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Crystal Growth and Luminescence Properties of Scintillators

Guest Editor:

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Message from the Guest Editor

Dear Colleagues,

Scintillators are the materials that convert the energy of ionizing radiation (α, β, γ, neutron) into a bunch of UV-visible photons. Scintillators play an important role in both scientific and industrial fields; high-energy physics, underground experiments, astrophysics, medical imaging, homeland security, geological prospecting, and so on. One of the most recent trends in scintillation materials principally concentrates on scintillators based on halide and oxide compounds. Increasing focus has been placed on not only characterization and scintillation mechanism but novel crystal growth technology, the co-doping effect, and the radiation imaging technique in the last decade.

This Special Issue will focus on a collection of current top trends in novel scintillators; including crystal growth, characterization, mechanisms, the co-doping effect, and application. The topical focus of this Special Issue includes but is not limited to:

- Novel scintillators, including nanotechnologies and hybrid materials;
- Crystal growth technology;
- Co-doping effect;
- Scintillation mechanism;
- Radiation resistance;
- Scintillation detectors;
- Radiation imaging.

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Message from the Editor-in-Chief

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