

## Special Issue

# Artificial Intelligence in Automation Systems for Aerospace Engineering

### Message from the Guest Editors

Automation systems for aerospace engineering have many benefits, including a safer working environment, more flexible manufacturing, increased capacity, and intelligence. However, some obstacles and problems still need to be resolved. It is difficult to perform the necessary assembly, drilling and riveting, surface grinding, and painting of the fuselage and wings in limited and tight spaces. Complex parts require higher accuracy and repeatability. Therefore, the first priority is to develop robotic applications and processes to address these extremely difficult, large-scale manufacturing challenges. This Special Issue aims to present state-of-the-art developments in automation systems for aerospace engineering, with a focus on creating a successful robotic integration solution that maximizes productivity.

- Machine design, analysis, and application;
- Artificial intelligence;
- Aerospace automation systems;
- Aerospace composite manufacturing;
- Aerospace manufacturing intelligence;
- Aerospace systems and technology.

---

### Guest Editors

Dr. Jingshan Zhao

Dr. Guowu Wei

Prof. Dr. Helge Wurdemann

Prof. Dr. Daniel Martins

---

### Deadline for manuscript submissions

closed (15 November 2023)



## Machines

---

an Open Access Journal  
by MDPI

---

Impact Factor 2.5  
CiteScore 4.7



[mdpi.com/si/170749](https://mdpi.com/si/170749)

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

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





# Machines

---

an Open Access Journal  
by MDPI

---

Impact Factor 2.5  
CiteScore 4.7



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



## About the Journal

### Message from the Editor-in-Chief

*Machines* is an international, peer reviewed journal on machinery and engineering. It publishes research articles, reviews and communications. Our aim is to encourage scientists to publish their experimental and theoretical results in as much detail as possible. There is no restriction on the length of the papers. Full experimental and/or methodical details must be provided. There are, in addition, unique features of this journal: Manuscripts regarding research proposals and research ideas will be particularly welcomed; Electronic files or software regarding the full details of the calculation and experimental procedure - if unable to be published in a normal way can be deposited as supplementary material.

---

### Editor-in-Chief

Prof. Dr. Antonio J. Marques Cardoso  
CISE - Electromechatronic Systems Research Centre, University of  
Beira Interior, Calçada Fonte do Lameiro, P-6201-001 Covilhã, Portugal

---

### Author Benefits

#### High Visibility:

indexed within Scopus, SCIE (Web of Science), Inspec, and other databases.

#### Journal Rank:

JCR - Q2 (Engineering, Mechanical) / CiteScore - Q1  
(Control and Optimization)

#### Rapid Publication:

manuscripts are peer-reviewed and a first decision is provided to authors approximately 16.9 days after submission; acceptance to publication is undertaken in 2.4 days (median values for papers published in this journal in the first half of 2025).