Hui-Chao He

List of Publications by Citations

69 papers	1,529 citations	21 h-index	37 g-index
74 ext. papers	2,064 ext. citations	7.8 avg, IF	4.9 L-index

#	Paper	IF	Citations
69	Convincing Synthesis of Atomically Thin, Single-Crystalline InVO Sheets toward Promoting Highly Selective and Efficient Solar Conversion of CO into CO. *Journal of the American Chemical Society*, **2019**, 141, 4209-4213	16.4	124
68	Synthesis of BiVO4 nanoflake array films for photoelectrochemical water oxidation. *Journal of Materials Chemistry A*, **2014**, 2, 9371-9379	13	121
67	Polyhedral 30-Faceted BiVO Microcrystals Predominantly Enclosed by High-Index Planes Promoting Photocatalytic Water-Splitting Activity. *Advanced Materials*, **2018**, 30, 1703119	24	117
66	Nanostructured Bi2S3/WO3 heterojunction films exhibiting enhanced photoelectrochemical performance. *Journal of Materials Chemistry A*, **2013**, 1, 12826	13	114
65	p-Si/W2C and p-Si/W2C/Pt photocathodes for the hydrogen evolution reaction. *Journal of the American Chemical Society*, **2014**, 136, 1535-44	16.4	70
64	Carbon-incorporated NiO/CoO concave surface microcubes derived from a MOF precursor for overall water splitting. *Chemical Communications*, **2019**, 55, 6515-6518	5.8	66
63	In3+-doped BiVO4 photoanodes with passivated surface states for photoelectrochemical water oxidation. *Journal of Materials Chemistry A*, **2018**, 6, 10456-10465	13	57
62	Three-Dimensional Dendritic Structures of NiCoMo as Efficient Electrocatalysts for the Hydrogen Evolution Reaction. *ACS Applied Materials & Interfaces*, **2017**, 9, 22420-22431	9.5	55
61	State-of-the-art advancements of crystal facet-exposed photocatalysts beyond TiO2: Design and dependent performance for solar energy conversion and environment applications. *Materials Today* , **2020**, 33, 75-86	21.8	50
60	Carbon-incorporated porous honeycomb NiCoFe phosphide nanospheres derived from a MOF precursor for overall water splitting. *Chemical Communications*, **2019**, 55, 10896-10899	5.8	48
59	Improved Surface Charge Transfer in MoO3/BiVO4 Heterojunction Film for Photoelectrochemical Water Oxidation. *Electrochimica Acta*, **2017**, 257, 181-191	6.7	42
58	State-of-the-art progress in the use of ternary metal oxides as photoelectrode materials for water splitting and organic synthesis. *Nano Today*, **2019**, 28, 100763	17.9	40
57	Electrodeposited amorphous cobalt phosphosulfide on Ni foams for highly efficient overall water splitting. *Journal of Power Sources*, **2019**, 431, 182-188	8.9	31
56	Quasi-Topotactic Transformation of FeOOH Nanorods to Robust FeO Porous Nanopillars Triggered with a Facile Rapid Dehydration Strategy for Efficient Photoelectrochemical Water Splitting. *ACS Applied Materials & Interfaces*, **2018**, 10, 10141-10146	9.5	30
55	Facile room-temperature surface modification of unprecedented FeB co-catalysts on Fe2O3 nanorod photoanodes for high photoelectrochemical performance. *Journal of Catalysis*, **2017**, 352, 113-119	7.3	29
54	Anchoring of black phosphorus quantum dots onto WO nanowires to boost photocatalytic CO conversion into solar fuels. *Chemical Communications*, **2020**, 56, 7777-7780	5.8	29
53	Enhanced photoelectrochemical water oxidation on WO3 nanoflake films by coupling with amorphous TiO2. *Electrochimica Acta*, **2018**, 283, 871-881	6.7	29

