

Special Issue

Advances in Solar Energy and Materials

Message from the Guest Editors

The energy of sunlight has been demonstrated worldwide as the most abundant energy source that can largely contribute to a sustainable energy future. Finding appropriate potential materials for radiant energy absorption, understanding the underlying conversion or storage methods and mechanisms, and the thermal and optical characteristics of the materials used are the key barriers associated with solar energy-efficient utilization. To date, more sophisticated computational methods and experimental validations continue to advance solar energy potential predictions to discover novel physicochemical models and alternative functional materials to make the provision of clean and sustainable energy more widespread. This Special Issue bundles original research works or review articles on recent advances in solar energy and materials and will show its impact on the green environmental protection concept advocated by the world today. Different processes related to solar energy conversion, utilization, and storage and different types of materials including metals/oxide, composite/heterogeneous materials, zeolites, and porous materials used for solar energy utilization will be considered.

Guest Editors

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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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