

## 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. H<sub>2</sub>, 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

Dr. Roberto Solimene

Dr. Gianluca Landi

Dr. Claudio Tregambi

Dr. Maurizio Troiano

---

### Deadline for manuscript submissions

closed (20 December 2022)



## Energies

---

an Open Access Journal  
by MDPI

---

Impact Factor 3.2  
CiteScore 7.3



[mdpi.com/si/101963](https://mdpi.com/si/101963)

*Energies*  
Editorial Office  
MDPI, Grosspeteranlage 5  
4052 Basel, Switzerland  
Tel: +41 61 683 77 34  
[energies@mdpi.com](mailto:energies@mdpi.com)

[mdpi.com/journal/  
energies](https://mdpi.com/journal/energies)





# Energies

---

an Open Access Journal  
by MDPI

---

Impact Factor 3.2  
CiteScore 7.3



[mdpi.com/journal/  
energies](https://mdpi.com/journal/energies)



## 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.

---

### Editor-in-Chief

Prof. Dr. Enrico Sciubba

Department of Mechanical and Industrial Engineering, University  
Niccolò Cusano, 00166 Roma, Italy

---

### Author Benefits

#### Open Access:

free for readers, with article processing charges (APC) paid by authors or their institutions.

#### High Visibility:

indexed within Scopus, SCIE (Web of Science), Ei Compendex, RePEc, Inspec, CAPlus / SciFinder, and other databases.

#### Journal Rank:

CiteScore - Q1 (Control and Optimization)