
25	Microscopy of Nanoporous Crystals. <i>Springer Handbooks</i> , 2019 , 1391-1450	1.3	4
24	Three-dimensional oriented attachment growth of single-crystal pre-perovskite PbTiO3 hollowed fibers. <i>CrystEngComm</i> , 2018 , 20, 448-453	3.3	4
23	Investigation on CO catalytic oxidation reaction kinetics of faceted perovskite nanostructures loaded with Pt. <i>RSC Advances</i> , 2017 , 7, 6102-6107	3.7	3
22	Symmetry Breaking in Monometallic Nanocrystals toward Broadband and Direct Electron Transfer Enhanced Plasmonic Photocatalysis. <i>Advanced Functional Materials</i> , 2021 , 31, 2006738	15.6	3
21	Synthesis of a magnetic Extended carbon nanosolenoid with Riemann surfaces.. <i>Nature Communications</i> , 2022 , 13, 1239	17.4	3
20	Direct Observation of Surface Reconstruction and Termination on a Complex Metal Oxide Catalyst by Electron Microscopy. <i>Angewandte Chemie</i> , 2012 , 124, 4252-4256	3.6	2
19	Noble metal nanowire arrays as an ethanol oxidation electrocatalyst. <i>Nanoscale Advances</i> , 2021 , 3, 177-181	3.1	2
18	Crystalline tetra-aniline with chloride interactions towards a biocompatible supercapacitor. <i>Materials Horizons</i> , 2021 ,	14.4	2
17	Structural Diversity in Ordered Mesoporous Silica Materials 2014 , 1-34		1
16	Experimental Evidence of Chiral Gold Nanowires with Boerdijk-Coxeter-Bernal Structure by Atomic-Resolution Imaging. <i>Microscopy and Microanalysis</i> , 2014 , 20, 1060-1061	0.5	1
15	Nanocrystals: Fabricating a Homogeneously Alloyed AuAg Shell on Au Nanorods to Achieve Strong, Stable, and Tunable Surface Plasmon Resonances (Small 39/2015). <i>Small</i> , 2015 , 11, 5328-5328	11	1
14	Chemistry-Controlled Structural Relaxation and Enhanced Redox Abilities in Vanadium-Doped Two-Dimensional Semiconductive TeMo5O16 Catalyst. <i>Journal of Physical Chemistry C</i> , 2010 , 114, 13277-13286 ¹	3.8	1
13	Boosting Electrocatalytic Activity of 3d-Block Metal (Hydro)oxides by Ligand-Induced Conversion. <i>Angewandte Chemie</i> , 2021 , 133, 10708-10713	3.6	1
12	Pattern-Potential-Guided Growth of Textured Macromolecular Films on Graphene/High-Index Copper. <i>Advanced Materials</i> , 2021 , 33, e2006836	24	1

11	Atomic Resolution Studies of W Dopants Effect on the Phase Transformation of VO ₂ . <i>Microscopy and Microanalysis</i> , 2016 , 22, 884-885	0.5	1
10	Submicroreactors: The Development of Yolk-Shell-Structured Pd&ZnO@Carbon Submicroreactors with High Selectivity and Stability (Adv. Funct. Mater. 32/2018). <i>Advanced Functional Materials</i> , 2018 , 28, 1870227	15.6	1
9	The reaction mechanism of acetylene hydrochlorination on defective carbon supported ruthenium catalysts identified by DFT calculations and experimental approaches. <i>Inorganic Chemistry Frontiers</i> , 2022 , 9, 458-467	6.8	0
8	Roles of Vanadium Substitution of Monoclinic TeMo ₅ O ₁₆ Catalyst for Propane Selective Oxidation. <i>Chinese Journal of Catalysis</i> , 2010 , 31, 689-694	11.3	0
7	Integrating pore interconnectivity and adaptability in a single crystal hierarchical zeolite for liquid alkylation. <i>AIChE Journal</i> , 2021 , 67, e17177	3.6	0
6	Advancing Atomic-Resolution TEM of Electron Beam-Sensitive Crystalline Materials from Impossible to Routine. <i>Microscopy and Microanalysis</i> , 2019 , 25, 1676-1677	0.5	
5	STEM Tomography and Surface Plasmon Imaging of a Au-Pd Bi-metallic Nanorod with Exotic Morphology. <i>Microscopy and Microanalysis</i> , 2014 , 20, 622-623	0.5	
4	Strain-Mediated Asymmetric Growth of Plasmonic Nanocrystals: A Monometallic Au Nanorod-Au Nanoparticle Heterodimer. <i>Microscopy and Microanalysis</i> , 2015 , 21, 2207-2208	0.5	
3	Characterization of Nanomaterials by Electron Microscopy. <i>World Scientific Series in Nanoscience and Nanotechnology</i> , 2019 , 35-173	0.1	
2	A Combined Bond-Valence and Periodic DFT Study of the Active Sites in M1 Phase of MoVTenbO Composite Oxide Catalyst. <i>Chinese Journal of Catalysis</i> , 2010 , 31, 1286-1292	11.3	
1	Hierarchical Zeolites: Beyond Creation of Mesoporosity: The Advantages of Polymer-Based Dual-Function Templates for Fabricating Hierarchical Zeolites (Adv. Funct. Mater. 12/2016). <i>Advanced Functional Materials</i> , 2016 , 26, 1854-1854	15.6	