



Advanced Technologies in Renewable Energy Generation Systems

Guest Editor:

Dr. Mohamed Mosaad

Department of Electrical and
Electronic Engineering
Technology, Yanbu Industrial
College, Yanbu 46452, Saudi
Arabia

Deadline for manuscript
submissions:

closed (8 May 2024)

Message from the Guest Editor

Dear Colleagues,

A new global energy economy is being created as a result of the faster-than-ever worldwide expansion of renewable energy production. This expansion is accomplished by incorporating some renewable energy sources into the electrical grid. The electrical systems become more sophisticated as a result of the integration and present new difficulties. One of these difficulties, as in PV and wind systems, is the unpredictable nature of the energy produced by these renewable sources as well as their dependency on environmental changes. The integration process will also require power electronic switches. Consequently, to improve and support the performance of these grid-integrated renewable sources, contemporary control, flexible devices, and optimization methodologies should be introduced. The following are only a few examples of the subjects of interest:

- Modern power system operation and control;
- Distributed generation;
- Modern FACTS device control techniques in contemporary power systems;
- Modern optimization techniques for improving the integration of renewable energy sources into the grid;
- Security and resiliency of hybrid power systems.





energies



an Open Access Journal by MDPI

Editor-in-Chief

Prof. Dr. Enrico Sciubba

Department of Mechanical and Industrial Engineering, University Niccolò Cusano, 00166 Roma, Italy

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.

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)

Contact Us

Energies Editorial Office
MDPI, Grosspeteranlage 5
4052 Basel, Switzerland

Tel: +41 61 683 77 34
www.mdpi.com

mdpi.com/journal/energies
energies@mdpi.com
[X@energies_mdpi](https://twitter.com/energies_mdpi)