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Radiation Sensors and Detectors: Materials, Principles and Applications

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Message from the Guest Editors

Dear Colleagues,

Radiation sensors and detectors are widely used in fundamental physics, nuclear reactors, aerospace science, medicine, environmental monitoring, etc. One of the most important aspects of these application areas is the extremely harsh radiation environment, driven by the next-generation fusion energy reactors and future high-energy particle detectors. It is crucial to develop radiation-resistant, easy-to-operate, high-spatial/temporal-resolution devices that can survive in environments with high radiation fluences and high temperatures, as expected in plasma diagnostics and high-energy particle collisions. Solid-state sensors, especially wide-bandgap semiconductors, are good candidates for these applications.

This Special Issue is addressed to all types of solid-state sensors designed for extremely harsh environments.

Dr. Xin Shi

Dr. Michael Moll

Guest Editors



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Special Issue



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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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