# Hui-Chao He

## List of Publications by Year in Descending Order



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|---|---|---|---|
| 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 | 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 |
| 68 | 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 |
| 67 | 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 |
| 66 | WO3 homojunction photoanode: Integrating the advantages of WO3 different facets for efficient water oxidation. *Journal of Energy Chemistry*, **2021**, 56, 37-45 | 12 | 12 |
| 65 | 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 |
| 64 | Magnetic Field-Assisted Photoelectrochemical Water Splitting: The Photoelectrodes Have Weaker Nonradiative Recombination of Carrier. *ACS Catalysis*, **2021**, 11, 1242-1247 | 13.1 | 15 |
| 63 | □Fe2O3/Ag/CdS ternary heterojunction photoanode for efficient solar water oxidation. *Catalysis Science and Technology*, **2021**, 11, 5859-5867 | 5.5 | 2 |
| 62 | 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 |
| 61 | 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 |
| 60 | 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 |
| 59 | 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 |
| 58 | 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 |
| 57 | 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 |
| 56 | Plasmonic Cocatalyst with Electric and Thermal Stimuli Boots Solar Hydrogen Evolution. *Solar Rrl*, **2020**, 4, 2070062 | 7.1 | 3 |
| 55 | Plasmonic Cocatalyst with Electric and Thermal Stimuli Boots Solar Hydrogen Evolution. *Solar Rrl*, **2020**, 4, 2000094 | 7.1 | 6 |
| 54 | 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 |
| 53 | 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 |

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| 52 | Cascade cycling of nicotinamide cofactor in a dual enzyme microsystem. *Chemical Communications*, **2020**, 56, 2723-2726 | 5.8 | 4 |
| 51 | 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 |
| 50 | 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 |
| 49 | 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 |
| 48 | 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 |
| 47 | 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 |
| 46 | 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 |
| 45 | 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 |
| 44 | 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 |
| 43 | 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 |
| 42 | 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 |
| 41 | Boosting the hydrogen evolution performance of a ternary MoxCo1□P nanowire array by tuning the Mo/Co ratio. *Journal of Materials Chemistry A*, **2019**, 7, 14842-14848 | 13 | 21 |
| 40 | Electrodeposited amorphous cobalt phosphosulfide on Ni foams for highly efficient overall water splitting. *Journal of Power Sources*, **2019**, 431, 182-188 | 8.9 | 31 |
| 39 | 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 |
| 38 | 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 |
| 37 | 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 |
| 36 | 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 |
| 35 | 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 |

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| 34 | 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 |
| 33 | 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 |
| 32 | 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 |
| 31 | 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 |
| 30 | 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 |
| 29 | Impact of Ferroelectric Polarization on Different Semiconductors for Photoelectrochemical Application. *ACS Sustainable Chemistry and Engineering*, **2019**, 7, 19640-19648 | 8.3 | 10 |
| 28 | An Efficient Metal-Free Photocatalytic System with Enhanced Activity for NADH Regeneration. *Industrial & Engineering Chemistry Research*, **2019**, 58, 23567-23573 | 3.9 | 5 |
| 27 | 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 |
| 26 | 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 |
| 25 | 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 |
| 24 | Improving photoelectrochemical reduction of Cr(VI) ions by building FeO/TiO electrode. *Environmental Science and Pollution Research*, **2018**, 25, 22455-22463 | 5.1 | 9 |
| 23 | 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 |
| 22 | 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 |
| 21 | 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 |
| 20 | In3+-doped BiVO4 photoanodes with passivated surface states for photoelectrochemical water oxidation. *Journal of Materials Chemistry A*, **2018**, 6, 10456-10465 | 13 | 57 |
| 19 | Photoelectrochemical driving and clean synthesis of energetic salts of 5,5?-azotetrazolate at room temperature. *Green Chemistry*, **2018**, 20, 3722-3726 | 10 | 14 |
| 18 | Enhanced photoelectrochemical water oxidation on WO3 nanoflake films by coupling with amorphous TiO2. *Electrochimica Acta*, **2018**, 283, 871-881 | 6.7 | 29 |
| 17 | Polyhedral 30-Faceted BiVO Microcrystals Predominantly Enclosed by High-Index Planes Promoting Photocatalytic Water-Splitting Activity. *Advanced Materials*, **2018**, 30, 1703119 | 24 | 117 |

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| 16 | 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 |
| 15 | Boosted Water Oxidation Activity and Kinetics on BiVO Photoanodes with Multihigh-Index Crystal Facets. *Inorganic Chemistry*, **2018**, 57, 15280-15288 | 5.1 | 16 |
| 14 | Selective Removal of Uranyl from Aqueous Solutions Containing a Mix of Toxic Metal Ions Using Core□Shell MFe2O4□TiO2 Nanoparticles of Montmorillonite Edge Sites. *ACS Sustainable Chemistry and Engineering*, **2018**, 6, 16267-16278 | 8.3 | 13 |
| 13 | 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 |
| 12 | 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 |
| 11 | 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 |
| 10 | Improved Surface Charge Transfer in MoO3/BiVO4 Heterojunction Film for Photoelectrochemical Water Oxidation. *Electrochimica Acta*, **2017**, 257, 181-191 | 6.7 | 42 |
| 9 | 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 |
| 8 | Microbially Mediated Stable Uranium Phosphate Nano-Biominerals. *Journal of Nanoscience and Nanotechnology*, **2017**, 17, 6771-6780 | 1.3 | 10 |
| 7 | 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 |
| 6 | 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 |
| 5 | Synthesis of BiVO4 nanoflake array films for photoelectrochemical water oxidation. *Journal of Materials Chemistry A*, **2014**, 2, 9371-9379 | 13 | 121 |
| 4 | Nanostructured Bi2S3/WO3 heterojunction films exhibiting enhanced photoelectrochemical performance. *Journal of Materials Chemistry A*, **2013**, 1, 12826 | 13 | 114 |
| 3 | State-of-the-art advancements of transition metal oxides as photoelectrode materials for solar water splitting. *Rare Metals*,1 | 5.5 | 1 |
| 2 | 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 |
| 1 | Development of an alkaline Electro-Fenton process based on the synthesis of H2O2 in bicarbonate electrolyte. *Catalysis Science and Technology*, | 5.5 | |