

## Special Issue

# Flexible Integrated Sensor Systems for Biomedical and Industrial Applications

### Message from the Guest Editor

Recent advances in microfabrication, additive manufacturing, microelectronics, and sensors are enabling new biomedical and industrial sensing devices. Application-specific integrated circuits (ASICs) and systems on a chip (SoCs) support on-node signal processing, analog computation, data fusion, and in-memory computing, allowing ultra-low power, miniaturized solutions ideal for IoT, wearable, and implantable systems. Flexible and stretchable sensors offer seamless integration into daily life, improving data quality. Transient sensors are particularly suited for temporary implants. Sensing systems span from DC to medium-frequency electrical sensors (e.g., electrochemical, electrophysiological, bioimpedance, gas, physical) to high-frequency radar and optical methods like photoplethysmography. This Special Issue focuses on challenges in sensitivity, selectivity, biocompatibility, packaging, ASIC integration, sensor modeling, mechanical perturbations, and the co-integration of multi-modal sensors for comprehensive multi-parametric sensing.

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### Guest Editor

Dr. Panagiotis Kassanos

The Hamlyn Centre, Institute of Global Health Innovation, Imperial College London, London SW7 2AZ, UK

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### Deadline for manuscript submissions

15 March 2026



## Sensors

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*Sensors*  
Editorial Office  
MDPI, Grosspeteranlage 5  
4052 Basel, Switzerland  
Tel: +41 61 683 77 34  
[sensors@mdpi.com](mailto:sensors@mdpi.com)

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### 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.

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### 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

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