# Special Issue

# Smart Charging and Grid Integration for Sustainable Electric Transportation

## Message from the Guest Editors

By exploring diverse topics, this Special Issue aspires to provide a comprehensive understanding of the evolving landscape of EV charging infrastructure and contribute valuable insights to facilitate the transition toward sustainable and grid-integrated transportation. Topics of interest include, but are not limited to, the following:

- Optimal charging station power supply and energy management;
- Advance bidirectional electric vehicle energy management strategies (V2G, V2B, V2H, V2V);
- Utilization of EVs as flexible assets for enhanced grid ancillary services;
- Strategies for integrating renewable energy sources into eV charging infrastructure;
- Development of EV charging pricing models and their effect on grid operation;
- Solutions for mitigating congestion and optimizing grid utilization;
- Implementation of mathematical programming in smart charging;
- Machine learning applications in EV charging—operation optimization and forecasting;
- Future prospects and policy implications.

## Guest Editors

Prof. Dr. Damir Jakus

Faculty of Electrical Engineering, Mechanical Engineering and Naval Architecture, University of Split, 21000 Split, Croatia

Dr. Josip Vasilj

Faculty of Electrical Engineering, Mechanical Engineering and Naval Architecture, University of Split, 21000 Split, Croatia

## Deadline for manuscript submissions

closed (25 July 2025)

**Energies**

an Open Access Journal by MDPI

Impact Factor 3.2
CiteScore 7.3

mdpi.com/si/196704

*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