Special Issue

Medical Robots: Safety, Performance and Improvement

Message from the Guest Editors

With rapid advancements in science and technology and the growing demand for medical services, medical robotics has emerged as a prominent research focus and developmental trend in the healthcare sector. They play a pivotal role in enhancing surgical precision. reducing the risks associated with invasive procedures. and improving overall surgical efficiency. However, the safety, performance, and enhancement of medical robots pose significant challenges that require immediate attention and ongoing research efforts. The aim of this Special Issue is to delve into the latest research discoveries and emerging trends concerning safety, performance, and enhancements in medical robots. In particular, we aim to explore the novel opportunities and challenges presented by artificial intelligence algorithms, sensor technologies, and control strategies for medical robots, and so on, with the ultimate goal of advancing and facilitating the applications of medical robotics. We look forward to receiving your contributions.

Guest Editors

Prof. Dr. Xiaojun Chen

Institute of Biomedical Manufacturing and Life Quality Engineering, School of Mechanical Engineering, Shanghai Jiao Tong University, Shanghai 200240, China

Dr. Jiangchang Xu

Institute of Biomedical Manufacturing and Life Quality Engineering, School of Mechanical Engineering, Shanghai Jiao Tong University, Shanghai 200240, China

Deadline for manuscript submissions

closed (15 July 2025)



Electronics

an Open Access Journal by MDPI

Impact Factor 2.6 CiteScore 6.1



mdpi.com/si/204571

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

mdpi.com/journal/electronics





Electronics

an Open Access Journal by MDPI

Impact Factor 2.6 CiteScore 6.1



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).

