



*energies*



an Open Access Journal by MDPI

## Modeling, Control and Optimization of Electric Vehicles and Ship Electric Power Systems

Guest Editor:

**Prof. Dr. Andrzej Lebkowski**

Department of Ship Automation,  
Gdynia Maritime University,  
Gdynia, Poland

Deadline for manuscript  
submissions:

**closed (20 September 2022)**

### Message from the Guest Editor

Dear Colleagues,

Electric drive systems are replacing the drives used so far in an increasing number of applications, allowing energy savings and an increase in the overall efficiency of the designed devices. This is another breakthrough in the development of technology. However, there is still plenty of room for improvement and innovation in these technologies. This Special Issue, to which I am pleased to invite you, will hopefully be the place where you would like to publish your ideas and insights related to, among others:

- Modeling of elements included in electric drive systems;
- Comprehensive development of entire electric vehicle models;
- Ship electric power system operation modeling;
- Optimization and selection of electrical energy storage system parameters;
- Design of algorithms that control the operation of electrical machines;
- Optimization of vehicle energy consumption;
- Algorithms that allow the optimization of the operating point of the electric drive system;
- Application of various types of electrical energy sources and electrical energy storage systems;
- Design and implementation of electrical energy storage charging systems.



[mdpi.com/si/100518](https://mdpi.com/si/100518)

# 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 (*Engineering (miscellaneous)*)

## Contact Us

---

*Energies* Editorial Office  
MDPI, St. Alban-Anlage 66  
4052 Basel, Switzerland

Tel: +41 61 683 77 34  
[www.mdpi.com](http://www.mdpi.com)

[mdpi.com/journal/energies](http://mdpi.com/journal/energies)  
[energies@mdpi.com](mailto:energies@mdpi.com)  
[X@energies\\_mdpi](https://x.com/energies_mdpi)