Special Issue

Crystal Growth and Luminescence Properties of Scintillators

Message from the Guest Editor

Scintillators are the materials that convert the energy of ionizing radiation (□, □, □, 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.

Guest Editor

Asst. Prof. Dr. Masao Yoshino
Institute for Materials Research, Tohoku University, Sendai, Japan

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Materials
Editorial Office
MDPI, Grosspeteranlage 5
4052 Basel, Switzerland
Tel: +41 61 683 77 34
materials@mdpi.com

mdpi.com/journal/materials

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Message from the Editor-in-Chief

Materials (ISSN 1996-1944) was launched in 2008. The journal covers twenty-five comprehensive topics: biomaterials, energy materials, advanced composites, advanced materials characterization, porous materials, manufacturing processes and systems, advanced nanomaterials and nanotechnology, smart materials, thin films and interfaces, catalytic materials, carbon materials, materials chemistry, materials physics, optics and photonics, corrosion, construction and building materials, materials simulation and design, electronic materials, advanced and functional ceramics and glasses, metals and alloys, soft matter, polymeric materials, quantum materials, mechanics of materials, green materials, general. *Materials* provides a unique opportunity to contribute high quality articles and to take advantage of its large readership.

Editor-in-Chief

Prof. Dr. Maryam Tabrizian
1. Department of Biomedical Engineering, Faculty of Medicine and Health Sciences, McGill University, Montreal, QC H3A 2B6, Canada
2. Faculty of Dentistry and Oral Health Sciences, McGill University, 3640 Rue University, Montreal, QC H3A 0C7, Canada

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