Special Issue

Design, Simulation, Thermal Management, and Performance Assessment of Gas Turbines and Aeroengine System

Message from the Guest Editors

Gas turbines and aeroengines have become improtant, widespread and reliable devices in fields such as power generation, aviation, and the oil and gas industry. To improve the system performance of gas turbines or aeroengines, various studies have been conducted by both academic and industrial communities. Therefore, the main objective of this Special Issue is to collect the ideas of research communities worldwide in a common platform and to present the lastest advances and developments in the design, simulation, thermal management, and performance assessment of gas turbines and aeroengine systems. Topics and interests of this Special Issue include, but are not limited to:

- Design and optimization for advanced or unconventional thermodynamic systems;
- Design and optimization for gas turbine components compressor, turbine and combustor;
- High-Fidelity simulations and validations;
- High-temperature and high-power heat exchangers;
- Thermal management of gas turbine and aeroengine systems;
- Analysis of system integration;
- Condition-based operations and maintenance;
- Carbon capture and storage for the gas turbine system.

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Deadline for manuscript submissions

closed (10 March 2023)

Energies

an Open Access Journal by MDPI

Impact Factor 3.2
CiteScore 7.3

mdpi.com/si/99757

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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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