Special Issue

Heat Transfer and Thermodynamics Technologies for Supercritical/Phase-Change CO_2 Energy Cycles

Message from the Guest Editors

This Special Issue invites researchers to present their studies on efficient heat transfer solutions, novel design concepts, and practical applications of heat transfer technologies in supercritical CO2 and gas–liquid phase energy cycles. Both original research papers and comprehensive reviews are invited. Topics of interest may encompass (but are not restricted to) the following research areas:

- Modeling and experimental investigation of heat transfer in supercritical CO2 and gas–liquid phase energy cycles.
- Integrated energy systems that leverage supercritical CO2 and gas–liquid phase heat transfer technologies.
- Optimal utilization of renewable energy sources in conjunction with supercritical CO2 and gas–liquid phase heat transfer.
- Development of advanced heat transfer enhancement techniques.
- System-level energy planning and management strategies.
- Simulation or experimental studies on advanced energy equipment.
- Exploration of new heat transfer materials with high performance.
- Design of innovative energy systems and heat transfer sub-systems.

Guest Editors

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Deadline for manuscript submissions

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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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