







an Open Access Journal by MDPI

Tactile Sensing and Rendering for Healthcare Applications

Guest Editors:

Prof. Dr. Fernando Vidal-Verdú

Department of Electronics, Institute of Biomedical Research of Málaga (IBIMA), University of Málaga, 29071 Málaga, Spain

Dr. Wael Bachta

Institut des Systèmes Intelligents et de Robotique (ISIR) UMR 7222, Sorbonne Université, CNRS Equipe Agathe UI, Inserm U1150, France

Dr. Andrés Trujillo-León

Grupo PAI Electrónica para Instrumentación y Sistemas. Department of Electronics, University of Málaga, 29071 Málaga, Spain

Deadline for manuscript submissions:

closed (30 September 2021)

Message from the Guest Editors

This Special Issue is focused on healthcare applications of sensors and actuators related to tactile sensing and display. Tactile sensors are used to assess the contact interface of users of assistive devices such as wheelchairs, prosthesis, orthosis or footwear. Force and tactile sensors are also used in rehabilitation devices to provide control feedback or information about gait phases and to implement touch sense in therapy robots and toys. Tactile sensor can be attached to a tool and used to gather touch information, which is provided to the surgeon through a tactile display or haptic device, in a palpation procedure using Minimally Invasive Surgery. The same devices can be part of telepresence or sensory substitution systems for impaired people. Tactile displays allow visually impaired people to access information such as text or graphics through the sense of touch. Moreover, proper rendering achieves a wide range of tactile sensations such as different stiffness or texture, and tactile icons or tactons. Tactile stimulation is also used in rehabilitation, for instance, in the training of post-stroke patients to improve recovery of motor function.













an Open Access Journal by MDPI

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

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.

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 (*Chemistry, Analytical*) / CiteScore - Q1 (Instrumentation)

Contact Us