

## Special Issue

# Multidisciplinary Design of Aircraft and UAV with Novel Airframe Architectures

### Message from the Guest Editor

Today, aeronautic research is driven toward solutions capable to reduce the environmental impact of air transport and seize the new opportunities offered by the digital transformation. The introduction of innovative propulsion technologies and architectures (e.g., distributed propulsion, hybrid power trains, BLI propulsion), sustainable drop-in and non-drop-in fuels (e.g., batteries, fuel cells, hydrogen, SAF), as well as the creation of new fields of applications for manned and unmanned vehicles (e.g., urban air mobility, hypersonic transport), allows expanding the aircraft design space beyond the boundaries of the conventional airframe architectures. Multidisciplinary design (MD) approaches are fundamental to explore such design space in order to achieve feasible design solutions and assess the operational and environmental benefits of the considered architectures. The goal of this Special Issue is to bring together the state of the art of multidisciplinary design methodologies and those application fields of the highest interest for research in aeronautics.

### Guest Editor

Dr. Vittorio Cipolla

Department of Civil and Industrial Engineering, Università di Pisa, 56126 Pisa PI, Italy

### Deadline for manuscript submissions

closed (1 May 2023)



## Aerospace

---

an Open Access Journal  
by MDPI

---

Impact Factor 2.2  
CiteScore 4.0



[mdpi.com/si/111173](https://mdpi.com/si/111173)

*Aerospace*  
Editorial Office  
MDPI, Grosspeteranlage 5  
4052 Basel, Switzerland  
Tel: +41 61 683 77 34  
[aerospace@mdpi.com](mailto:aerospace@mdpi.com)

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





# Aerospace

---

an Open Access Journal  
by MDPI

---

Impact Factor 2.2  
CiteScore 4.0



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



## About the Journal

### Message from the Editor-in-Chief

You are welcome to contribute a research article or a comprehensive review for consideration and publication in *Aerospace* (ISSN 2226-4310), an on-line, open access journal.

*Aerospace* adheres to rigorous peer-review as well as editorial processes and publishes high quality manuscripts that address both the fundamentals and applications of aeronautics and astronautics. Our goal is to enable rapid dissemination of high impact works to the scientific community.

---

### Editor-in-Chief

Prof. Dr. Konstantinos Kontis  
School of Engineering, University of Glasgow, James Watt Building  
South, University Avenue, Glasgow G12 8QQ, Scotland, UK

---

### 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), Inspec, Ei Compendex, and other databases.

#### Journal Rank:

JCR - Q2 (Engineering, Aerospace) / CiteScore - Q2  
(Aerospace Engineering)