Special Issue

Crystal Growth and Structure

Message from the Guest Editor

Structured x-rays are used to determine the dimensions and geometry of the unit cell forming a given crystal lattice. In chemistry, this method makes it possible to accurately determine the structure of the chemical compounds forming the analyzed monocrystals. It is an essential tool in organic, organometallic, coordination, and biochemistry chemistry for determining the real structures of layered chemical compounds. This method, by determining the exact crystal structure, gives a real picture of the complex chemical compound. We can predict how a given compound will be arranged in space, how it will interact with other molecules, and how it will be arranged in layers (stacking). Conducting conformational analysis, we determine the most energyefficient arrangement of atoms and bonds for a given molecule. Using all the research results obtained, we can be tempted to design new important compound with biological activity.

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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