52	Vacancy-defect modulated pathway of photoreduction of CO on single atomically thin AgInPS sheets into olefiant gas. *Nature Communications*, **2021**, 12, 4747	17.4	28
51	Simultaneous removal and recovery of uranium from aqueous solution using TiO2 photoelectrochemical reduction method. *Journal of Radioanalytical and Nuclear Chemistry*, **2017**, 313, 59-67	1.5	27
50	In situ no-slot joint integration of half-metallic C(CN)3 cocatalyst into g-C3N4 scaffold: An absolute metal-free in-plane heterosystem for efficient and selective photoconversion of CO2 into CO. *Applied Catalysis B: Environmental*, **2020**, 264, 118470	21.8	26
49	Enhanced charge separation and transfer by Bi 2 MoO 6 @Bi 2 Mo 2 O 9 compound using SILAR for photoelectrochemical water oxidation. *Electrochimica Acta*, **2018**, 264, 26-35	6.7	23
48	Boosting the hydrogen evolution performance of a ternary MoxCo1−xP nanowire array by tuning the Mo/Co ratio. *Journal of Materials Chemistry A*, **2019**, 7, 14842-14848	13	21
47	Thermodynamic and Kinetic Influence of Oxygen Vacancies on the Solar Water Oxidation Reaction of FeO Photoanodes. *ACS Applied Materials & Interfaces*, **2020**, 12, 11625-11634	9.5	21
46	Selective adsorption of uranyl and potentially toxic metal ions at the core-shell MFeO-TiO (M=Mn, Fe, Zn, Co, or Ni) nanoparticles. *Journal of Hazardous Materials*, **2019**, 365, 835-845	12.8	18
45	Enhanced Photoelectrochemical Water Oxidation Performance on BiVO by Coupling of CoMoO as a Hole-Transfer and Conversion Cocatalyst. *ACS Applied Materials & Interfaces*, **2018**, 10, 42207-42216	9.5	18
44	Highly symmetrical, 24-faceted, concave BiVO polyhedron bounded by multiple high-index facets for prominent photocatalytic O evolution under visible light. *Chemical Communications*, **2019**, 55, 4777-4780	5.8	17
43	Boosted Water Oxidation Activity and Kinetics on BiVO Photoanodes with Multihigh-Index Crystal Facets. *Inorganic Chemistry*, **2018**, 57, 15280-15288	5.1	16
42	Reduced-graphene-oxide-loaded MoS2Ni3S2 nanorod arrays on Ni foam as an efficient and stable electrocatalyst for the hydrogen evolution reaction. *Electrochemistry Communications*, **2019**, 99, 22-26	5.1	15
41	Magnetic Field-Assisted Photoelectrochemical Water Splitting: The Photoelectrodes Have Weaker Nonradiative Recombination of Carrier. *ACS Catalysis*, **2021**, 11, 1242-1247	13.1	15
40	Photoelectrochemical driving and clean synthesis of energetic salts of 5,5?-azotetrazolate at room temperature. *Green Chemistry*, **2018**, 20, 3722-3726	10	14
39	Insight into the Improvement Mechanism of Copper Oxide/BiVO4 Heterojunction Photoanodes for Solar Water Oxidation. *Journal of the Electrochemical Society*, **2019**, 166, H513-H520	3.9	13
38	Selective Removal of Uranyl from Aqueous Solutions Containing a Mix of Toxic Metal Ions Using CoreShell MFe2O4TiO2 Nanoparticles of Montmorillonite Edge Sites. *ACS Sustainable Chemistry and Engineering*, **2018**, 6, 16267-16278	8.3	13
37	Insight into the Kinetic Influence of Oxygen Vacancies on the WO Photoanodes for Solar Water Oxidation. *Journal of Physical Chemistry Letters*, **2019**, 10, 6159-6165	6.4	12
36	BiVO tubular structures: oxygen defect-rich and largely exposed reactive {010} facets synergistically boost photocatalytic water oxidation and the selective N[double bond, length as m-dash]N coupling reaction of 5-amino-1H-tetrazole. *Chemical Communications*, **2019**, 55, 5635-5638	5.8	12
35	WO3 homojunction photoanode: Integrating the advantages of WO3 different facets for efficient water oxidation. *Journal of Energy Chemistry*, **2021**, 56, 37-45	12	12

