

Special Issue

Frontiers in Bionic and Flexible Robotics

Message from the Guest Editors

Bionic and flexible robotics is an emerging subfield of traditional robotics inspired by biological creatures and activities. This field is becoming more popular because of its several advantages: safe human-machine interaction, working in inaccessible spaces, adaptability to wearable devices, handling delicate objects, etc. As of now, we have come to understand that bionic and flexible robotics offers an exceptional solution for any kind of application that involves intimate human contact (e.g., exoskeletons, prosthetics, surgery, rehabilitation). It is a very young research area with many possibilities to solve optimal shape, modeling, and control issues in flexible robots due to their inherent hyper-redundancy.

The Special Issue aims to publish research papers with theoretical and application-based contributions focusing on novel designs, optimal shape estimation, kinematic modeling, control, soft actuators, analysis, simulations, and experiments for bionic and flexible robots. Review papers are also welcome so that we may provide a comprehensive view of this field.

Guest Editors

Dr. Inderjeet Singh

Biomedical Technologies Division, University of Texas at Arlington, Fort Worth, TX, USA

Prof. Dr. Paolo Mercorelli

Institute of Product and Process Innovation, Leuphana University of Lueneburg, 21335 Lueneburg, Germany

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Robotics
Editorial Office
MDPI, Grosspeteranlage 5
4052 Basel, Switzerland
Tel: +41 61 683 77 34
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.

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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