Special Issue

Innovative, Hybrid Energy Solutions and Technologies

Message from the Guest Editor

By combining multiple renewable and conventional energy sources with energy storage methods, hybrid systems can overcome the challenges and limitations of individual technologies while improving overall efficiency and resilience. Innovative and advanced approaches in energy production, storage, conversion, and optimization—integrated with environmental and health considerations—further support the deployment of these systems, enabling flexible energy management as well as improved energy security and equity. This Special Issue focuses on addressing critical knowledge gaps associated with innovative and hybrid energy solutions and technologies for the development of cleaner environments. Potential topics of interest include, but are not limited to, the following:

- Applications of innovative and hybrid energy solutions in building, industrial, and agricultural sectors;
- Applications of Artificial Intelligence (AI) in hybrid energy systems and technologies;
- Energy and exergy analysis of hybrid energy systems;
- Smart, energy-efficient and net-zero energy buildings;
- Energy sustainability, resilience, and climate adaptability in hybrid energy systems;
- Samart, hybrid energy storage systems;
- .....

Guest Editor

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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.

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