Heng Rao

List of Publications by Year
in descending order

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28 papers	2,061 citations	430874 18 h-index	501196 28 g-index
28 all docs	28 docs citations	28 times ranked	2620 citing authors

#	Article	IF	Citations
1	Visible-light-driven methane formation from CO2 with a molecular iron catalyst. Nature, 2017, 548, 74-77.	27.8	730
2	3D Hierarchical ZnIn₂S₄ Nanosheets with Rich Zn Vacancies Boosting Photocatalytic CO₂ Reduction. Advanced Functional Materials, 2019, 29, 1905153.	14.9	308
3	Visible-Light-Driven Conversion of CO₂ to CH₄ with an Organic Sensitizer and an Iron Porphyrin Catalyst. Journal of the American Chemical Society, 2018, 140, 17830-17834.	13.7	150
4	Perovskite Quantum Dots Encapsulated in a Mesoporous Metalâ€“Organic Framework as Synergistic Photocathode Materials. Journal of the American Chemical Society, 2021, 143, 14253-14260.	13.7	118
5	Platinumâ€•and CuO_xâ€Decorated TiO₂ Photocatalyst for Oxidative Coupling of Methane to C₂ Hydrocarbons in a Flow Reactor. Angewandte Chemie - International Edition, 2020, 59, 19702-19707.	13.8	106
6	Non-sensitized selective photochemical reduction of CO₂ to CO under visible light with an iron molecular catalyst. Chemical Communications, 2017, 53, 2830-2833.	4.1	100
7	Visibleâ€light Homogeneous Photocatalytic Conversion of CO₂ into CO in Aqueous Solutions with an Iron Catalyst. ChemSusChem, 2017, 10, 4447-4450.	6.8	83
8	Carbon dioxide photo/electroreduction with cobalt. Journal of Materials Chemistry A, 2019, 7, 16622-16642.	10.3	59
9	Electrochemical and Photochemical Reduction of CO₂ Catalyzed by Re(I) Complexes Carrying Local Proton Sources. Organometallics, 2019, 38, 1351-1360.	2.3	48
10	Functionalization of Zirconiumâ€Based Metalâ€“Organic Layers with Tailored Pore Environments for Heterogeneous Catalysis. Angewandte Chemie - International Edition, 2020, 59, 18224-18228.	13.8	44
11	Dualâ€Functional Photocatalysis for Cooperative Hydrogen Evolution and Benzylamine Oxidation Coupling over Sandwichedâ€Like Pd@TiO₂@ZnIn₂S₄ Nanobox. Small, 2022, 18, e2105114.	10.0	40
12	Toward Visible-Light Photochemical CO₂-to-CH₄ Conversion in Aqueous Solutions Using Sensitized Molecular Catalysis. Journal of Physical Chemistry C, 2018, 122, 13834-13839.	3.1	38
13	Highly efficient photocatalytic hydrogen evolution from nickel quinolinethiolate complexes under visible light irradiation. Journal of Power Sources, 2016, 324, 253-260.	7.8	34
14	Photocatalytic hydrogen evolution from a cobalt/nickel complex with dithiolene ligands under irradiation with visible light. Catalysis Science and Technology, 2015, 5, 2332-2339.	4.1	30
15	Spatially Separated Bifunctional Cocatalysts Decorated on Hollow-Structured TiO₂ for Enhanced Photocatalytic Hydrogen Generation. ACS Applied Materials & Interfaces, 2020, 12, 23356-23362.	8.0	28
16	Photocatalytic H2 generation based on noble-metal-free binuclear cobalt complexes using visible-light. Physical Chemistry Chemical Physics, 2013, 15, 16665.	2.8	21
17	Platinumâ€•and CuO_xâ€Decorated TiO₂ Photocatalyst for Oxidative Coupling of Methane to C₂ Hydrocarbons in a Flow Reactor. Angewandte Chemie, 2020, 132, 19870-19875.	2.0	19
18	Spatially separated bimetallic cocatalysts on hollow-structured TiO₂ for photocatalytic hydrogen generation. Materials Chemistry Frontiers, 2020, 4, 1671-1678.	5.9	19

#	Article	IF	Citations
19	Rapid removal of Sr2+, Cs+ and UO22+ from solution with surfactant and amino acid modified zeolite Y. Microporous and Mesoporous Materials, 2020, 302, 110244.	4.4	14
20	Synthesis of a new ironâ€“sulfur cluster compound and its photocatalytic H₂ evolution activity through visible light irradiation. Applied Organometallic Chemistry, 2016, 30, 638-644.	3.5	12
21	Synthesis, electrochemical property and photocatalytic H2 evolution of a novel binuclear complex under irradiation of visible light. Solar Energy, 2014, 105, 648-655.	6.1	10
22	Critical Aspects of Metalâ€“Organic Frameworkâ€Based Materials for Solarâ€Driven CO 2 Reduction into Valuable Fuels. Global Challenges, 2021, 5, 2000082.	3.6	9
23	Bioinspired spike-like double yolkâ€“shell structured TiO₂@ZnIn₂S₄ for efficient photocatalytic CO₂ reduction. Catalysis Science and Technology, 2022, 12, 1092-1099.	4.1	9
24	H₂Generation from a homogeneous photocatalytic system containing noble-metal-free Co(II) complex under the irradiation of visible light. International Journal of Energy Research, 2014, 38, 2003-2009.	4.5	7
25	Synthesis and photo-catalytic H2 evolution of three novel biomimetic photocatalysts based on [FeFe]-Hases model compound. Journal of Power Sources, 2015, 273, 1038-1047.	7.8	7
26	Functionalization of Zirconiumâ€Based Metalâ€“Organic Layers with Tailored Pore Environments for Heterogeneous Catalysis. Angewandte Chemie, 2020, 132, 18381-18385.	2.0	7
27	Photocatalytic H2 generation based on noble-metal-free Co(II) photocatalyst under visible-light-driven. Journal of the Energy Institute, 2015, 88, 359-363.	5.3	6
28	Bioinspired Selfâ€Supporting Phthalocyanine@ZnIn₂S₄ Foam for Photocatalytic CO₂ Reduction Under Visible Light Irradiation. Advanced Energy and Sustainability Research, 2022, 3, .	5.8	5