## **Special Issue**

## Development of Electrical Machines: Latest Studies and Future Prospects

### Message from the Guest Editors

This Special Issue aims to record the findings of latest studies and research activities on materials, production processes, design particularities, configuration conception, fault tolerance and measurement techniques regarding the development of high-performance electrical machines. The main topics of interest include but are not limited to the following:

- Thin iron laminations and low-loss alloy magnetic steels implemented in electrical machine cores.
- Winding configurations and cooling techniques for high-performance electrical machines.
- Multi-phase electrical machines.
- Permanent magnet materials and associated loss reduction techniques.
- Harmonic losses and converter control enabling high efficiency drives.
- Ceramic and electromagnetic bearings for high-speed and high-efficiency machines.
- Machine topologies and design considerations favoring high-performance machines.
- Measurement techniques for high-performance machines.
- Lamination cutting and core building factor loss reduction methods.
- Design of fault-tolerant electrical machines.

#### **Guest Editors**

Prof. Dr. Antonios G. Kladas

Laboratory of Electrical Machines and Power Electronics, School of Electrical and Computer Engineering, National Technical University of Athens, 9, Iroon Polytechneiou Street, 15780 Athens, Greece

Dr. George J. Tsekouras

Department of Electrical and Electronics Engineering, School of Engineering, University of West Attica, 250, Thivon Avenue, Aigaleo, GR12241 Athens, Greece

### Deadline for manuscript submissions

25 December 2025



# **Energies**

an Open Access Journal by MDPI

Impact Factor 3.2 CiteScore 7.3



mdpi.com/si/173571

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



### **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)

