



Neurorehabilitation Robotics: Recent Trends and Novel Applications

Guest Editors:

Dr. Ronit Feingold Polak

Department of Physical Therapy,
Ben-Gurion University of the
Negev, Beer Sheva 84105, Israel

Dr. Thierry Chaminade

CNRS Researcher, Institut de
Neurosciences de la Timone-Aix-
Marseille Université, 13385
Marseille, France

Deadline for manuscript
submissions:

31 October 2024

Message from the Guest Editors

In the last few years, there has been a growing interest in the application of robotics in the rehabilitation of various neurological conditions. While rehabilitation robotics has the potential to assist patients, their family members, and clinical teams in the long and arduous rehabilitation process, the use of such technologies has not yet reached its full potential in terms of being in routine clinical and research usage.

This Special Issue aims to discuss state-of-the-art research and methodologies, addressing the challenges facing researchers and clinicians in the various fields and applications of robot rehabilitation. These fields can be related, but not limited, to the following:

- Motor control and motor learning;
- Robotics for upper-limb or lower-limb rehabilitation;
- Gait and balance robotics;
- Robotics for stroke and other neurological condition rehabilitation;
- Exoskeleton, end effector, and social robots for neurorehabilitation;
- Gamification;
- Application of EEG and EMG in neurorobotics.





an Open Access Journal by MDPI

Editor-in-Chief

Prof. Dr. Marco Ceccarelli

LARM2: Laboratory of Robot
Mechatronics, Department of
Industrial Engineering, University
of Rome Tor Vergata, Via del
Politecnico 1, 00133 Roma, 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)