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Recent Innovations in Sensors for Radiation Detection

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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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Editor-in-Chief

Message from the Editor-in-Chief

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