

Special Issue

Advanced Research on Supercritical Carbon Dioxide in Thermal Energy and Power Engineering

Message from the Guest Editors

With the proposal of low carbon economy, supercritical carbon dioxide system has a wide application prospect in the future energy system because of its compact structure and high efficiency. The aims and topics of this Energies Special Issue on “Advanced Research on Supercritical Carbon Dioxide in Thermal Energy and Power Engineering” cover the cutting-edge research of supercritical carbon dioxide in the field of thermal energy and power engineering, including fundamental scientific research and frontier technology in energy conversion, power generation, energy storage, compressors, heat exchangers, etc. The following topics, among others, are included in this issue:

- Numerical simulation and experiments of thermodynamic, fluid flow and heat transfer of supercritical carbon dioxide
- Application of supercritical carbon dioxide in advanced energy conversion, power generation and energy storage technology
- Design and optimization of high-performance supercritical carbon dioxide compressors
- Design and optimization of high-performance supercritical carbon dioxide heat exchangers
- Enhanced heat transfer technology in supercritical carbon dioxide

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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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