

Special Issue

Advances in Radiation Sensors and Detectors

Message from the Guest Editor

Radiation sensors and detectors are key technologies in a broad range of applications, including high-energy physics, medical applications, nuclear safety, environmental monitoring, industrial inspection, and space exploration. This Special Issue of *Sensors*, “Advances in Radiation Sensors and Detectors”, aims to showcase recent developments and foster innovation in this evolving field.

This Special Issue invites interdisciplinary contributions spanning from fundamental research to practical applications. We welcome original research articles, reviews, and communications that explore novel detector architectures, new materials such as scintillators and semiconductors, advanced microfabrication techniques, and state-of-the-art readout and signal processing solutions. Topics of interest include low-power and compact designs, systems with high spatial and timing resolution, and AI-assisted data analysis. The discussion of emerging technologies is also encouraged, while particular attention will be given to the role of radiation detectors in cutting-edge particle physics experiments, where high-performance detection systems are essential.

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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