

Special Issue

Latest Trends in Hall-Effect and Magnetoresistance Sensors: Devices, Systems and Applications

Message from the Guest Editors

Magnetic sensors have a fundamental role in many applications since they are used as the enabling element for sensing and monitoring mechanical and electrical quantities, such as position, force, and current. Their robustness grants them extensive applicability in harsh environments and widespread usage in industrial and automotive applications. However, novel applications are now emerging, such as magnetic biosensing, broadband current sensing, magnetic cameras, and robotics, to cite a few. Novel materials, circuits, and operating methodologies for magnetic sensors are investigated to respond to the requirements set by the new applications. Among all magnetic sensors, this Special Issue is focused on Hall-effect and magnetoresistance sensors, which are the most compatible with semiconductor technologies for the development of smart magnetic sensors. Topics include, but are not limited to, to:

- New materials;
- New applications (camera, etc....);
- Better performance (bandwidth, accuracy, temperature variation, etc....);
- Circuits and operating methodologies;
- Package design (stress effect, etc...);
- Simulation.

Guest Editors

Dr. Marco Crescentini

Department of Electrical, Electronic, and Information Engineering "G. Marconi", University of Bologna, Bologna, Italy

Dr. Marco Marchesi

STMicroelectronics, Cornaredo, Italy

Deadline for manuscript submissions

closed (30 June 2024)



Sensors

an Open Access Journal
by MDPI

Impact Factor 3.5
CiteScore 8.2
Indexed in PubMed



mdpi.com/si/124380

Sensors
Editorial Office
MDPI, Grosspeteranlage 5
4052 Basel, Switzerland
Tel: +41 61 683 77 34
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

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)