Intelligent Renewable Energy System: A Focus on Hydrogen Fuel Cells and Battery Storage with AI

Guest Editors:

Prof. Dr. Hongwen He
National Engineering Laboratory for Electric Vehicles, School of Mechanical Engineering, Beijing Institute of Technology, No.5 Zhongguancun South Street, Beijing 100081, China

Prof. Dr. Liangfei Xu
State Key Lab of Automotive Safety and Energy, School of Vehicle and Mobility, Tsinghua University, Beijing 100084, China

Prof. Dr. Ya-Xiong Wang
School of Mechanical Engineering and Automation, Fuzhou University, Fuzhou 350116, China

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Message from the Guest Editors

The Special Issue welcomes outstanding research papers, as well as review articles, devoted to innovative suggestions for AI-based or advanced modeling and control technologies in the field of renewable energy, especially for the hydrogen fuel cell and battery storage.

The main topics of this Special Issue include but are not limited to:

Hydrogen fuel cell and electrolyzer design, modeling, and control; Fuel cell vehicle powertrains; Advances in battery storage technologies; Battery management system (BMS); Energy management system (EMS); Electric vehicle control; Fuel cell combined heat and power (CHP); Thermal management of renewable energy systems; Advanced Grid-to-Vehicle and Vehicle-to-Grid (V2G and G2V) systems; Charging/discharging infrastructure; DC/DC converters; Data-driven control of renewable energy system; Development of artificial intelligence in the new energy field; Real-time simulation and analysis tools for hydrogen fuel cells; Battery thermal system optimization; Electrification of remoted areas; Deep learning and machine learning for renewable energy system; Data-driven-based models and physics-based models; Hydrogen storage and renewable hydrogen production.

Special Issue

Editor-in-Chief

Prof. Dr. Giulio Nicola Cerullo
Dipartimento di Fisica,
Politecnico di Milano, Piazza L.
da Vinci 32, 20133 Milano, Italy

Message from the Editor-in-Chief

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