Special Issue

Advanced Grid-to-Vehicle (G2V) and Vehicle-to-Grid (V2G) Technologies

Message from the Guest Editor

This Special Issue invites original and innovative research papers and review articles that address advancements in G2V and V2G technologies, their applications, and future directions. Topics of interest for this special issue include, but are not limited to, the following:

- Advanced grid-to-vehicle (G2V) communication and control techniques;
- Vehicle-to-grid (V2G) system architectures, algorithms, and methodologies;
- Smart charging and discharging strategies for EVs;
- V2G and G2V integration with renewable energy sources (e.g., solar, wind);
- Grid stability and balancing using V2G and G2V systems;
- Economic and business models for G2V and V2G systems;
- Impacts of V2G/G2V on grid operations and energy management;
- Cybersecurity and privacy concerns in V2G/G2V systems;
- Multi-agent systems and machine learning for V2G/G2V optimization;
- Policy and regulatory frameworks for V2G and G2V technologies;
- Data analytics for V2G and G2V integration;
- Case studies and real-world implementations of V2G and G2V.

Your contribution to this Special Issue will be crucial in advancing the field and shaping the future of smart grid systems and energy management.

Guest Editor

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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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