Special Issue

Production and Exploitation of Energy Carriers from Solar-Driven Thermochemical Processes

Message from the Guest Editors

The aim of this Special Issue is to contribute to the widespread diffusion of the scientific and technological knowledge on the production and exploitation of energy carriers obtained by solar-driven thermochemical processes. The topics of interest include but are not limited to:

- Thermal energy storage as sensible or latent heat from concentrated solar radiation;
- Solar-assisted thermochemical cycles for the production of green fuels (e.g. H2, CO, syngas) or solid materials for long-term and/or long-duration energy storage;
- Advanced materials for thermochemical cycles showing improved redox properties (thermodynamics, kinetics, etc.);
- Solar-assisted biomass thermoconversion: reactor design, operation and performance;
- Advanced structured reactors with improved energy and mass transfer efficiency under concentrated sunlight;
- Stationary and mobile thermoconversion of solar-derived fuels;
- Catalytic-assisted solar thermoconversion of solids: development of highly effective catalysts.

, , and

Guest Editors

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Deadline for manuscript submissions

closed (20 December 2022)

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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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