

Special Issue

3D-Printed Machine Elements and Mechanical Devices

Message from the Guest Editors

This Special Issue aims to bring together theoretical studies or applied work on the integrated use of state-of-the-art software tools for digital machine design, engineering, and manufacturing used to design and manufacture advanced 3D-printed machine elements and mechanical devices that exploit spatial design freedom, advanced materials, and unconventional manufacturing processes. Submissions should make a visible contribution to the state of the art and may include advances in fundamental theories, computational techniques, additive manufacturing materials and techniques, specialized 3D printing hardware, experimental testing (material, element, and system level), and engineering use case studies. The technologies developed can be used to replace or redesign conventional machine elements in maintenance engineering, or to develop entirely new monolithic mechanical design concepts for critical subsystems or devices that require less assembly and component integration.

Guest Editors

Prof. Dr. César M. A. Vasques

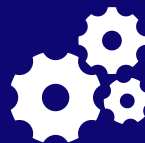
Dr. Adélio M. S. Cavadas

Dr. Fernando A. V. Figueiredo

Dr. Tarsis P. Barbosa

Deadline for manuscript submissions

closed (30 November 2022)



Machines

an Open Access Journal
by MDPI

Impact Factor 2.5
CiteScore 4.7



mdpi.com/si/83046

Machines
Editorial Office
MDPI, Grosspeteranlage 5
4052 Basel, Switzerland
Tel: +41 61 683 77 34
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).