

Special Issue

Nuclear Radiation Detectors and Sensors

Message from the Guest Editor

This Special Issue focuses on recent advances in nuclear radiation detectors and sensors, with particular emphasis on innovations in environmental applications, data analysis, and smart system integration. As radiation monitoring evolves beyond laboratory settings, new challenges and opportunities arise in the real-time detection and interpretation of radiometric data.

We welcome contributions exploring environmental radiation monitoring, the design and deployment of portable nuclear detectors, and improvements in detector calibration techniques. This Special Issue will also highlight developments in energy spectra analysis, including the use of deep learning algorithms for signal processing, which are redefining how radiation signatures are classified and understood. Potential topics include but are not limited to:

- environmental radiation monitoring
- energy spectra analysis
- deep learning algorithms for signal processing
- portable nuclear radiation detectors
- detector calibration
- real-time data analysis
- IoT-integrated sensing systems
- smart sensors network
- proximal and remote sensing for radiation mapping
- radiological risk assessment

Guest Editor

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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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