

Special Issue

Application of Artificial Intelligence in Power System Monitoring and Fault Diagnosis

Message from the Guest Editors

To systematically present the recent progress in related fields, this Special Issue focuses on the advances in operation monitoring and safety controlling, most notably using emerging techniques like artificial intelligence, big data analysis, deep learning, for characteristic modeling, performance controlling and fault diagnosing applications.

- Data-based abnormalities analysis of thermal power system and nuclear power system;
- Fault diagnosis and prediction of wind turbines based on SCADA data;
- Modeling, monitoring and diagnosing of waste-to-energy, biomass power, and tidal power systems;
- Data-based fault characteristics analysis of power generation equipment;
- Power equipment health monitoring based on vibration signal, sound signal, image signal, thermal infrared signal, etc. ;
- Control and performance monitoring of photovoltaic power generation systems;
- Modeling, scheduling, control and monitoring of microgrid systems;
- SOC estimation, SOH estimation, fault detection, isolation and localization of lithium battery systems;
- State estimation and performance evaluation of large-scale energy storage systems

Guest Editors

Dr. Guang Wang

Dr. Jiale Xie

Prof. Dr. Shunli Wang

Deadline for manuscript submissions

closed (31 May 2023)



Energies

an Open Access Journal
by MDPI

Impact Factor 3.2
CiteScore 7.3



mdpi.com/si/120638

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)