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

Guest Editors

Dr. Dario Javier Benavides Padilla

1. Department of Electrical Engineering, University of Málaga, 29010 Málaga, Spain
2. Department of Electrical Engineering, University of Jaen, 23700 Linares, Spain

Prof. Dr. Wilian Paul Arevalo Cordero

Department of Electrical Engineering, University of Jaen, 23700 Linares, Spain

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Energies
Editorial Office
MDPI, Grosspeteranlage 5
4052 Basel, Switzerland
Tel: +41 61 683 77 34
energies@mdpi.com

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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.

Editor-in-Chief

Prof. Dr. Enrico Sciubba
Department of Mechanical and Industrial Engineering, University Niccolò Cusano, 00166 Roma, Italy

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