



Design and Manufacturing for Lightweight Components and Structures

Guest Editors:

Dr. Hao Jiang

Department of Mechanical and Vehicle Engineering, Hunan University, Changsha 410000, China

Dr. Shaolu Wang

State Key Laboratory of Advanced Design and Manufacturing Technology for Vehicle, Hunan University, Changsha 410082, China

Deadline for manuscript submissions:

31 May 2025

Message from the Guest Editors

The theme of this Special Issue is "Design and Manufacturing for Lightweight Components and Structures." It is intended to provide a platform for scholars and investigators to share their latest theoretical and technological achievements, and original ideas are expected to be presented in the papers submitted. The topics to be investigated include, but are not limited to, the following:

- Advanced lightweight materials;
- Structural optimization and design;
- Simulation and computational modeling;
- Composite materials and processing technology;
- Dissimilar material joining;
- New metal joining technology;
- Quality inspection/detection technology;
- Lightweight design for automotive, aerospace, marine, and consumer electronics;
- Additive manufacturing technologies for lightweight components;
- High performance manufacturing tools;
- Sustainable manufacturing;
- Energy efficiency and environmental protection.





an Open Access Journal by MDPI

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

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.

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, and other databases.

Journal Rank: JCR - Q2 (Engineering, Mechanical) / CiteScore - Q2 (Control and Optimization)

Contact Us

Machines Editorial Office
MDPI, Grosspeteranlage 5
4052 Basel, Switzerland

Tel: +41 61 683 77 34
www.mdpi.com

mdpi.com/journal/machines
machines@mdpi.com
[X@Machines_MDPI](https://twitter.com/Machines_MDPI)