

Special Issue

Microgrids and Its Application to Integrated Energy Systems and Islanded Active Distribution Networks

Message from the Guest Editors

This Special Issue aims to publish high-quality research papers on the inter-disciplinary field of microgrid optimisation under uncertainty, and targets new probabilistic methods (i.e., scalable computational solutions) for managing microgrid energy management systems (EMS), from long-term planning to real-time operation, with the introduction of a wide range of renewable energy technologies. Research sought includes innovative approaches to the analytical and simulation techniques for assessing the optimal operation and control of microgrids and DERs, while committing, holding, dispatching, and maintaining different ancillary services for the grid in a reliable and economical manner. Research can be extended to self-optimizing control solutions for building microgrids (BMGs) for the integration in net-zero energy buildings, as well as electric mobility (vehicle-to-grid, V2G, or boat-to-grid, B2G) within maritime, island microgrids, or integrated port energy systems. Keywords optimization under uncertainty; risk modeling; quality of supply assessment; grid resiliency performance; probabilistic network analysis; integration of RES...

Guest Editors

Dr. Ignacio Hernando-Gil

Department of Electrical Engineering, ESTIA Institute of Technology, 64210 Bidart, France

Prof. Dr. Ionel Vechiu

ESTIA Institute of Technology, University of Bordeaux, 64210 Bidart, France

Deadline for manuscript submissions

closed (31 July 2023)



Energies

an Open Access Journal
by MDPI

Impact Factor 3.2
CiteScore 7.3



mdpi.com/si/118216

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)