

Special Issue

Advanced Application of Mathematical Methods in Energy Systems

Message from the Guest Editor

The aim of this Special Issue is to present the latest advancements in the application of advanced mathematical methods in the energy sector. The topics of the publication include the following:

- Modeling of energy systems, including power networks, RES systems, and microgrids;
- Optimization of design and operational processes in energy systems;
- Prediction and forecasting of energy demand using statistical and machine learning methods;
- Reliability and safety analysis of power systems;
- Designing intelligent energy management systems using mathematical methods;
- Investigation of dynamic processes in energy systems;
- Development of monitoring methods for energy system states.

The publications in this Special Issue combine advanced theory with practical applications, offering innovative approaches to addressing key challenges in modern energy. This Special Issue supports interdisciplinary research and its implementation in the energy sector, contributing to its sustainable development.

Guest Editor

Dr. Marcin Rabe

Institute of Management, University of Szczecin, 70-453 Szczecin, Poland

Deadline for manuscript submissions

closed (31 July 2025)



Energies

an Open Access Journal
by MDPI

Impact Factor 3.2
CiteScore 7.3



mdpi.com/si/229166

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)