Special Issue

New Magnetic and Electronic Materials, Thin Film Technology in Electronic Applications

Message from the Guest Editors

In recent years, with the development of new magnetosensitive materials, magnetic sensing mechanisms, and novel sensor technologies, the performance of magnetic sensors has improved significantly. This Special Issue aims to present the latest research advancements in high-performance magnetic sensors. Topics include spin-valve magnetic sensors based on novel magnetoresistive thin-film materials and structures, magnetostrictive-effect magnetic sensors based on new materials, magnetoimpedance magnetic sensors based on new ferromagnetic materials and structures, and novel magnetic sensors based on flexible materials and MEMS technology. Additionally, this issue will present current research on magnetic sensing technologies involving spintronics effects, magnetoelectric effects, magneto-optical effects, quantum mechanics effects, high-temperature superconductivity effects, and optical pumping effects. The latest applications of magnetic sensing technology in industrial automation, consumer electronics, medical health, aerospace, smart grids, and security fields will be showcased.

Guest Editors

Dr. Jiamin Chen

State Key Laboratory of Transducer Technology, Aerospace Information Research Institute, Chinese Academy of Sciences, Beijing 100190, China

Dr. Zhenhu Jin

State Key Laboratory of Transducer Technology, Aerospace Information Research Institute, Chinese Academy of Sciences, Beijing 100190, China

Deadline for manuscript submissions

closed (20 February 2025)



Sensors

an Open Access Journal by MDPI

Impact Factor 3.5 CiteScore 8.2 Indexed in PubMed



mdpi.com/si/212261

Sensors
Editorial Office
MDPI, Grosspeteranlage 5
4052 Basel, Switzerland
Tel: +41 61 683 77 34
sensors@mdpi.com

mdpi.com/journal/ sensors





Sensors

an Open Access Journal by MDPI

Impact Factor 3.5 CiteScore 8.2 Indexed in PubMed



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

Dipartimento di Ingegneria Elettrica e dell'Informazione (Department of Electrical and Information Engineering), Politecnico di Bari, Via Edoardo Orabona n. 4, 70125 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)

