

## Special Issue

# Neurorehabilitation Robotics: Recent Trends and Novel Applications

### 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.

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### Guest Editors

Dr. Ronit Feingold Polak

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

Dr. Thierry Chaminade

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

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### Deadline for manuscript submissions

closed (31 October 2024)



## Robotics

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*Robotics*  
Editorial Office  
MDPI, Grosspeteranlage 5  
4052 Basel, Switzerland  
Tel: +41 61 683 77 34  
[robotics@mdpi.com](mailto:robotics@mdpi.com)

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## About the Journal

### 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.

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### 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

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