

Special Issue

Recent Advances in Sensing Technologies for Automation, Process and Structural Health Monitoring

Message from the Guest Editors

Recent advancements in sensing technologies are reshaping automation, process and structural health monitoring, making the integration of intelligent sensing networks practical, feasible and scalable. This Special Issue invites contributions on the latest sensing technologies and frameworks for efficient monitoring of processes and structures across multiple sectors. We seek state-of-the-art sensing solutions, smart materials with embedded sensing capabilities, novel signal processing algorithms, and cross-disciplinary case studies that demonstrate practical implementation in real scale problems. Submissions focusing on real-world applications and their implications for sustainability, resilience, and Industry 4.0 are particularly encouraged. Potential topics include (but are not limited to) the following:

- Intelligent Sensor Networks
- Internet of Things (IoT) Enabled Sensing Solutions
- Smart Materials with Integrated Sensing Elements
- Predictive Maintenance and Condition Assessment
- Fiber Optic Sensors
- Damage Detection and Imaging Algorithms
- Reliability and Safety Engineering
- Guided Waves for Structural and Process Monitoring

Guest Editors

Dr. Ilias Giannakeas

Department of Aeronautics, Imperial College London, South Kensington Campus, City and Guilds Building, Exhibition Road, London SW7 2AZ, UK

Dr. Yingwu Li

School of Automation, Beijing Institute of Technology, No. 5, Zhongguancun South Street, Haidian District, Beijing, 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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