Special Issue

Advances in Hydrogen Energy and Power System

Message from the Guest Editor

This Special Issue aims to present and disseminate cutting-edge advances in the integration of hydrogen energy into power systems. Topics of interest for publication include, but are not limited to, the following:

- Green hydrogen production technologies and renewable energy coupling mechanisms;
- Hydrogen fuel cell power generation and grid operation strategies;
- Core hydrogen technologies and equipment development;
- Multi-timescale regulation strategies for hydrogen-integrated source, grid, load, and storage systems;
- Hydrogen backup power systems and grid black-start coordination in extreme scenarios;
- Multi-energy collaborative planning for wind–hydrogen-storage-integrated mega-bases;
- Dynamic scheduling and energy management in hydrogen microgrids with electricity–heat–hydrogen coupling;
- Planning, scheduling, and economic analysis of hydrogen–ammonia–alcohol hybrid multi-energy systems;
- Digital twin technologies and intelligent regulation for hydrogen–electricity coupled systems.

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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