# **Special Issue**

# Recent Advances in X-Ray Sensing and Imaging

# Message from the Guest Editor

The purpose of this Special Issue is to showcase the latest developments of X-ray sensing and imaging technologies and explore their future trajectories. We aim to bring together a diverse range of research, covering (but not limited to) the following topics:

- Innovations in photon-counting X-ray detectors and their applications.
- Advances in high-spatial-resolution detectors using direct conversion methods.
- The role of these technologies in enhancing spectral imaging applications.
- The integration and impact of these detectors in ultrahigh-resolution CT.
- Emerging applications in X-ray phase-contrast imaging and X-ray coherent scatter imaging.
- Clinical and industrial case studies demonstrating the practical applications of these advanced detectors.
- Quantitative data (e.g., improved resolution, reduced radiation dose) illustrating the impact of these advancements.

We invite researchers and practitioners from academia and industry to contribute their latest findings, reviews, and perspectives on these exciting developments.

# Guest Editor

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# Deadline for manuscript submissions

20 November 2025



# 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.

#### Editor-in-Chief

#### Prof. Dr. Vittorio M. N. Passaro

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