

Special Issue

Recent Developments in Solar Thermal Energy

Message from the Guest Editors

Thermal energy is currently even more in demand than electrical energy in industry and buildings, solar thermal being one of the most widespread renewable technologies that is adequate to provide a supply for this demand. Solar thermal energy (STE) is currently seen by the International Energy Agency, among others, as an important tool for the decarbonization of society and particularly as a pathway to attain zero-carbon-ready buildings by 2030. We are writing to invite you to submit your original experimental, theoretical, and review work to this Special Issue. We look forward to receiving your outstanding research. Topics of interest for this Special Issue include but are not limited to the following:

- New fluid carriers, heat transfer enhancers, new materials, and coatings for STE devices
- STE concentration and tracking
- Thermo- economic analysis of STE systems
- STE modelling and simulation
- STE and other energy sources hybridization
- STE industrial applications
- Integration of STE in district heating and HVAC systems
- Non-conventional STE devices (dryers, stoves...)
- Control, management, and optimization of STE plants, etc.

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Deadline for manuscript submissions

closed (25 August 2025)



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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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