Chuang Han

List of Publications by Year
in descending order

34 papers	4,604 citations	218677 26 h-index	395702 33 g-index
35 all docs	35 docs citations	35 times ranked	6029 citing authors

#	Article	IF	Citations
1	Defective Ultrathin ZnIn₂S₄ for Photoreductive Deuteration of Carbonyls Using D₂O as the Deuterium Source. Advanced Science, 2022, 9, e2103408.	11.2	15
2	Two-photon-absorbing ruthenium complexes enable near infrared light-driven photocatalysis. Nature Communications, 2022, 13, 2288.	12.8	32
3	Cooperative Syngas Production and Câˆ’N Bond Formation in One Photoredox Cycle. Angewandte Chemie - International Edition, 2021, 60, 7962-7970.	13.8	118
4	Cooperative Syngas Production and Câˆ’N Bond Formation in One Photoredox Cycle. Angewandte Chemie, 2021, 133, 8041-8049.	2.0	18
5	Metalâ€Semiconductor Heterostructures for Photoredox Catalysis: Where Are We Now and Where Do We Go?. Advanced Functional Materials, 2021, 31, 2101103.	14.9	41
6	State-of-the-art progress in tracking plasmon-mediated photoredox catalysis. Pure and Applied Chemistry, 2021, 93, 509-524.	1.9	2
7	State of the Art and Prospects for Halide Perovskite Nanocrystals. ACS Nano, 2021, 15, 10775-10981.	14.6	705
8	A Nanocrystal Catalyst Incorporating a Surface Bound Transition Metal to Induce Photocatalytic Sequential Electron Transfer Events. Journal of the American Chemical Society, 2021, 143, 11361-11369.	13.7	47
9	Frontispiece: Photoredox Organic Synthesis Employing Heterogeneous Photocatalysts with Emphasis on Halide Perovskite. Chemistry - A European Journal, 2020, 26, .	3.3	0
10	Recent Progress in Engineering Metal Halide Perovskites for Efficient Visibleâ€Lightâ€Driven Photocatalysis. ChemSusChem, 2020, 13, 4005-4025.	6.8	79
11	Photoredox Organic Synthesis Employing Heterogeneous Photocatalysts with Emphasis on Halide Perovskite. Chemistry - A European Journal, 2020, 26, 13118-13136.	3.3	39
12	Surface/Interface Engineering of Carbonâ€Based Materials for Constructing Multidimensional Functional Hybrids. Solar Rrl, 2020, 4, 1900577.	5.8	52
13	The surface chemistry of graphene-based materials: functionalization, properties, and applications. Interface Science and Technology, 2020, 31, 453-474.	3.3	7
14	Gold nanorods-based hybrids with tailored structures for photoredox catalysis: fundamental science, materials design and applications. Nano Today, 2019, 27, 48-72.	11.9	104
15	Photocorrosion Inhibition of Semiconductor-Based Photocatalysts: Basic Principle, Current Development, and Future Perspective. ACS Catalysis, 2019, 9, 4642-4687.	11.2	432
16	Efficient photoredox conversion of alcohol to aldehyde and H₂ by heterointerface engineering of bimetalâ€“semiconductor hybrids. Chemical Science, 2019, 10, 3514-3522.	7.4	90
17	Tunable plasmonic coreâ€“shell heterostructure design for broadband light driven catalysis. Chemical Science, 2018, 9, 8914-8922.	7.4	80
18	Function-Oriented Engineering of Metal-Based Nanohybrids for Photoredox Catalysis: Exerting Plasmonic Effect and Beyond. CheM, 2018, 4, 1832-1861.	11.7	147

#	Article	IF	Citations
19	Progressive Design of Plasmonic Metalâ€“Semiconductor Ensemble toward Regulated Charge Flow and Improved Visâ€“NIRâ€Driven Solarâ€toâ€Chemical Conversion. Small, 2017, 13, 1602947.	10.0	88
20	Semiconductors: Progressive Design of Plasmonic Metalâ€“Semiconductor Ensemble toward Regulated Charge Flow and Improved Visâ€“NIRâ€Driven Solarâ€toâ€Chemical Conversion (Small 14/2017). Small, 2017, 13, .	10.0	0
21	One dimensional CdS based materials for artificial photoredox reactions. Journal of Materials Chemistry A, 2017, 5, 2387-2410.	10.3	190
22	Near-field dielectric scattering promotes optical absorption by platinum nanoparticles. Nature Photonics, 2016, 10, 473-482.	31.4	298
23	Heterostructured semiconductor nanowire arrays for artificial photosynthesis. Materials Horizons, 2016, 3, 270-282.	12.2	95
24	Insight into the Origin of Boosted Photosensitive Efficiency of Graphene from the Cooperative Experiment and Theory Study. Journal of Physical Chemistry C, 2016, 120, 27091-27103.	3.1	37
25	Structural diversity of graphene materials and their multifarious roles in heterogeneous photocatalysis. Nano Today, 2016, 11, 351-372.	11.9	283
26	Photocatalytic water splitting for solar hydrogen generation: fundamentals and recent advancements. International Reviews in Physical Chemistry, 2016, 35, 1-36.	2.3	288
27	Origin of Enhancing the Photocatalytic Performance of TiO₂ for Artificial Photoreduction of CO₂ through a SiO₂ Coating Strategy. Journal of Physical Chemistry C, 2016, 120, 265-273.	3.1	76
28	Hierarchical Hybrids: Hierarchically CdS Decorated 1D ZnO Nanorodsâ€2D Graphene Hybrids: Low Temperature Synthesis and Enhanced Photocatalytic Performance (Adv. Funct. Mater. 2/2015). Advanced Functional Materials, 2015, 25, 170-170.	14.9	8
29	Insight into the Effect of Highly Dispersed MoS₂ versus Layer-Structured MoS₂ on the Photocorrosion and Photoactivity of CdS in Grapheneâ€“CdSâ€“MoS₂ Composites. Journal of Physical Chemistry C, 2015, 119, 27234-27246.	3.1	254
30	Precursor chemistry matters in boosting photoredox activity of graphene/semiconductor composites. Nanoscale, 2015, 7, 18062-18070.	5.6	67
31	Hierarchically CdS Decorated 1D ZnO Nanorodsâ€2D Graphene Hybrids: Low Temperature Synthesis and Enhanced Photocatalytic Performance. Advanced Functional Materials, 2015, 25, 221-229.	14.9	394
32	One-dimensional Nanostructures for Photocatalytic Organic Synthesis. Current Organic Chemistry, 2015, 19, 484-497.	1.6	11
33	Enhancing the visible light photocatalytic performance of ternary CdSâ€“(grapheneâ€“Pd) nanocomposites via a facile interfacial mediator and co-catalyst strategy. Journal of Materials Chemistry A, 2014, 2, 19156-19166.	10.3	130
34	Improving the photocatalytic activity and anti-photocorrosion of semiconductor ZnO by coupling with versatile carbon. Physical Chemistry Chemical Physics, 2014, 16, 16891.	2.8	374