



an Open Access Journal by MDPI

Advanced Magnetoelectric Sensors: Materials, Design and Applications

Guest Editors:

Dr. Zhongqiang Hu

School of Electronic Science and Engineering, Xi'an Jiaotong University, Xi'an 710049, China

Prof. Dr. Ming Liu

School of Electronic and Information Engineering, Xi'an Jiaotong University, Xi'an, China

Dr. Jinghong Guo

Institute of Electric Power Sensing Technology, State Grid Smart Grid Research Institute Co., LTD., Beijing 102209, China

Deadline for manuscript submissions: **31 May 2024**

Message from the Guest Editors

Magnetoelectric (ME) sensors based on piezoelectric/ ferromagnetic ME composites have gained attention for futuristic device applications due to their low cost, easy fabrication, high sensitivity, and room temperature operation. This Special Issue aims to highlight the current advances in the field of magnetoelectric sensors, including but not limited to the following topics:

- New magnetoelectric composite materials;
- Novel fabrication processes for magnetoelectric sensors;
- Nano/micro-electromechanical systems (N/MEMSs) acoustic resonator-based magnetoelectric sensors;
- Theory, modeling, and optimization of magnetoelectric sensors;
- Magnetoelectric current sensors, self-powered sensors;
- Magnetoelectric energy harvesters;
- Signal modulation and delta-E (ΔE) effect-based magnetoelectric sensors;
- Noise analysis of magnetoelectric sensors and readout systems.



mdpi.com/si/167287





an Open Access Journal by MDPI

Editor-in-Chief

Message from the 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

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 (*Instruments & Instrumentation*) / CiteScore - Q1 (*Instrumentation*)

Contact Us

Sensors Editorial Office MDPI, St. Alban-Anlage 66 4052 Basel, Switzerland Tel: +41 61 683 77 34 www.mdpi.com mdpi.com/journal/sensors sensors@mdpi.com X@Sensors_MDPI