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Instrumentation in Interactive Robotic and Automation

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Message from the Guest Editors

The new requirements in industrial automation have to be met with new sensing technologies that bridge different machines and systems. Smart sensing allows the collaboration of networked systems (such as those in smart factories), promoting just-in-time production based on data-driven demand models, for a transparent and intelligent supply chain. The aim of this Special Issue including (but not limited to) the following:

- Microelectronic smart and virtual sensors;
- Sensor fusion;
- Sensors for human–robot collaboration and interaction;
- Advanced techniques for diagnostics; predictive maintenance; and self-organized, self-maintenance systems;
- Haptics and teleoperation;
- Cyber-physical social systems and human-in-the-loop flexible manufacturing systems;
- Digital twins;
- Multirobot systems;
- Robot swarms;
- Data-driven control, learning-based control, robust and predictive control;
- Data-driven, demand-driven, and Lean Six Sigma;
- Human safety using wearable smart devices;
- Sensors for intelligent supply chain and process optimization;
- Applications: welding, assembly, grasping, painting, etc.



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Special Issue



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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.

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