



Advanced Systems and Components for Medium and Long-Term Energy Storage

Guest Editors:

Dr. Guido Francesco Frate

Department of Energy, Systems,
Territory and Construction
Engineering, University of Pisa,
Pisa, Toscana, Italy

Dr. Lorenzo Ferrari

Department of Energy, Systems,
Territory and Construction
Engineering, University of Pisa,
Pisa, Italy

Deadline for manuscript
submissions:

closed (15 May 2023)

Message from the Guest Editors

Dear Colleagues,

The Guest Editors are inviting submissions to a Special Issue of *Energies* on the subject area of “Advanced Systems and Components for Medium and Long-Term Energy Storage”. Topics of interest for publication include, but are not limited to:

Energy storage impact on power systems at the regional, national, or international scale;
Optimal scheduling and design;
Economic feasibility analysis in current and future scenarios;
Off-design and part-load modeling and simulation;
Dynamic modeling and simulation;
New concepts and technologies;
Pumped Thermal Energy Storage (PTES);
Liquid Air Energy Storage (LAES);
Carnot batteries and thermal exergy storage technologies;
Flow batteries, with a special focus on components, electrolytes, and other measures intended to improve the performance and the capacity;
Innovative electrochemical technologies suited for medium and long-term energy storage on utility scale;
Development of new components for storage technologies;
Development of turbomachines and heat exchangers for storage technologies.





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)