

Special Issue

Grid Applications and Performance in Power Systems

Message from the Guest Editors

The invites papers for a Special Issue of Energies on "Grid Applications and Performance in Power Systems." Modern power systems have experienced a fundamental revolution as a result of the advent of DERs, shifting from centralized to decentralized optimization. Such transition results in concepts such as VPP and microgrid, which may aggregate various DERs and have been acknowledged as a promising solution to improve grid dependability, security, and economy. Meanwhile, data sciences are coming to offer DT in contemporary power systems, which can make full use of data collection while also enhancing situation awareness and grid performance decision-making. Topics of interest for publication include, but are not limited to:

- Power system control and optimization
- Distributed energy resources aggregation
- Energy management system of microgrids/VPP
- Digital twin technology in power grid
- Big data analytics in distribution network
- Anomaly detection of electrical device

Guest Editors

Prof. Dr. Qian Ai

Department of Electrical Engineering, Shanghai Jiao Tong University, Shanghai 200240, China

Dr. Xing He

Department of Electrical Engineering, Shanghai Jiao Tong University, Shanghai 200240, China

Deadline for manuscript submissions

closed (31 December 2022)



Energies

an Open Access Journal
by MDPI

Impact Factor 3.2
CiteScore 7.3



mdpi.com/si/118050

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)