

Special Issue

Metal Halide Nanomaterials-Based X-Ray Detection and Imaging

Message from the Guest Editor

This Special Issue's scope ranges from the synthesis and modification of perovskite semiconductors to device integration and X-ray detector performance optimization for imaging applications. This Special Issue focuses on both the scientific and engineering aspects of perovskite materials and the corresponding direct X-ray detectors, outlining fundamental properties, defects, and phase transitions which enable the observation of unprecedented physical phenomena at the nanoscale and the creation of state-of-the-art X-ray imaging detectors.

- perovskite semiconductor
- crystal growth
- defect passivation
- ion migration inhibition
- heterogeneous integration
- direct X-ray detection
- X-ray imaging

We look forward to receiving your contributions.

Guest Editor

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Deadline for manuscript submissions

closed (20 May 2025)



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Message from the Editor-in-Chief

Nanoscience and nanotechnology are exciting fields of research and development, with wide applications to electronic, optical, and magnetic devices, biology, medicine, energy, and defense. At the heart of these fields are the synthesis, characterization, modeling, and applications of new materials with lower nanometer-scale dimensions, which we call “nanomaterials”. These materials can exhibit unusual mesoscopic properties and include nanoparticles, coatings and thin films, metal–organic frameworks, membranes, nano–alloys, quantum dots, self-assemblies, 2D materials such as graphene, and nanotubes. Our journal, *Nanomaterials*, has the goal of publishing the highest quality papers on all aspects of nanomaterial science to an interdisciplinary scientific audience. All of our articles are published with rigorous refereeing and open access.

Editor-in-Chief

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