# **Special Issue**

# Multimodal Sensor Perception Technologies and Medical Applications

# Message from the Guest Editor

With the continuous advancement of medical technology, more and more medical operations and rehabilitation tasks are beginning to require advanced medical equipment capable of providing accurate, reliable, and efficient diagnostic and treatment methods. The current traditional medical and rehabilitation equipment cannot offer sufficiently accurate perception and feedback capabilities comparable to the human tactile system. Bionic tactile systems, an emerging development, can be applied to surgical robots, intelligent prosthetics, and rehabilitation devices, offering significant application potential. However, current bionic tactile systems face many challenges and technological barriers in practical applications, including the need for sensor integration and interoperability, the complexity of data fusion and processing, and the requirements for real-time, accurate bionic tactile systems. This Special Issue will focus on the research and development of the sensor integration technology, data fusion algorithms, and electro-tactile skin perception mechanisms in order to promote the application of bionic tactile systems in the medical field and people's daily lives.

## Guest Editor

Dr. Yimin Zhou Shenzhen Institutes of Advanced Technology, Chinese Academy of Sciences, Shenzhen 518055, China

### Deadline for manuscript submissions

closed (5 August 2024)



# Sensors

an Open Access Journal by MDPI

Impact Factor 3.5 CiteScore 8.2 Indexed in PubMed



mdpi.com/si/186786

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



sensors



# 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)