



robotics

an Open Access Journal by MDPI



Advanced Technologies for Autonomous Surgical Robotics

Guest Editors:

Dr. Mario Selvaggio

PRISMA Lab, University of Naples
Federico II, Naples, Italy

Dr. Sara Moccia

The BioRobotics Institute,
Sant'Anna Scuola Universitaria
Superiore Pisa, Pisa, Italy

Dr. Bruno Scaglioni

University of Leeds, Leeds, UK

Deadline for manuscript
submissions:

closed (30 June 2022)

Message from the Guest Editors

Dear Colleague,

The goal of this Special Issue is to collect papers about the latest advancements in the use of robotics and AI to increase the level of autonomy in robotic surgical operations. This is intended to provide an overview of the most innovative techniques in the field of AI and their validation with experimental data. The main focus is on the use of robotics and AI technologies for the assistance and support of medical operators in the fields of surgery, endoscopy, and broader clinical practice.

Of particular interest are papers in which surgical robotic systems combine AI with assistive methodologies or autonomous behaviors. Relevant to this special issue are also contributions that explore acceptability and acceptance of AI-enabled surgical robots, as well as other aspects such as ethics, perceptions, human factors, or exploration of suitable surgical outcome measures.

Dr. Mario Selvaggio

Dr. Sara Moccia

Dr. Bruno Scaglioni

Guest Editors



mdpi.com/si/95100

Special Issue



an Open Access Journal by MDPI

Editor-in-Chief

Prof. Dr. Marco Ceccarelli

LARM: Laboratory of Robotics
and Mechatronics, University of
Cassino and South Latium, 03043
Cassino, Italy

Message from the Editor-in-Chief

It is my great pleasure to welcome you to our open access journal, *Robotics*, which is dedicated to both the foundations of artificial intelligence, bio-mechanics and mechatronics, and the real-world applications of robotic perception, cognition and actions. The 21st century is the robotics century and intelligent robots will change our lifestyle forever. Let us work together toward the realization of intelligent robots step by step.

It is great fun to create intelligent robots and imagine their practical applications. *Robotics* is now ready to serve you in the long journey towards such a goal.

Author Benefits

Open Access: free for readers, with article processing charges (APC) paid by authors or their institutions.

High Visibility: indexed within Scopus, ESCI (Web of Science), dblp, Inspec, and other databases.

Journal Rank: JCR - Q2 (Robotics) / CiteScore - Q1 (Mechanical Engineering)

Contact Us

Robotics Editorial Office
MDPI, Grosspeteranlage 5
4052 Basel, Switzerland

Tel: +41 61 683 77 34
www.mdpi.com

mdpi.com/journal/robotics
robotics@mdpi.com
[X@RoboticsMDPI](https://twitter.com/RoboticsMDPI)