

Special Issue

Advanced Hydrogen Technologies for Energy Production, Accumulation, Distribution and Energetic Equipment Repair

Message from the Guest Editor

Topics of interest in this Special Issue include the durability and long-term service of hydrogen turbines and hydrogen cooling turbogenerators, engine combustion chambers fueled by hydrogen-containing environments, hydrogen turbine discs and blades, the hot tracks of turbines, hydrogen cooling systems of turbogenerators, injectors and injection pumps based on the application of a new generation of hydrogen-resistant structural materials. This Special Issue will focus on novel technologies of energy production on fossil and nuclear power plants, energy accumulation and distribution in large agglomerations using buffer infrastructure and grid connections, the repair and thermal protection of energetic equipment, taking into account hydrogen embrittlement in the course of long-term service, and determining the influence of hydrogen-containing fuels and lubricant-cooling environments on the durability of a new generation of structural materials. It is recommended to send a tentative title and a short summary of the manuscript to Energies Editor Ms. Cicilia .

Guest Editor

Prof. Dr. Alexander Balitskii

1. Department of Strength of the Materials and Structures in Hydrogen-Containing Environments, Karpenko Physico-Mechanical Institute, National Academy of Sciences of Ukraine, 79-601 Lviv, Ukraine
2. Department of Mechanical Engineering and Mechatronics, West Pomeranian University of Technology in Szczecin, 70-310 Szczecin, Poland

Deadline for manuscript submissions

10 January 2026



Energies

an Open Access Journal
by MDPI

Impact Factor 3.2
CiteScore 7.3



mdpi.com/si/211040

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

[mdpi.com/journal/
energies](https://mdpi.com/journal/energies)





Energies

an Open Access Journal
by MDPI

Impact Factor 3.2
CiteScore 7.3



[mdpi.com/journal/
energies](https://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)