



energies



an Open Access Journal by MDPI

Innovations and Recent Trends in Power Systems: Smart Grids, Energy Storage Systems and Electric Vehicle Integrations

Guest Editors:

Dr. Giuseppe Graber

Department of Industrial Engineering, University of Salerno, 84084 Salerno, Italy

Dr. Vito Calderaro

Department of Industrial Engineering, University of Salerno, 84084 Salerno, Italy

Deadline for manuscript submissions:

closed (15 October 2025)

Message from the Guest Editors

A non-exhaustive list of topics to be covered in this Special Issue are as follows: EVs grid impact analysis EV smart-charging management for peak reduction into the grid. New power and energy management strategies for V2G and ESSs in smart grids. Second life battery-based approach for ESSs integration into the grid. Integration of RESs in modern power systems. New approaches to provide ancillary services based on ESSs. Innovative control strategies for ESSs in smart grids. Techno-economic analysis of ESSs in power systems for RESs and EVs integration. Lithium-Ion batteries, fuel cells, and supercapacitors applications in modern power systems. Impact of fast and ultra-fast chargers for EVs on power systems. Optimal positioning and sizing of ESSs in smart grids. Impact on grid of wireless charging systems for EVs. Resilience assessment of smart grids in presence of ESSs, RESs and EVs Load shedding approaches in microgrids considering RESs uncertainty. Power quality issues related to EVs charging and ESSs in smart grids. Power2gas paradigm: integration of transportation network and power system.



mdpi.com/si/192330

Special Issue



energies



an Open Access Journal by MDPI

Editor-in-Chief

Prof. Dr. Enrico Sciubba

Department of Mechanical and Industrial Engineering, University Niccolò Cusano, 00166 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 (Control and Optimization)

Contact Us

Energies Editorial Office
MDPI, Grosspeteranlage 5
4052 Basel, Switzerland

Tel: +41 61 683 77 34
www.mdpi.com

mdpi.com/journal/energies
energies@mdpi.com
[X@energies_mdpi](https://twitter.com/energies_mdpi)