34	Pyridine-Diketopyrrolopyrrole-Based Novel Metal-Free Visible-Light Organophotoredox Catalyst for Atom-Transfer Radical Polymerization. *Journal of Physical Chemistry A*, **2020**, 124, 1068-1075	2.8	11
33	Cu3Mo2O9/BiVO4 Heterojunction Films with Integrated Thermodynamic and Kinetic Advantages for Solar Water Oxidation. *ACS Sustainable Chemistry and Engineering*, **2020**, 8, 14082-14090	8.3	11
32	MoO3/BiVO4 heterojunction film with oxygen vacancies for efficient and stable photoelectrochemical water oxidation. *Journal of Materials Science*, **2019**, 54, 671-682	4.3	11
31	Microbially Mediated Stable Uranium Phosphate Nano-Biominerals. *Journal of Nanoscience and Nanotechnology*, **2017**, 17, 6771-6780	1.3	10
30	Impact of Ferroelectric Polarization on Different Semiconductors for Photoelectrochemical Application. *ACS Sustainable Chemistry and Engineering*, **2019**, 7, 19640-19648	8.3	10
29	Improving photoelectrochemical reduction of Cr(VI) ions by building □FeO/TiO electrode. *Environmental Science and Pollution Research*, **2018**, 25, 22455-22463	5.1	9
28	Ordered NiO□TiO2 nanotube arrays as an efficient catalyst support for methanol oxidation. *Physica Status Solidi (A) Applications and Materials Science*, **2015**, 212, 2085-2090	1.6	8
27	Trimetallic CoFeCr hydroxide electrocatalysts synthesized at a low temperature for accelerating water oxidation via tuning the electronic structure of active sites. *Sustainable Energy and Fuels*, **2020**, 4, 3647-3653	5.8	7
26	Ultrathin nanosheet-anchored hexahedral prismatic Bi2MoO6 arrays: one-step constructed and crystal facet-based homojunctions boosting photocatalytic CO2 reduction and N2 fixation. *Catalysis Science and Technology*, **2019**, 9, 7045-7050	5.5	7
25	Plasmonic Cocatalyst with Electric and Thermal Stimuli Boots Solar Hydrogen Evolution. *Solar Rrl*, **2020**, 4, 2000094	7.1	6
24	Self-Assembly of Water-Soluble Glutathione Thiol-Capped n-Hematite□□Zn-Ferrites (X = Mg, Mn, or Ni): Experiment and Theory. *Journal of Physical Chemistry C*, **2017**, 121, 24046-24059	3.8	5
23	Photoelectrochemical Driving and Simultaneous Synthesis of 3-pyridinecarboxylic Acid and Hydrogen in WO3 Photoanode-Based Cell. *Journal of the Electrochemical Society*, **2019**, 166, H662-H668	3.9	5
22	A high-efficiency photocatalyst, flaky anatase@natural rutile composite using one-step microwave hydrothermal synthesis. *Research on Chemical Intermediates*, **2018**, 44, 705-720	2.8	5
21	Geometric and electronic modulation of fcc NiCo alloy by Group-VI B metal doping to accelerate hydrogen evolution reaction in acidic and alkaline media. *Chemical Engineering Journal*, **2022**, 430, 133110	14.7	5
20	An Efficient Metal-Free Photocatalytic System with Enhanced Activity for NADH Regeneration. *Industrial & Engineering Chemistry Research*, **2019**, 58, 23567-23573	3.9	5
19	Cascade cycling of nicotinamide cofactor in a dual enzyme microsystem. *Chemical Communications*, **2020**, 56, 2723-2726	5.8	4
18	Magnetic field improved photoelectrochemical synthesis of 5,5?-azotetrazolate energetic salts and hydrogen in a hematite photoanode-based cell. *Electrochimica Acta*, **2020**, 330, 135217	6.7	4
17	Objective Findings on the K-Doped -CN Photocatalysts: The Presence and Influence of Organic Byproducts on K-Doped -CN Photocatalysis. *Langmuir*, **2021**, 37, 4859-4868	4	4

