Special Issue

Design and Optimization of Sustainable Energy Systems

Message from the Guest Editor

The decarbonization of the energy system is a deep transformation that implies the design—and redesign—of its most fundamental structures. From region-wide generation expansion planning to the short-term operation of battery storage, a myriad perspective emerges with its own interrelated challenges. These issues call for the application of decision-making tools to take advantage of the technological possibilities in the most efficient manner. This Special Issue is dedicated to the application of advanced optimization methods to the design and operation of sustainable energy systems, focusing on innovative methods applied to the integration of renewables and the management of flexibility. The approaches can be based on mathematical optimization or on heuristic techniques, but, in any case, the selection of the technique must be justified and its performance shown with rigor. Results that can be clearly interpreted in terms of simple best-design policies will be highly valued.

Guest Editor

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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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