

Special Issue

Recent Innovations in Sensors for Radiation Detection

Message from the Guest Editors

X-ray detection technology has played a pivotal role in various fields, including medicine, industry, and research. X-rays are a form of electromagnetic radiation with wavelengths shorter than those of ultraviolet rays, making them capable of penetrating most substances. X-ray detector sensors are crucial components in capturing and converting these rays into useful information. Various detector technologies exploit this phenomenon to capture and convert X-rays into measurable signals. Common types of X-ray detectors include scintillation detectors, gas detectors, solid-state detectors, and image receptors such as X-ray films and digital detectors. This Special Issue invites contributions which focus on, but are not limited to, the following topics:

- Compound semiconductor detector for hard X-rays;
- Solution-processed perovskites for X-ray detection;
- Fast timing detectors;
- High-Z materials for hard X-ray detection;
- Novel detectors for synchrotron application;
- Low-gain avalanche photo-diodes for 4D tracking;
- Novel sensors for soft X-rays;
- Fast imaging detectors;
- High-spatial resolution for X-ray imaging;
- High-energy resolution detectors.

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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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