Special Issue

Design, Modelling, and Control of Multiphase Drives for Transportation

Message from the Guest Editors

The aim of this Special Issue is to share the newest research concerning the design, modelling, and control of multiphase drives and the associated power electronic topologies. The inherent potential of multiphase drives is fault-tolerance, which should be obviously encouraged.

Keywords

- Multiphase machine design
- Fault-tolerant control strategies for multiphase drive systems
- Control under constraints of the drive
- Integrated multiphase variable speed drives
- Fault detection and identification process for multiphase drives
- PWM modulation techniques
- New multiphase topologies of power electronics
- Fault-tolerant power electronics topologies
- Impact of machine design to control strategy and vice versa
- Model predictive control
- Artificial intelligence-based control and identification for multiphase drives

Guest Editors

Prof. Dr. Eric Semail

Laboratory of Electrical Engineering and Power Electronics of Lille,Arts et Metiers Institute of Technology, Lille, France

Dr. Ngac Ky Nguyen

Arts et Métiers Sciences et Technologies – Campus de Lille Laboratoire d'Electrotechnique et d'Electronique de Puissance de Lille – L2EP, Lille, France

Deadline for manuscript submissions

closed (22 February 2023)

Energies

an Open Access Journal by MDPI

Impact Factor 3.2
CiteScore 7.3

mdpi.com/si/69037

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)

MDPI