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Advances in Radiation-Induced Nanostructuration of Materials

Guest Editor:

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Deadline for manuscript submissions:
closed (28 February 2022)

Message from the Guest Editor

Dear Colleagues,

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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Message from the Editor-in-Chief

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