



an Open Access Journal by MDPI

# Advanced Coordinated Optimization Strategy of Electric Vehicle and Smart Grids

Guest Editors:

## Message from the Guest Editors

Dr. Martina Kajanova

Dr. Marek Höger

Dr. Peter Bracinik

Prof. Dr. Pavol Špánik

Deadline for manuscript submissions: **31 July 2024** 

mdpi.com/si/148680

Dear Colleagues,

A shift in society towards decarbonization and environmentally friendly lifestyles has brought many challenges for the operation and control of electrical power systems. This Special Issue aims to gather and present original contributions and reviews focused on advanced optimization strategies related to electric vehicle operation, charging, and utilization within smart grids.

- Electric vehicle operation modeling;
- Battery charging modeling;
- Electric vehicle operation and charging predictions;
- Optimization of electric vehicle fleet coordination;
- Coordination between transportation and electrical power system sectors;
- Optimization of electric vehicle charging;
- Impact of different electric vehicle charging strategies on electrical power systems;
- Advanced strategies of smart grid operation and control;
- Vehicle-to-X concepts;
- Cooperation of renewables and electric vehicle charging stations.

Dr. Martina Kajanova Dr. Marek Höger Dr. Peter Bracinik Prof. Dr. Pavol Špánik *Guest Editors* 





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 mdpi.com/journal/energies energies@mdpi.com X@energies\_mdpi