Special Issue

Artificial Intelligence and Machine Learning New Concepts in SMART Energy Systems

Message from the Guest Editors

Integrating various energy sectors into smart energy systems is considered to be a potential paradigm for offering an all-encompassing and optimal solution for a feasible, reasonably priced, and sustainable energy system in the near future. Relatively new ideas in the fields of energy, artificial intelligence (AI) and machine learning (ML) have the potential to be employed as useful tools in the operation of systems, using previous and anticipated future events to enhance system efficacy. The application of AI in energy systems has garnered increasing attention in recent years. Energy systems include various types of machinery, structures, vegetation, and even intelligent energy (such as electrical grids). In other words, they are any system that requires energy in order to function, preserve a given state, or move energy between points. Possessing a smart management system that can anticipate future events to run grid assets to their maximum capacity or respond to abrupt changes in inputs (such as rising or falling demand) may be extremely helpful when it comes to transmitting or consuming energy.

Guest Editors

Dr. Joanna Rosak-Szyrocka

Department of Production Engineering and Safety, Faculty of Management, Czestochowa University of Technology, 42-201 Częstochowa, Poland

Prof. Dr. Radosław Wolniak

Economics and Informatics Department, Organization and Management Faculty, Silesian University of Technology, 44-100 Gliwice, Poland

Deadline for manuscript submissions

20 November 2025



Energies

an Open Access Journal by MDPI

Impact Factor 3.2 CiteScore 7.3



mdpi.com/si/189333

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

mdpi.com/journal/ energies





Energies

an Open Access Journal by MDPI

Impact Factor 3.2 CiteScore 7.3



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)

