Special Issue

Advances in Radiation-Induced Nanostructuration of Materials

Message from the Guest Editor

Nanostructured materials are increasingly required since nanostructures confer unique properties to the materials. Nanometer-sized microstructures can be achieved through both equilibrium and non-equilibrium processes, including irradiation and ion beam modification. Irradiation is a non-equilibrium process where point defects are created in high concentrations owing to atom displacement caused by collision cascades. These point defects are responsible for the nanostructuration of the irradiated materials through different processes. Understanding the nanostructuration of materials under irradiation constitutes a challenging issue that has the potential to greatly expand the use of nanostructured materials in a variety of fields—from electronic devices to applications with extreme environments. The aim of this Special Issue is to highlight the advances in the latest developments and understanding of the relationship between irradiation and nanostructure from both theoretical and experimental points of view. Articles including full papers, communications, and reviews are welcome contributions. Joel Ribis

Guest Editor

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Deadline for manuscript submissions

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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.

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