

## Special Issue

# Smart Magnetic Sensors and Magnetometer Systems

### Message from the Guest Editors

Recent advancements in smart magnetic sensors and magnetometers have revolutionized high-precision magnetic field measurements across various applications, including in industrial, medical, and environmental monitoring. These advancements have enabled capabilities ranging from fT sensing to nT biomagnetic detection. Commercial applications of these sensors now span a wide range, including smartphone navigation, industrial non-destructive testing, and magnetocardiography. To further advance this field, we invite submissions addressing the following research directions: - Multiphysical coupling modeling: The establishment of magnetic field–electrical signal–optical signal correlation models to improve the accuracy and sensitivity of magnetic field measurement prediction. - Cross-scale data fusion: Collaborative analysis of geomagnetic navigation data and biomagnetic signals to build an integrated system of spatial positioning and health monitoring. - Miniaturization design: The development of miniaturization magnetometers and key devices, with a view to integrating them into wearable devices.

### Guest Editors

Dr. Jixi Lu  
Dr. Danyue Ma  
Dr. Xiujie Fang

### Deadline for manuscript submissions

closed (20 November 2025)



## Sensors

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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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