Special Issue

Modeling and Operation Optimization of Energy Vehicles and Smart Grids

Message from the Guest Editors

The integration of energy vehicles, particularly electric vehicles (EVs), with smart grids is a critical area of research in the context of sustainable energy systems. As the demand for cleaner energy solutions grows, the interaction between EVs and smart grids becomes pivotal to enhancing energy efficiency, reducing carbon footprints, and improving overall grid reliability. This Special Issue delves into advanced methodologies for modeling and optimizing the operation of energy vehicles within smart-grid environments, with particular attention to the transformative role of artificial intelligence (AI) and machine learning (ML) techniques. The topics of interest include but are not limited to the following:

- Modeling of Energy Vehicles and Smart Grids
- Operation Optimization of Energy Vehicles
- Application of AI and ML in Smart-Grid Optimization
- Energy Management and V2G Systems

Guest Editors

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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.

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