

# Hao Cai

## List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/2666069/publications.pdf>

Version: 2024-02-01

24  
papers

1,762  
citations

471509

17  
h-index

580821

25  
g-index

33  
all docs

33  
docs citations

33  
times ranked

2491  
citing authors

| #  | ARTICLE   | IF   | CITATIONS |
|----|---|------|-----------|
| 1  | Well-to-wheels energy use and greenhouse gas emissions of ethanol from corn, sugarcane and cellulosic biomass for US use. <i>Environmental Research Letters</i> , 2012, 7, 045905.  | 5.2  | 379       |
| 2  | Cellulosic ethanol: status and innovation. <i>Current Opinion in Biotechnology</i> , 2017, 45, 202-211.   | 6.6  | 316       |
| 3  | Life-cycle analysis of bio-based aviation fuels. <i>Bioresource Technology</i> , 2013, 150, 447-456.  | 9.6  | 118       |
| 4  | Robust paths to net greenhouse gas mitigation and negative emissions via advanced biofuels. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2020, 117, 21968-21977.                | 7.1  | 110       |
| 5  | Energy Efficiency and Greenhouse Gas Emission Intensity of Petroleum Products at U.S. Refineries. <i>Environmental Science &amp; Technology</i> , 2014, 48, 7612-7624.  | 10.0 | 103       |
| 6  | Driving towards cost-competitive biofuels through catalytic fast pyrolysis by rethinking catalyst selection and reactor configuration. <i>Energy and Environmental Science</i> , 2018, 11, 2904-2918.                       | 30.8 | 95        |
| 7  | An assessment of the potential products and economic and environmental impacts resulting from a billion ton bioeconomy. <i>Biofuels, Bioproducts and Biorefining</i> , 2017, 11, 110-128.                                   | 3.7  | 71        |
| 8  | Wells to wheels: water consumption for transportation fuels in the United States. <i>Energy and Environmental Science</i> , 2016, 9, 787-802.   | 30.8 | 67        |
| 9  | Carbon footprint of global natural gas supplies to China. <i>Nature Communications</i> , 2020, 11, 824.   | 12.8 | 54        |
| 10 | Life-cycle analysis of integrated biorefineries with co-production of biofuels and bio-based chemicals: co-product handling methods and implications. <i>Biofuels, Bioproducts and Biorefining</i> , 2018, 12, 815-833.     | 3.7  | 53        |
| 11 | Well-to-Wheels Greenhouse Gas Emissions of Canadian Oil Sands Products: Implications for U.S. Petroleum Fuels. <i>Environmental Science &amp; Technology</i> , 2015, 49, 8219-8227.   | 10.0 | 51        |
| 12 | Life-cycle energy use and greenhouse gas emissions of production of bioethanol from sorghum in the United States. <i>Biotechnology for Biofuels</i> , 2013, 6, 141.   | 6.2  | 49        |
| 13 | Provincial Greenhouse Gas Emissions of Gasoline and Plug-in Electric Vehicles in China: Comparison from the Consumption-Based Electricity Perspective. <i>Environmental Science &amp; Technology</i> , 2021, 55, 6944-6956. | 10.0 | 38        |
| 14 | Environmental, Economic, and Scalability Considerations and Trends of Selected Fuel Economy-Enhancing Biomass-Derived Blendstocks. <i>ACS Sustainable Chemistry and Engineering</i> , 2018, 6, 561-569.                     | 6.7  | 28        |
| 15 | Techno-economic Analysis and Life-Cycle Analysis of Renewable Diesel Fuels Produced with Waste Feedstocks. <i>ACS Sustainable Chemistry and Engineering</i> , 2022, 10, 382-393.  | 6.7  | 28        |
| 16 | Life cycle assessment of fuel ethanol produced from soluble sugar in sweet sorghum stalks in North China. <i>Journal of Cleaner Production</i> , 2017, 161, 335-344.  | 9.3  | 24        |
| 17 | Future private car stock in China: current growth pattern and effects of car sales restriction. <i>Mitigation and Adaptation Strategies for Global Change</i> , 2020, 25, 289-306.  | 2.1  | 23        |
| 18 | Techno-Economic Analysis and Life-Cycle Analysis of Two Light-Duty Bioblendstocks: Isobutanol and Aromatic-Rich Hydrocarbons. <i>ACS Sustainable Chemistry and Engineering</i> , 2018, 6, 8790-8800.                        | 6.7  | 18        |

| #  | ARTICLE  | IF   | CITATIONS |
|----|--|------|-----------|
| 19 | Consideration of Black Carbon and Primary Organic Carbon Emissions in Life-Cycle Analysis of Greenhouse Gas Emissions of Vehicle Systems and Fuels. <i>Environmental Science &amp; Technology</i> , 2014, 48, 12445-12453. | 10.0 | 16        |
| 20 | Whole-building life-cycle analysis with a new GREET <sup>®</sup> tool: Embodied greenhouse gas emissions and payback period of a LEED-Certified library. <i>Building and Environment</i> , 2022, 209, 108664.              | 6.9  | 16        |
| 21 | Co-optimization of Heavy-Duty Fuels and Engines: Cost Benefit Analysis and Implications. <i>Environmental Science &amp; Technology</i> , 2019, 53, 12904-12913.  | 10.0 | 14        |
| 22 | Dynamic life-cycle carbon analysis for fast pyrolysis biofuel produced from pine residues: implications of carbon temporal effects. <i>Biotechnology for Biofuels</i> , 2021, 14, 191.                                     | 6.2  | 14        |
| 23 | Environmental, Economic, and Scalability Considerations of Selected Bio-Derived Blendstocks for Mixing-Controlled Compression Ignition Engines. <i>ACS Sustainable Chemistry and Engineering</i> , 2022, 10, 6699-6712.    | 6.7  | 13        |
| 24 | Dynamic Life-Cycle Analysis of Fast Pyrolysis Biorefineries: Impacts of Feedstock Moisture Content and Particle Size. <i>ACS Sustainable Chemistry and Engineering</i> , 2020, 8, 6211-6221.                               | 6.7  | 11        |