

## Special Issue

# Biomedical Sensors for Functional Mapping: Techniques, Methods, Experimental and Medical Applications

### Message from the Guest Editors

Biomedical sensors are key components in various medical instruments and equipment and are valuable tools that provide functional information to better understand the underlying mechanism of relevant biological processes and interventions. The recent development of high-density systems, characterized by a high number of sensors arranged in specific configurations (matrices, arrays, wearable, etc.) has boosted the use of biomedical sensors for functional evaluation, including electrophysiological activity, metabolic response of organs and tissues, motor control analysis, adding meaningful spatial information. The aim of this Special Issue is to collect papers describing cutting-edge techniques, methods and applications of biomedical sensors, as well as specific algorithms for data processing. **Keywords**

- High-density electroencephalography (EEG);
- Multi-channel electromyography (EMG);
- Kinematics and motion analysis;
- Functional near infrared spectroscopy (fNIRS);
- Electrocardiography (ECG);
- Muscle synergies;
- Wearable sensors;
- Image and signal processing;
- Functional and effective connectivity;
- Applied machine learning.

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### Guest Editors

Dr. Alfonso Mastropietro  
Dr. Alessandro Scano  
Dr. Massimo W. Rivolta

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### Deadline for manuscript submissions

closed (31 March 2023)



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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

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