List of Publications

16	Competitive Adsorption of Uranyl and Toxic Trace Metal Ions at MFe2O4-montmorillonite (M = Mn, Fe, Zn, Co, or Ni) Interfaces. *Clays and Clay Minerals*, **2019**, 67, 291-305	2.1	4
15	Synthesis and characterization of Sb2O3: a stable electrocatalyst for efficient H2O2 production and accumulation and effective degradation of dyes. *New Journal of Chemistry*, **2021**, 45, 8958-8964	3.6	4
14	Plasmonic Cocatalyst with Electric and Thermal Stimuli Boots Solar Hydrogen Evolution. *Solar Rrl*, **2020**, 4, 2070062	7.1	3
13	Interfacial Engineering for the Fast Carrier Tunneling Channel by a Novelty Quaternary Layered Photoanode. *ACS Applied Energy Materials*, **2019**, 2, 6780-6789	6.1	3
12	Hole dynamic acceleration over CdSO nanoparticles for high-efficiency solar hydrogen production with urea photolysis. *Journal of Materials Chemistry A*, **2019**, 7, 25650-25656	13	3
11	Unpaired Electron-Induced Wide-Range Light Absorption within Zn (or Cu) MOFs Containing Electron-Withdrawing Ligands: A Theoretical and Experimental Study. *Journal of Physical Chemistry A*, **2020**, 124, 5314-5322	2.8	2
10	□Fe2O3/Ag/CdS ternary heterojunction photoanode for efficient solar water oxidation. *Catalysis Science and Technology*, **2021**, 11, 5859-5867	5.5	2
9	Boosting O 2 Reduction and H 2 O Dehydrogenation Kinetics: Surface N -Hydroxymethylation of g -C 3 N 4 Photocatalysts for the Efficient Production of H 2 O 2. *Advanced Functional Materials*,2111125	15.6	2
8	Convenient Synthesis of 5,5?-azotetrazolate Energetic Salts through Electrochemical Oxidative-Coupling of 5-amino-1H-tetrazole Under Mild Conditions. *Journal of the Electrochemical Society*, **2020**, 167, 065503	3.9	1
7	Accurate Understanding the Catalytic Role of MnO2 in the Oxidative-Coupling of 2-naphthols into 1,1?-bi-2-naphthols. *Catalysis Letters*, **2021**, 151, 901-908	2.8	1
6	Objective Observations of the Electrochemical Production of H2O2 in KHCO3 Aqueous Electrolyte and Related Application Inspirations. *Journal of Physical Chemistry C*, **2021**, 125, 19831-19838	3.8	1
5	Dual-functional water splitting: Electro-fenton-like pollutants degradation from anode reaction and hydrogen fuel production from cathode reaction. *Electrochimica Acta*, **2021**, 394, 139122	6.7	1
4	State-of-the-art advancements of transition metal oxides as photoelectrode materials for solar water splitting. *Rare Metals*,1	5.5	1
3	Efficient adsorption of U(VI) using in low-level radioactive wastewater containing organic matter by amino groups modified polyacrylonitrile fibers. *Journal of Radioanalytical and Nuclear Chemistry*, **2022**, 331, 921	1.5	0
2	Photocatalytic oxidative-coupling of 5-amino-1H-tetrazole for the synthesis of 5,5?-azotetrazolate energetic salts at mild conditions. *Catalysis Communications*, **2020**, 136, 105923	3.2	0
1	Development of an alkaline Electro-Fenton process based on the synthesis of H2O2 in bicarbonate electrolyte. *Catalysis Science and Technology*,	5.5	