Special Issue

Solar Energy and Photovoltaic Systems: Prospect Development and Challenges

Message from the Guest Editor

The rapid growth of world energy consumption poses challenges in terms of energy shortages and environmental pollution. The exhaustion of fossil fuel resources and their severe environmental impacts have seriously hindered global sustainable development. Solar energy technologies offer a low-cost and sustainable energy supply to overcome such challenges, aiding the energy transition. To meet the energy demands of our society, it is essential to develop low-cost and high-efficiency solar energy systems. This Special Issue mainly covers original research and studies related to the above-mentioned topics, including, but not limited to, solar cells and materials, solar thermal systems, as well as photovoltaic/thermal (PV/T) systems. Modeling techniques, as well as experimental work and results related to modern photovoltaic and concentrating solar power technologies, are of particular interest to this Special Issue. System integration of solar technologies based on open-source dynamic modeling and/or annual operation data from implemented solar energy systems are welcome in this Special Issue to aid the energy transition and overcome technical, financial, and social barriers.

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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