Special Issue

Technologies, Materials and Impacts for Sustainable Energy Applications

Message from the Guest Editor

As the global population grows and energy demands increase, it is becoming increasingly important to adopt energy sources and technologies that minimize our environmental impact and ensure long-term energy security. The imperative to transition towards a sustainable energy landscape has catalyzed significant research and development efforts across different scientific and technological domains. Topics of interest for this Special Issue include, but are not limited to, the following:

- Renewable energy technologies (solar energy, wind energy, hydropower, biofuel).
- Energy storage and conversion (batteries, fuel cells, hydrogen energy).
- Thermal energy storage (sensible heat storage, latent heat storage, thermochemical heat storage).
- Material science for energy applications (nanomaterials, functional materials, sustainable materials).
- Impact and significance (environmental impact, economic impact, social impact, climate change mitigation, energy security, mitigation of safety risks).

This Special Issue will provide a comprehensive overview of the latest advancements in technologies, materials, and systems that are driving the transition to a sustainable energy future.

Guest Editor

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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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