Special Issue

Advances in Heat Transfer and Combustion in Turbomachinery

Message from the Guest Editors

Over the last few decades, advances in state-of-the-art gas turbines have led to a higher turbine inlet temperature and overall pressure ratio (for higher efficiency) and more compact core engines (for lower weight). Ultimately, this led to a general increase in the thermal loads along with a lower cooling capacity of the coolant flow, thus making the thermal management of hot gas path components an even more critical challenge. For this Special Issue, we welcome the submission of works related to Advances in Heat Transfer and Combustion in Turbomachinery. Topics of interest include:

- combustor–turbine interaction;
- swirling flow–liner interaction;
- convective and radiative heat transfer;
- combustor liner cooling;
- flame–wall interaction;
- reactive film cooling;
- effects of heat transfer on combustion; and
- conjugate heat transfer modeling.

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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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