Special Issue

From Science to Recovery: Bridging Sensing Technology and Neurology for a Better Future

Message from the Guest Editors

This Special Issue focuses on the latest advancements in innovative technologies for the assessment, monitoring, and treatment of neurological and neurorehabilitation conditions. As artificial intelligence (AI) and neuroengineering continue to evolve, there is an increasing need for solutions that address the complexities of neurological disorders and enhance patient outcomes.

We welcome submissions that present novel sensors, systems, or techniques for evaluating various aspects of the neurology and neurorehabilitation process. Topics of interest include, but are not limited to, neurophysiological activity, motor control, cardiorespiratory function, sleep monitoring, robotic technologies, and overall neurorehabilitation—critical factors in optimizing recovery strategies.

Key areas of focus include the following:

Advanced neurophysiological monitoring systems for real-time brain and spinal cord assessment.
Wearable sensors for tracking motor function and mobility.
Smart systems for evaluating cardiorespiratory responses during rehabilitation.
Sleep analysis technologies linked to neurological recovery.
AI-driven tools for personalized diagnosis and treatment.

Guest Editors

Dr. Hatice Kumru
Institut Guttmann, 08916 Badalona, Spain

Dr. Yolanda Castillo-Escario
Institute for Bioengineering of Catalonia (IBEC), 08028 Barcelona, Spain

Dr. Antonio Oliviero
Hospital Nacional de Parapléjicos, 45004 Toledo, Spain

Sensors

an Open Access Journal by MDPI

Impact Factor 3.5
CiteScore 8.2
Indexed in PubMed

mdpi.com/si/233285

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)