

Special Issue

Development and Applications of Parallel Robots

Message from the Guest Editor

As the counterpart of serial robots, parallel robots have attracted attention from both academia and industry, due to their high potentials in the aspects of compact structure, low moving inertia, and quick dynamic response. In this context, the development and application of parallel robots have become increasingly attractive topics in recent years. However, great challenges have been encountered in terms of optimal design, motion control, and accuracy assurance, due to their multi-closed-loop architecture. The main objective of this Special Issue is to create a platform for scientists, engineers and practitioners to share their latest theoretical and technological results, as well as to discuss several issues for the research directions in the field of parallel robots. The papers to be published in this SI are expected to provide recent results pertaining to the design, control and accuracy assurance of parallel robots, especially for cross-fertilizations between the fields of parallel robots and machining/manipulation/motion simulator applications. Papers containing experimental results regarding robotic machining and learning-based accuracy assurance are especially welcome.

Guest Editor

Dr. Fugui Xie

Department of Mechanical Engineering, Tsinghua University, Beijing 100084, China

Deadline for manuscript submissions

closed (16 February 2023)



Machines

an Open Access Journal
by MDPI

Impact Factor 2.5
CiteScore 4.7



mdpi.com/si/120355

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).