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Analysis and Optimization of Cooling Performance in Gas Turbines

Guest Editor:

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Deadline for manuscript submissions:

closed (31 August 2023)

Message from the Guest Editor

Dear Colleagues,

The Guest Editor is inviting submissions to the Special Issue of *Energies* in the area of the analysis and optimization of cooling performance in gas turbines. Gas turbines are widely used in aircraft propulsion, marine propulsion, power generation, and industry. Cooling systems are of vital importance to the safety and performance of modern gas turbines, and various techniques are applied to achieve cooling including internal cooling, film cooling, transpiration cooling, compound cooling, etc.

This Special Issue will focus on the cooling and heat transfer problems experienced by hot gas passage components (combustor linerss, turbine blades, turbine disk, etc.) in gas turbines, concerning design, analysis, and optimization. Topics of interest for publication include, but are not limited to:

- Internal cooling;
- Film cooling;
- Transpiration cooling;
- Compound cooling;
- Other cooling methods;
- Novel cooling concepts;
- Secondary air system analysis;
- Cooling design methodology;
- Cooling/heat transfer experimental methodology;
- Cooling/heat transfer numerical methodology;
- Cooling optimization.



Specialsue







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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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