

Special Issue

Design and Application of Bionic Robots

Message from the Guest Editors

This Special Issue titled "Design and Application of Bionic Robots" aims to explore the latest advancements and innovations in the field of bionic robots, focusing on the design principles, technologies, and applications inspired by nature. This issue will cover a wide range of topics, including but not limited to the development of robots that mimic the movement, sensing, and behavior of animals and insects, as well as the integration of advanced materials, sensors, and control algorithms to enhance their performance. The goal of this Special Issue is to provide a platform for researchers, engineers, and practitioners to share their insights, experiences, and challenges in designing and applying bionic robots and to promote collaboration and innovation in this exciting and rapidly evolving field. **Keywords:** bionic robot; biomimetic robotics; nature-inspired design; sensors and control algorithms; bionic systems and robots; animal and insect movement; bionic robot application; medical assistance; agriculture robots; bionic robot for search and rescue; bionic legged robots; bionic underwater robots

Guest Editors

Prof. Dr. Gang Chen

School of Mechanical Engineering, Zhejiang Sci-Tech University,
Hangzhou 310018, China

Prof. Dr. Huosheng Hu

School of Computer Science and Electronic Engineering, University of
Essex, Colchester CO4 3SQ, UK

Deadline for manuscript submissions

31 July 2026



Machines

an Open Access Journal
by MDPI

Impact Factor 2.5
CiteScore 4.7



mdpi.com/si/215719

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 17.6 days after submission; acceptance to publication is undertaken in 2.7 days (median values for papers published in this journal in the second half of 2025).