

Special Issue

Energy Storage, Energy Conversion, and Multifunctional Materials, 2nd Edition

Message from the Guest Editor

Energy storage has recently been proven to be a key element in the operation of modern power systems and mobile user electronics. Although the cost of energy storage has decreased rapidly, these systems are still expensive, and significant investment and research are needed in order to overcome this problem. Energy storage may also be related to size, volume and lifetime limitations, depending on the application. In modern power systems, energy storage plays a key role, as it enhances their flexibility by increasing the penetration of renewable energy technologies, improves efficiency by reducing delivery losses, and increases system reliability and resilience. This role is further extended with the integration of EVs into these systems. This Special Issue aims to present the state of the art of energy storage systems and technologies that are mainly related to power systems and EVs by considering the role of energy storage at its greatest scale, including research and new trends, material use, manufacturing processes, operational characteristics, recycling and life cycle assessment.

Guest Editor

Dr. Yiannis Katsigiannis
Department of Electrical and Computer Engineering, Hellenic Mediterranean University, GR-71004 Heraklion, Greece

Deadline for manuscript submissions

25 September 2026



Energies

an Open Access Journal
by MDPI

Impact Factor 3.2
CiteScore 7.3



mdpi.com/si/244666

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)