

Special Issue

Modeling, Simulation and Control of Electric Drive Systems

Message from the Guest Editors

Energy optimization already represents a crucial issue in smart grid/micro-grid energy flow, renewable energy, electrical and hybrid vehicles, energy storage devices, electrical motors, and in any kind of actuators. In addition, also methods addressing the mechatronic design of energy-efficient drives and, moreover, their robust control in the presence of changing operating conditions, uncertainty, and disturbances are of great interest. In this sense, techniques based on concepts such as controllability and observability are welcome. This Special Issue will address and collect papers successfully showing how the model-based control and optimization of electric drive systems can contribute to a sustainable use of energy in industrial and transport applications. **Keywords:**

- model-based optimization
- combinations of model-based design techniques with machine learning
- model-based system engineering in e-mobility
- design of drives based on controllability and observability concepts

Guest Editors

Prof. Dr. Paolo Mercorelli

Institute of Product and Process Innovation, Leuphana, University of Lüneburg, 21335 Lüneburg, Germany

Prof. Dr. Harald Aschemann

Chair of Mechatronics, University of Rostock, Justus-von-Liebig-Weg 6, D-18059 Rostock, Germany

Deadline for manuscript submissions

closed (30 August 2021)



Energies

an Open Access Journal
by MDPI

Impact Factor 3.2
CiteScore 7.3



mdpi.com/si/30866

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)