Special Issue

Unconventional Hydrogen Applications and Systems

Message from the Guest Editor

The energy sector is transitioning to use hydrogen as the main vector to replace fossil fuels. Hydrogen is a promising molecule that can store energy with a high density (33.33 kWh/kg by lower heating value). However, what happens to all the fossil fuel resources we are left with? And where can we actually apply hydrogen to replace fossil fuels? To attempt to answer these significant questions, this platform mainly aims to collect and report data from unconventional and novel applications of hydrogens, including disruptive systems for hydrogen production from unconventional sources of energy like nuclear, hydropower, tidal and wave energy. Moreover, the application of hydrogen for decarbonising underrated but highly emitting sectors like domestic, aviation, etc. requires further investigation before large-scale deployment. This special issue is a great opportunity for novel industrial projects on the feasibility of unconventional hydrogen applications and systems.

Guest Editor

Dr. Arash Badakhsh
Power Networks Demonstration Centre, University of Strathclyde, Glasgow G1 1XQ, UK

Deadline for manuscript submissions

5 September 2025

Energies

an Open Access Journal by MDPI

Impact Factor 3.2
CiteScore 7.3

mdpi.com/si/184964

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

mdpi.com/journal/energies

Energies

an Open Access Journal by MDPI

Impact Factor 3.2
CiteScore 7.3

mdpi.com/journal/energies

About the Journal

Message from the Editor-in-Chief

Energies is an international, open access journal in energy engineering and research. The journal publishes original papers, review articles, technical notes, and letters. Authors are encouraged to submit manuscripts which bridge the gaps between research, development and implementation. The journal provides a forum for information on research, innovation, and demonstration in the areas of energy conversion and conservation, the optimal use of energy resources, optimization of energy processes, mitigation of environmental pollutants, and sustainable energy systems.

Editor-in-Chief

Prof. Dr. Enrico Sciubba
Department of Mechanical and Industrial Engineering, University Niccolò Cusano, 00166 Roma, 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, RePEc, Inspec, CAPlus / SciFinder, and other databases.

Journal Rank:

CiteScore - Q1 (Control and Optimization)