

# Lihao Han

## List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/2611008/publications.pdf>

Version: 2024-02-01

18  
papers

1,813  
citations

687363

13  
h-index

940533

16  
g-index

19  
all docs

19  
docs citations

19  
times ranked

3230  
citing authors

| #  | ARTICLE  | IF   | CITATIONS |
|----|--|------|-----------|
| 1  | Efficient solar water splitting by enhanced charge separation in a bismuth vanadate-silicon tandem photoelectrode. <i>Nature Communications</i> , 2013, 4, 2195.   | 12.8 | 1,137     |
| 2  | Efficient Water-Splitting Device Based on a Bismuth Vanadate Photoanode and Thin-Film Silicon Solar Cells. <i>ChemSusChem</i> , 2014, 7, 2832-2838.  | 6.8  | 149       |
| 3  | A direct coupled electrochemical system for capture and conversion of CO <sub>2</sub> from oceanwater. <i>Nature Communications</i> , 2020, 11, 4412.  | 12.8 | 91        |
| 4  | High-Rate Electrochemical Reduction of Carbon Monoxide to Ethylene Using Cu-Nanoparticle-Based Gas Diffusion Electrodes. <i>ACS Energy Letters</i> , 2018, 3, 855-860.   | 17.4 | 77        |
| 5  | Extracting large photovoltages from a-SiC photocathodes with an amorphous TiO <sub>2</sub> front surface field layer for solar hydrogen evolution. <i>Energy and Environmental Science</i> , 2015, 8, 1585-1593.   | 30.8 | 74        |
| 6  | An Experimental- and Simulation-Based Evaluation of the CO <sub>2</sub> Utilization Efficiency of Aqueous-Based Electrochemical CO <sub>2</sub> Reduction Reactors with Ion-Selective Membranes. <i>ACS Applied Energy Materials</i> , 2019, 2, 5843-5850. | 5.1  | 51        |
| 7  | Optimization of amorphous silicon double junction solar cells for an efficient photoelectrochemical water splitting device based on a bismuth vanadate photoanode. <i>Physical Chemistry Chemical Physics</i> , 2014, 16, 4220-4229.                       | 2.8  | 40        |
| 8  | Raman study of laser-induced heating effects in free-standing silicon nanocrystals. <i>Nanoscale</i> , 2015, 7, 8389-8397.   | 5.6  | 36        |
| 9  | Gradient dopant profiling and spectral utilization of monolithic thin-film silicon photoelectrochemical tandem devices for solar water splitting. <i>Journal of Materials Chemistry A</i> , 2015, 3, 4155-4162.  | 10.3 | 35        |
| 10 | A novel preparation method for ZnO/Al <sub>2</sub> O <sub>3</sub> nanofibers with enhanced absorbability and improved photocatalytic water-treatment performance by Ag nanoparticles. <i>Nanoscale</i> , 2018, 10, 6892-6899.                              | 5.6  | 33        |
| 11 | Decoupling H <sub>2</sub> (g) and O <sub>2</sub> (g) Production in Water Splitting by a Solar-Driven V <sup>3+/2+</sup> (aq, H <sub>2</sub> SO <sub>4</sub> )   KOH(aq) Cell. <i>ACS Energy Letters</i> , 2019, 4, 968-976.                                | 17.4 | 33        |
| 12 | A thin-film silicon/silicon hetero-junction hybrid solar cell for photoelectrochemical water-reduction applications. <i>Solar Energy Materials and Solar Cells</i> , 2016, 150, 82-87.   | 6.2  | 17        |
| 13 | A Hybrid Catalyst-Bonded Membrane Device for Electrochemical Carbon Monoxide Reduction at Different Relative Humidities. <i>ACS Sustainable Chemistry and Engineering</i> , 2019, 7, 16964-16970.  | 6.7  | 14        |
| 14 | A low-temperature synthesis of electrochemical active Pt nanoparticles and thin films by atomic layer deposition on Si(111) and glassy carbon surfaces. <i>Thin Solid Films</i> , 2015, 586, 28-34.  | 1.8  | 11        |
| 15 | Reliable Performance Characterization of Mediated Photocatalytic Water-Splitting Half Reactions. <i>ChemSusChem</i> , 2017, 10, 2158-2166.   | 6.8  | 8         |
| 16 | Optical modeling of an efficient water splitting device based on bismuth vanadate photoanode and micromorph silicon solar cells. , 2014, , .   |      | 3         |
| 17 | Size control, quantum confinement, and oxidation kinetics of silicon nanocrystals synthesized at a high rate by expanding thermal plasma. <i>Applied Physics Letters</i> , 2015, 106, 213106.  | 3.3  | 3         |
| 18 | Silicon quantum dots in an oxide matrix for third generation photovoltaic solar cells. , 2010, , .   |      | 1         |