Special Issue

Superconductor and Semiconductor-Based Radiation Detectors

Message from the Guest Editors

The detection of electromagnetic radiation in the terahertz and microwave range is relevant for a wide range of applications that span between off-the-shelf technologies, such as those employed in imaging systems or for material spectroscopies, and fundamental science studies in quantum technologies or dark matter searches. Owing to the low energy of terahertz and microwave photons, the realization of efficient detectors is extremely challenging and requires optimized devices and materials. Superconducting and semiconducting circuits provide different, yet complementary, approaches: a rich selection of cutting-edge devices, including also single-photon detectors and counters, has been reported in the literature. Despite this, efficient detectors are still lacking in specific frequency ranges, and prevailing technology has not emerged yet. For more details, please visit here.

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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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