Special Issue

Insights into Hydrogen Production Using Solar Energy

Message from the Guest Editor

Hydrogen is emerging as a leading sustainable energy carrier, with the potential to decarbonise a variety of sectors. Integrating solar energy in hydrogen production processes plays a key role in advancing carbon-neutral technologies and reducing our reliance on fossil fuels. This Special Issue aims to gather high-quality research papers, reviews, and case studies that explore current trends, challenges, and opportunities in solar-driven hydrogen generation. Topics of interest include, but are not limited to, the following:

- Photoelectrochemical water splitting for hydrogen production;
- Thermochemical and photothermal hydrogen production methods;
- Catalysts and materials for enhanced solar-to-hydrogen conversion;
- System designs and reactor configurations for solar hydrogen production;
- Techno-economic assessments of solar-driven hydrogen generation;
- Policy, market, and sustainability considerations in solar hydrogen initiatives.

Guest Editor

Dr. Mahmoud Eltaweel

Energy and Sustainable Manufacturing Research Group, School of Physics, Engineering and Computer Science, University of Hertfordshire, Hatfield AL10 9AB, UK

Deadline for manuscript submissions

15 January 2026

Processes

an Open Access Journal by MDPI

Impact Factor 2.8
CiteScore 5.5

mdpi.com/si/228136

Processes
Editorial Office
MDPI, Grosspeteranlage 5
4052 Basel, Switzerland
Tel: +41 61 683 77 34
processes@mdpi.com

mdpi.com/journal/processes

Processes

an Open Access Journal by MDPI

Impact Factor 2.8
CiteScore 5.5

mdpi.com/journal/processes

About the Journal

Message from the Editor-in-Chief

You are invited to contribute either a research article or a comprehensive review for consideration and publication in *Processes* (ISSN 2227-9717). *Processes* is published in open access format – research articles, reviews, and other content are released on the internet immediately after acceptance. The scientific community and the general public have unlimited, free access to the content. As an open access journal, *Processes* is supported by the authors and their institutes through the payment of article processing charges (APCs) for accepted papers. We would be pleased to welcome you as one of our authors.

Editor-in-Chief

Prof. Dr. Giancarlo Cravotto
Department of Drug Science and Technology, University of Turin, Via P. Giuria 9, 10125 Turin, Italy

Author Benefits

Open Access:

free for readers, with article processing charges (APC) paid by authors or their institutions.

High Visibility:

indexed within Scopus, SCIE (Web of Science), Ei Compendex, Inspec, AGRIS, and other databases.

Journal Rank:

CiteScore - Q2 (Chemical Engineering (miscellaneous))