

Special Issue

Advanced Analysis of Heat Transfer and Energy Conversion 2024

Message from the Guest Editors

In the international context of carbon neutrality and carbon peaks, efficient and clean energy utilization methods are expected to be explored, and the mechanisms of advanced heat transfer processes should be revealed. This Special Issue aims to present and disseminate the advanced theory and technology of heat transfer and energy generation, utilization, conversion, storage, transmission, and conservation. Topics of interest for publication include, but are not limited to, the following: Modelling of multi-scale enhanced heat transfer; Application of advanced measurement technology in heat transfer and energy conversion; Characterization of heat mass transfer at phase interfaces; Deep learning and machine learning for flow pattern recognition; Advanced thermodynamic cycle construction; A new method for efficient conversion and utilization of medium- and low-temperature energy; Design optimization of complex energy conversion and utilization systems; Renewable energy utilization; New thermodynamic cycle working fluid; Combustion mechanisms and kinetics; A new way to enhance heat transfer; New theories and laws of heat transfer; Advanced thermal management methods.

Guest Editors

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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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