



*sensors*



an Open Access Journal by MDPI

## Novel Magnetic Sensors and Applications

Guest Editors:

**Dr. Jie Xu**

College of Physics, Qingdao University, Qingdao 266071, China

**Prof. Dr. Shandong Li**

National Demonstration Center for Experimental Applied Physics Education, Qingdao University, Qingdao 266071, China

**Dr. Xuekui Xi**

Beijing National Laboratory for Condensed Matter Physics, Institute of Physics, Chinese Academy of Sciences, Beijing 100190, China

Deadline for manuscript submissions:

**closed (31 October 2023)**

### Message from the Guest Editors

Magnetic sensors are a special kind of sensors, which are widely used in automobile, aerospace, the Internet of Things, consumer electronics and other industries. In recent years, traditional magnetic sensors based on magnetoresistance, electromagnetic induction and other principles, such as the Hall effect, giant magnetoresistance, tunneling magnetoresistance, fluxgate meter, etc., have had their performance improved. Sensors based on novel principles, such as diamond NV-center magnetometers, optical pumping atomic magnetometer, superconducting quantum interference magnetometer, magnetoelectric coupling effect, magneto-optical effect, optical fiber magnetoelastic composite sensor, are developing rapidly. This Special Issue aims to collect the latest research progress of traditional and novel sensors, as well as their latest application progress in biological detection, weak magnetic field measurement, resource exploration, nondestructive testing and other fields, and to provide a platform for scientists to engage in the research and application of magnetic sensors and to exchange and display knowledge.



[mdpi.com/si/128549](https://mdpi.com/si/128549)

**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 (*Chemistry, Analytical*) / CiteScore - Q1 (Instrumentation)

## Contact Us

---

*Sensors* Editorial Office  
MDPI, Grosspeteranlage 5  
4052 Basel, Switzerland

Tel: +41 61 683 77 34  
[www.mdpi.com](http://www.mdpi.com)

[mdpi.com/journal/sensors](http://mdpi.com/journal/sensors)  
[sensors@mdpi.com](mailto:sensors@mdpi.com)  
[X@Sensors\\_MDPI](#)