

Special Issue

Advances in Aircraft Alternative Fuel Sources and Systems: Aviation Decarbonization and Aircraft Design

Message from the Guest Editors

Decarbonization of our urban, industry and transportation sectors, has been under intensive research focus for several years. Hydrogen and Sustainable Aviation Fuels are a few of a handful of new, low to no-carbon emissions solutions that will be critical for the world's transition towards a Net Zero emission future. As part of decarbonised renewable energy systems, these novel energy sources could be a versatile replacement for high-carbon fuels used today – helping to bring down emissions in vital industrial sectors and providing flexible energy for transport. This special issue is aimed at providing the recent insights in the technological advances related to aircraft alternative fuel sources and systems, through the technology lenses of aircraft design, with a view towards aviation decarbonization. Topics of interest for publication include, but are not limited to:

- Aircraft concepts and design for aviation decarbonization
- Aviation electrification and electric propulsion using alternative fuels
- Fuel Cells for the aviation transportation sector
- Thermal management of alternative fuel aviation systems
- Hydrogen, compressed or liquified

Guest Editors

Dr. Ioannis Giannopoulos

School of Aerospace, Transport and Manufacturing, Building 83,
Cranfield University, Cranfield, Bedfordshire MK43 0AL, UK

Dr. David Judt

Airframe Systems Design, Centre for Aeronautics, Cranfield University,
Bedfordshire, UK,

Deadline for manuscript submissions

closed (31 December 2023)



Energies

an Open Access Journal
by MDPI

Impact Factor 3.2
CiteScore 7.3



mdpi.com/si/172997

Energies
Editorial Office
MDPI, Grosspeteranlage 5
4052 Basel, Switzerland
Tel: +41 61 683 77 34
energies@mdpi.com

[mdpi.com/journal/
energies](https://mdpi.com/journal/energies)





Energies

an Open Access Journal
by MDPI

Impact Factor 3.2
CiteScore 7.3



[mdpi.com/journal/
energies](https://mdpi.com/journal/energies)



About the Journal

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.

Editor-in-Chief

Prof. Dr. Enrico Sciubba
Department of Mechanical and Industrial Engineering, University
Niccolò Cusano, 00166 Roma, Italy

Author Benefits

Open Access:

free for readers, with article processing charges (APC) paid by authors or their institutions.

High Visibility:

indexed within Scopus, SCIE (Web of Science), Ei Compendex, RePEc, Inspec, CAPlus / SciFinder, and other databases.

Journal Rank:

CiteScore - Q1 (Control and Optimization)