



energies



an Open Access Journal by MDPI

Practical Diagnosis and Fault-Tolerant Control of Energy Systems: Towards a Sustainable Transition

Guest Editors:

Prof. Dr. Ahmed Hafaiifa

Applied Automation and Industrial Diagnostic Laboratory, University of Djelfa, Djelfa 17000 DZ, Algeria

Dr. Obaid S. Alshammari

Electrical Engineering department, University of Hail, Hail, Saudi Arabia

Dr. Abdelhamid Iratni

Electrical Engineering Department, Faculty of Science and Technology, University of Bordj Bou Arreridj, El Anceur 34030 DZ, Algeria

Deadline for manuscript submissions:
closed (5 January 2023)

Message from the Guest Editors

Dear Colleagues,

This Special Issue aims to present the developments and solutions brought by the emergence of new technologies, based on the analysis of big data and artificial intelligence, with the application of fault-tolerant control, to ensure good control of the behavior of these energy systems, even in the presence of faults. The aim is to promote scientific and technological transfer while ensuring sustainable development with innovative solutions and high-energy efficiency using applied automation tools. The topics of interest include, but are not limited to, the following:

- Robust fault-tolerant control strategy;
- Diagnostic decision making;
- Digital twin and IoT technology;
- Energy storage and conversion systems; Failure analysis and fault diagnosis and prognosis;
- Fault-tolerant control application (electric vehicles, electrical machines, power converter);
- Integrated fault estimation;
- Intelligent fault-tolerant control strategy; Intelligent data acquisition; Machine learning and multi-agent systems;
- Modeling and identification;
- Monitoring and observer-based fault-tolerant systems;
- Sustainable energy system (solar, wind, biomass, hydraulic, and hybrid)



mdpi.com/si/122738

Special Issue



energies



an Open Access Journal by MDPI

Editor-in-Chief

Prof. Dr. Enrico Sciubba

Department of Mechanical and
Aerospace Engineering,
University of Roma Sapienza, Via
Eudossiana 18, 00184 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)