

Special Issue

Intelligent Sensing Systems: From Design to IoT Integration

Message from the Guest Editors

The evolution of sensing technology has transitioned from simple transducers to sophisticated intelligent sensing systems (ISSs). Historically, sensors served as passive data collectors. However, the confluence of microelectronics, low-power processing, and the proliferation of the Internet of Things (IoT) has catalyzed a paradigm shift. Modern sensors are increasingly endowed with embedded intelligence, enabling on-chip signal processing, data analytics, and decision-making capabilities, transforming them into the autonomous perceptual backbone of our connected world.

This Special Issue aims to provide a comprehensive forum for the latest advancements that bridge the gap between fundamental sensor design and systemic IoT deployment. The scope of this issue is inherently interdisciplinary, encompassing a full range of technologies, from novel sensor materials and low-power electronics to the complex challenges of data management, interoperability, and security within distributed IoT architectures.

Guest Editors

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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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