Special Issue

Electromagnetic Sensing and Its Applications

Message from the Guest Editors

Based on the interaction between materials and electromagnetic fields/waves, the electromagnetic sensing technique is able to provide physical insight into the integrity and properties of materials without causing damage. EM sensing facilitates advancements across a wide range of scientific, industrial, and medical domains and addresses challenges in many application fields such as aerospace, rail, oil, and gas, geophysical exploration, advanced manufacturing, etc. Great efforts have also been made to improve the measurement accuracy, speed, and resolution through optimization of the sensing system and advanced manufacturing. This Special Issue aims to report recent advances in EM sensing and welcome contributions from colleagues working in this field. The potential topics include by not limited to:

- New and emerging electromagnetic sensing principles, sensors and systems;
- Electromagnetic sensors design and optimization;
- Material property evaluation;
- Defect detection and imaging;
- Sensing system development;
- Forward and inverse problems;
- Deep learning enhanced sensing and its applications.

Guest Editors

Prof. Dr. Wuliang Yin

Department of Electrical and Electronic Engineering, University of Manchester, Manchester M60 1QD, UK

Dr. Mingyang Lu

CNDE, Iowa State University, Ames, IA, USA

Dr. Ruochen Huang

College of Electrical Engineering and Automation, Fuzhou University, Fuzhou 350108, China

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

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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.

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

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