Special Issue

Challenge and Research Trends of Smart Power Grid

Message from the Guest Editor

The smart power grid is the future electric power system that supports bi-directional energy and information flow between consumer and service provider. The smart power grid aims to modernize the current electric power system with a new set of technologies and services such as distributed energy generation (wind and solar energy), advanced meter infrastructures, electric vehicles, and home/building energy management systems. Artificial intelligence, Blockchain technology, and the underlying communication infrastructures will play an important role in supporting the grid integration of different smart grid applications with the aim to improve power quality, reliability, efficiency, and security. This Special Issue focuses on the role of information and communication technologies, artificial intelligence, Blockchain technology, and their applications in the development of the future smart power grid including energy forecasting, energy trading, the integration of wind energy, solar energy, electric vehicles, smart meters, smart homes/building, etc.

Guest Editor

Prof. Dr. Young-Chon Kim

Division of Electronic and Information, Department of Information Technology, Jeonbuk National University, Jeonju 54896, Korea

Deadline for manuscript submissions

closed (30 August 2021)

Energies

an Open Access Journal by MDPI

Impact Factor 3.2
CiteScore 7.3

mdpi.com/si/67991

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

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)