Special Issue

Design and Control of Self-Sensing Actuators for Soft Robotics

Message from the Guest Editors

Soft robotics, with an intrinsic softness of body, allows for the design of multifunctional robotic components that enable adaptable and flexible behavior in varying and unpredictable environments. Traditional discrete component assembly approaches contrast with those of soft robotics, where soft monolithic systems commonly exploit imprecise and graded borders between functional modules. This approach not only tackles the associated fabrication challenges, such as the integration of dissimilar materials, but also paves the way to embed distributed computation to meet challenging control of multi-DOF soft materials while tracking their precise shape and position changes. Self-sensing actuators, as a new generation of multifunctional components, offer a flexible approach to the development of integrated actuators and sensors. The objective of this joint Special Issue between the two journals *Sensors* and *Actuators* is to promote a deeper understanding of various approaches for the integration of sensors and actuators in soft robotics.

Guest Editors

Prof. Jonathan Rossiter

Prof. Shinichi Hirai

Dr. Majid Taghavi

Dr. Hareesh Godaba

Deadline for manuscript submissions

closed (30 September 2022)

Sensors

an Open Access Journal by MDPI

Impact Factor 3.5
CiteScore 8.2
Indexed in PubMed

mdpi.com/si/70789

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

mdpi.com/journal/sensors

Sensors

an Open Access Journal by MDPI

Impact Factor 3.5
CiteScore 8.2
Indexed in PubMed

mdpi.com/journal/sensors

MDPI

About the Journal

Message from the Editor-in-Chief

Sensors is a leading journal devoted to fast publication of the latest achievements of technological developments and scientific research in the huge area of physical, chemical and biochemical sensors, including remote sensing and sensor networks. Both experimental and theoretical papers are published, including all aspects of sensor design, technology, proof of concept and application. Sensors organizes Special Issues devoted to specific sensing areas and applications each year.

Editor-in-Chief

Prof. Dr. Vittorio M. N. Passaro
Dipartimento di Ingegneria Elettrica e dell'Informazione (Department of Electrical and Information Engineering), Politecnico di Bari, Via Edoardo Orabona n. 4, 70125 Bari, Italy

Author Benefits

Open Access:

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

High Visibility:

indexed within Scopus, SCIE (Web of Science), PubMed, MEDLINE, PMC, Ei Compendex, Inspec, Astrophysics Data System, and other databases.

Journal Rank:

JCR - Q2 (Instruments and Instrumentation) / CiteScore - Q1 (Instrumentation)