Special Issue

Smart Optimization and Renewable Integrated Energy System

Message from the Guest Editors

The integration of renewables in electrical systems aims to reduce fossil fuel use and environmental impact. Uncertainty in renewable generation can cause grid instability. Energy storage systems (ESSs) provide a solution, ensuring continuous electrical services. ESSs store excess energy and release it as needed. Microgrid and smart grid integration with energy management models are promising solutions. However, optimization and intelligent systems pose new challenges. Optimal ESS management, intelligent systems, grid stability, control strategies, resilience, and off-grid configurations require analysis of new methods to improve productivity and energy distribution. This Special Issue will call for submissions with topics include (but are not limited to) the following:

- distributed renewable energies
- energy storage systems
- energy management system
- smart grids, microgrids, nanogrids
- off-grid electrical systems
- frequency control and stabilization
- resilience in modern electrical systems
- energy control and optimization systems

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Deadline for manuscript submissions

30 April 2025



Energies

an Open Access Journal by MDPI

Impact Factor 3.0 CiteScore 6.2



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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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