

## Special Issue

# Advanced Imaging Sensors for Object-Shape Recognition and 3D Reconstruction

### Message from the Guest Editors

Imaging sensor technologies and 3D data processing have dramatically enhanced our ability to capture and reconstruct both an object's shape and its semantic geometric structure, which is increasingly critical for applications such as autonomous navigation, human-machine interactions, industrial automation, cultural heritage preservation, and biomedical diagnostics. This Special Issue aims to bring together original research and comprehensive reviews that showcase the latest breakthroughs in sensor design, 3D data acquisition, data processing techniques, and intelligent reconstruction methods. Topics of interest include, but are not limited to, the following:

- Novel architectures for imaging sensors and embedded sensing systems;
- AI-driven depth sensing and real-time 3D scene reconstruction;
- Multimodal and multispectral imaging for enhanced shape recognition;
- Sensor fusion strategies for robust object detection and spatial understanding;
- Application-focused systems in fields such as robotics, healthcare, industrial inspection, and augmented reality.

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### Guest Editors

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### Deadline for manuscript submissions

30 June 2026



## Sensors

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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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