

Special Issue

Advanced Sensing Technologies in Thermal Measurements

Message from the Guest Editors

Thermal sensing is becoming increasingly essential for addressing engineering challenges across sectors such as energy systems, manufacturing, structural health monitoring, and biomedical applications. Advances in infrared detectors, high-resolution thermal cameras, and embedded sensing platforms now enable more accurate and reliable measurements under demanding real-world conditions. At the same time, progress in signal processing, machine learning, and calibration techniques is transforming raw thermal data into actionable insights for diagnostics, control, and predictive maintenance. With this Special Issue, we aim to present research that pushes the state of the art in sensor design, measurement methodologies, and application-driven solutions that harness thermal information. By connecting emerging sensing technologies with practical engineering needs, it aims to demonstrate how thermal measurements can enhance safety, efficiency, and informed decision-making. This topic aligns strongly with the scope of *Sensors*, highlighting innovations in sensing devices, measurement systems, and data analysis techniques to extract meaningful knowledge from thermal signals.

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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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