



energies



an Open Access Journal by MDPI

Energy Storage Technologies for Energy Grids

Guest Editors:

Dr. Audrius Bagdanavicius

School of Engineering, University of Leicester, University Road, Leicester LE1 7RH, UK

Prof. Dr. Carlos E. Ugalde-Loo

School of Engineering, Cardiff University, Queen's Buildings, The Parade, Cardiff CF24 3AA, Wales, UK

Deadline for manuscript submissions:

closed (10 March 2025)

Message from the Guest Editors

As more and more renewable energy sources are incorporated into energy systems every year, the importance of energy storage systems as an integral aspect of energy systems is increasing. The realization that they play an increasingly vital role in ensuring the continuous and reliable operation of energy systems is driving scientists and engineers to find new solutions for energy storage technologies.

Some energy storage technologies, such as pumped hydro storage or battery energy storage systems, can only be integrated into power grids. Other energy storage technologies, such as thermomechanical energy storage systems or thermal storage systems, although still not widespread, can be integrated into electricity grids as well as into heating or cooling networks.

The aim of this Special Issue is to provide a platform for researchers to present their work on the future of energy storage systems integrated with energy networks. Original research papers on the latest developments in energy storage technologies and their integration into various energy networks are invited. We also welcome review articles on existing energy storage technologies, their integration into energy grids.



mdpi.com/si/203191

Special Issue



energies



an Open Access Journal by MDPI

Editor-in-Chief

Prof. Dr. Enrico Sciubba

Department of Mechanical and Industrial Engineering, University Niccolò Cusano, 00166 Roma, Italy

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.

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)

Contact Us

Energies Editorial Office
MDPI, Grosspeteranlage 5
4052 Basel, Switzerland

Tel: +41 61 683 77 34
www.mdpi.com

mdpi.com/journal/energies
energies@mdpi.com
[X@energies_mdpi](https://twitter.com/energies_mdpi)