



sensors



an Open Access Journal by MDPI

Smart Manufacturing based on Sensing Technology: Digital Twin, Artificial Intelligence and Human–Robot Collaboration

Guest Editors:

Dr. Chao Liu

Dr. Peiji Liu

Dr. Chong Chen

Dr. Haidong Shao

Prof. Dr. Baicun Wang

Deadline for manuscript
submissions:

31 August 2024

Message from the Guest Editors

Dear Colleagues,

The integration of cutting-edge sensing technologies in the contemporary manufacturing landscape has led to the emergence of smart manufacturing, emphasizing the seamless integration of physical and digital systems for enhanced efficiency and innovation. This integration has facilitated transformative advancements in digital twin implementations, artificial intelligence applications, and the promotion of effective human–robot collaboration in modern manufacturing environments. Digital twin technologies simulate and optimize manufacturing processes, enhancing productivity, while artificial intelligence empowers proactive process optimization. Sophisticated human–robot collaboration strategies redefine manufacturing boundaries, fostering a collaborative ecosystem where human expertise and robotic precision work in tandem to ensure enhanced safety and productivity.

This Special Issue invites researchers, academicians, and industry practitioners to contribute to the discourse on "Smart Manufacturing based on Sensing Technology: Digital Twin, Artificial Intelligence, Human-Robot Collaboration."



mdpi.com/si/192915

Special Issue



sensors



an Open Access Journal by MDPI

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

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.

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](#)