Special Issue

Autonomous Robots: Design, Sensing and Control

Message from the Guest Editors

Autonomous robots, the intelligent agents par excellence, designed and engineered to deal with the environment on their own, are capable of functioning for extended periods of time without human intervention. The development of autonomous robots employed for human service or cooperation, in medical applications, agriculture, construction, transportation, etc., must address highly complex technological and practical challenges in terms of design, sensing and control. In this Special Issue, we aim to collect the latest research findings and innovative approaches in the field of autonomous robots, design, sensing and control. This includes but is not limited to:

- Innovative autonomous robot design solutions;
- Optimization algorithms for achieving dynamic planning, control, and state estimation;
- Trajectory design for dynamic environments;
- Learning and adaptation in robot control;
- Novel solutions for controlling autonomous robots;
- Autonomous robot sensing and perception;
- Computational architectures for autonomous robots;
- Human-robot interaction;
- Performance analysis of autonomous robots;
- Autonomy and energy efficiency of autonomous robots.

Guest Editors Dr. Monica Tiboni

Prof. Dr. Giovanni Legnani

Prof. Dr. Dan Zhang

Deadline for manuscript submissions

closed (15 October 2023)



an Open Access Journal by MDPI

Impact Factor 2.6 CiteScore 6.1



mdpi.com/si/127870

Electronics Editorial Office MDPI, Grosspeteranlage 5 4052 Basel, Switzerland Tel: +41 61 683 77 34 electronics@mdpi.com

mdpi.com/journal/







an Open Access Journal by MDPI

Impact Factor 2.6 CiteScore 6.1



electronics



About the Journal

Message from the Editor-in-Chief

Electronics is a multidisciplinary journal designed to appeal to a diverse audience of research scientists, practitioners, and developers in academia and industry. The journal is devoted to fast publication of latest technological breakthroughs, cutting-edge developments, and timely reviews of current and emerging technologies related to the broad field of electronics. Experimental and theoretical results are published as regular peer-reviewed articles or as articles within Special Issues guest-edited by leading experts in selected topics of interest.

Editor-in-Chief

Prof. Dr. Flavio Canavero Department of Electronics and Telecommunications, Politecnico di Torino, 10129 Torino, Italy

Author Benefits

High Visibility:

indexed within Scopus, SCIE (Web of Science), CAPlus / SciFinder, Inspec, Ei Compendex and other databases.

Journal Rank:

JCR - Q2 (Engineering, Electrical and Electronic) / CiteScore - Q1 (Electrical and Electronic Engineering)

Rapid Publication:

manuscripts are peer-reviewed and a first decision is provided to authors approximately 16.8 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).