Special Issue

Forecasting, Modeling, and Optimization of Photovoltaic Systems

Message from the Guest Editor

In the face of climate change, many countries and regions have made active efforts to restructure their energy system. China set up a “30·60” plan, pledging to achieve the peak of carbon dioxide emissions by 2030 and carbon neutrality by 2060. In this context, solar energy, in particular, the technology of photovoltaic modules and systems, has become a tool to achieve carbon reduction. There have been many emerging technologies based on artificial intelligence, deep learning, and evolutionary computation to solve these problems. This Special Issue will deal with novel forecasting, modeling, and optimization techniques for photovoltaic systems. Topics of interest for publication include, but are not limited to, the following:

- Grid integration of photovoltaic systems;
- Forecasting methods and tools for photovoltaic systems;
- Modeling methods and tools for photovoltaic modules and systems;
- Technologies for photovoltaic maximum power point tracking;
- Fault diagnosis of photovoltaic modules and systems;
- Parameter identification of photovoltaic modules;
- Performance evaluation of photovoltaic modules and systems.

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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