Special Issue

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

Message from the Guest Editors

The Special Issue welcomes outstanding research papers, as well as review articles, devoted to innovative suggestions for Al-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.

Guest Editors

Prof. Dr. Hongwen He

Prof. Dr. Liangfei Xu

Prof. Dr. Ya-Xiong Wang

Deadline for manuscript submissions

closed (22 August 2022)



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Message from the Editor-in-Chief

As the world of science becomes ever more specialized, researchers may lose themselves in the deep forest of the ever increasing number of subfields being created. This open access journal *Applied Sciences* has been started to link these subfields, so researchers can cut through the forest and see the surrounding, or quite distant fields and subfields to help develop his/her own research even further with the aid of this multi-dimensional network.

Editor-in-Chief

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