

## Special Issue

# Brain Activity Exploration with Non-invasive Sensor Arrays

### Message from the Guest Editors

Brain activity exploration has been a part of the multinational research agenda for several decades. Network models currently dominate and postulate the existence of dynamic functional connections between spatially distributed neuronal assemblies at a range of different scales, which manifests the need for hardware and software solutions capable of concurrently sensing the distributed neuronal populations and extracting regularities present in the measured data. Capitalizing on the recent explosive technological developments in material science, microfabrication, and big data analysis, it is now time for a new twist in the spiral of developing novel tools for sensing brain activity. Given the need to register the activity of neural networks whose nodes are spread across the brain volume, non-invasive whole-brain imaging approaches are of specific interest, and are capable of registering the activity of cortical and subcortical sources at various spatial and temporal resolution scales. More information please visit [here](#)

---

### Guest Editors

Dr. Alexei Ossadtchi

Center for Bioelectric Interfaces, HSE University

Dr. Anton Vershovskii

Ioffe Institute, 194021 St. Petersburg, Russia

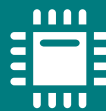
Dr. Guido Nolte

Department of Neurophysiology and Pathophysiology, UKE, Hamburg

---

### Deadline for manuscript submissions

closed (31 October 2021)



## Sensors

---

an Open Access Journal  
by MDPI

---

Impact Factor 3.5  
CiteScore 8.2  
Indexed in PubMed



[mdpi.com/si/61366](https://mdpi.com/si/61366)

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

[mdpi.com/journal/  
sensors](https://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](https://mdpi.com/journal/sensors)



## 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  
Department of Electrical and Information Engineering, Politecnico di Bari, Via Orabona 4, 70126 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)