

## Special Issue

# Sensor-Driven Intelligent Methodologies for Advanced Image Processing

### Message from the Guest Editors

Recent advances in sensor technology are shifting information perception from conventional single-source to multi-source frameworks. Modern sensors including visible-light, infrared, hyperspectral, depth, synthetic aperture radar (SAR), time-of-flight (ToF), and LiDAR generate large volumes of image processing data. Meanwhile, artificial intelligence (AI), especially machine learning and deep learning, provides powerful tools to extract meaningful information from this data, drastically boosting image processing accuracy, efficiency, and robustness. Outperforming conventional approaches, these multi-sensor, AI-driven methods enable more effective information extraction from heterogeneous imaging data, with strong potential in tasks including image matching, enhancement, restoration, segmentation, pattern recognition, and scene understanding. This Special Issue aims to present and disseminate the latest advances in sensor and AI technologies for image processing. We welcome submissions addressing theoretical developments, algorithm design, system implementation, and applied research advancing the state of the art in sensor and AI-enabled image processing.

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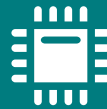
### Guest Editors

Dr. Siyuan Cao  
Dr. Qi Ming  
Dr. Xiaoxi Hu

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### Deadline for manuscript submissions

31 December 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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### Editor-in-Chief

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