

## Special Issue

# Fail-Safe Electric Drives and Safety-Related Issues

### Message from the Guest Editors

Electrical drives for transportation, civil, and industrial applications must guarantee operation in emergency conditions. In critical events, such as faults, floods, explosions, fires, and earthquakes, electric drives must be operated to prevent further damages and, very often, even to guarantee the minimal operation of the plant or of the vehicle in order to help save human lives.

Electrical components and systems must be designed to operate in critical conditions or to withstand faults, extreme temperatures, and pressures. This Special Issue is dedicated to the analysis of electric drives and drive components under these conditions and welcomes scientific contributions in this emerging area. Topics of interest for publication include, but are not limited to the following:

- Fail-safe transformers, electrical machines, and cables;
- Multi-phase electric machines and drives;
- Magnet-less electrical machines;
- Risk assessment of electrical drives and components;
- Fire performance of powertrains and power switches;
- Electric drive diagnosis;
- Communications for emergency critical operations.

---

### Guest Editors

Dr. Fabrizio Marignetti

Department of Electrical and Information Engineering, University of Cassino and South Lazio, via G. Di Biasio 43, 03043 Cassino FR, Italy

Prof. Roberto Di Stefano

Department of Electrical and Information Engineering, University of Cassino and South Lazio, via G. Di Biasio 43, 03043 Cassino FR, Italy

---

### Deadline for manuscript submissions

closed (30 April 2021)



## Energies

---

an Open Access Journal  
by MDPI

---

Impact Factor 3.0  
CiteScore 6.2



[mdpi.com/si/39207](https://mdpi.com/si/39207)

*Energies*

MDPI, Grosspeteranlage 5  
4052 Basel, Switzerland  
Tel: +41 61 683 77 34  
[energies@mdpi.com](mailto:energies@mdpi.com)

[mdpi.com/journal/  
energies](https://mdpi.com/journal/energies)





# Energies

---

an Open Access Journal  
by MDPI

---

Impact Factor 3.0  
CiteScore 6.2



[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 Aerospace Engineering, University of Roma Sapienza, Via Eudossiana 18, 00184 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)