

Special Issue

Growth and Characterization of Bulk Crystals

Message from the Guest Editor

Electronic and optical devices are almost all based on single crystals of semiconductors and oxides. We can see that progress in crystal growth techniques makes tremendous developments in the field of microelectronics, power electronics, photovoltaics, optoelectronics and scintillator materials. In order to fulfill the industry requirements, researchers are expected to give insights into crystal growth mechanisms in order to understand crystalline perfection. On one side, characterization methods like X-ray and electron diffraction, optical spectroscopy, mass spectroscopy, and electric and magnetic measurements provide this insight, and they have become important tools in the study of bulk crystal growth and materials properties. On the other side, in recent decades, computer modeling has become an essential tool for optimization of growth design and automation process. We kindly invite you to submit a manuscript(s) for this Special Issue. Full papers, communications, and reviews in the field of bulk crystal growth—growth techniques, characterization, and computer models—are all welcome.

Guest Editor

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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.

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