



sensors



an Open Access Journal by MDPI

Sensors and Actuators in Prosthetic Microdevices Technology and Applications

Guest Editors:

Dr. Zoltán Fekete

Research Group for Implantable
Microsystems, Faculty of
Information Technology &
Bionics, Pázmány Péter Catholic
University, H-1083 Budapest,
Hungary

Prof. Dr. István Ulbert

Institute of Cognitive
Neuroscience and Psychology,
Research Centre for Natural
Sciences, H-1117 Budapest,
Hungary

Dr. Péter Fürjes

Institute of Technical Physics and
Materials Science, Centre for
Energy Research, H-1121
Budapest, Hungary

Deadline for manuscript
submissions:

closed (20 January 2022)

Message from the Guest Editors

Implantable sensors and actuators are key components of state-of-the-art biomedical devices designed for operation in the central or peripheral nervous systems or in the cardiovascular network. Implementation of these devices relies on sophisticated micro- and nanofabrication processes of smart, responsive or functional materials. Monitoring of physiological signals and stimulation of cellular activity is controlled through application-specific electronic architecture, data acquisition systems and computational methods.

This Special Issue of *Sensors* aims to provide the opportunity to address aspects of design, materials, technology and testing of implantable sensors and actuators as well as covering actual challenges in the application and evaluation of such systems in vitro and in vivo. Contributions may cover any prosthesis interfacing biological tissue comprising electrical, magnetic, optical or biochemical components to interrogate or modulate cellular behaviour inside the body. Both review papers and original research articles are welcome.



mdpi.com/si/41716

Special Issue



sensors



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 (*Instruments & Instrumentation*) / CiteScore - Q1 (*Instrumentation*)

Contact Us

Sensors Editorial Office
MDPI, St. Alban-Anlage 66
4052 Basel, Switzerland

Tel: +41 61 683 77 34
www.mdpi.com

mdpi.com/journal/sensors
sensors@mdpi.com
[X@Sensors_MDPI](#)