Special Issue

Modeling of Turbojet and Gas Turbine Engine for Minimal Environmental Impact

Message from the Guest Editor

Pollutant emissions from the aviation industry are of greatest concern for the environment. Due to the massive development of air traffic, the harmful pollutants (NOx, CO, SOx and HC) emitted by gas turbine and other turbo engines are dramatically increasing every day. In general, aviation engines impact local air quality and the global climate. By modifying the engine with optimum materials and combustor design, the possibility of a reduction in the formation of the carbon is viable. On the other hand, the utilization of biofuel for aviation is a promising option for meeting global energy needs without any collateral damage to the environment. The addition of biofuel to gas turbine engines results in effective thrust production with less formation of carbon than fossil fuels. Furthermore, the dispersion of nanoparticles in biofuel blends can realize higher thrust production with minimal damage to the environment. The intention of this Special Issue is to invite quality research and review articles on the design, development and simulation of gas turbine and turbojet engines.

Guest Editor

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Deadline for manuscript submissions

closed (21 March 2023)

Energies

an Open Access Journal by MDPI

Impact Factor 3.2
CiteScore 7.3

mdpi.com/si/99621

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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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