

Special Issue

Improving Energy Efficiency through Data-Driven Modeling, Simulation and Optimization

Message from the Guest Editor

Dear colleagues, We are inviting submissions to a Special Issue of the *Energies* Journal on the subject area of “Improving Energy Efficiency through Data-Driven Modeling, Simulation, and Optimization”. Rising energy costs and the effect of greenhouse gases stimulate the need for more efficient energy systems. The increase of computational power combined with advanced modeling and simulation tools makes it possible to derive innovative solutions that can reduce the ecological footprint. This Special Issue focuses on novel contributions that are based on data-driven approaches, machine learning, and artificial intelligence for modeling, simulation, and optimization of energy systems. Topics of interest for publication include, but are not limited to: * Non-intrusive load monitoring of energy consumption in buildings; * Data-driven modeling approaches for energy prediction and forecasting; * Energy modeling using neural architectures and deep learning; * Advanced decision making using machine learning or artificial intelligence; * Energy flexibility assessment, demand prediction, and load balancing for smart grids.

Guest Editor

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Deadline for manuscript submissions

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About the Journal

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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