Special Issue

Epitaxial Growth of Semiconductor Materials

Message from the Guest Editor

The development of techniques for the epitaxial growth of thin semiconductor films over recent decades has contributed significantly to the technological revolution. Over this time, there has been at least three stages. First, it was the Si and Ge era, the next was the GaAs and InP era, and now the GaN era is half-jokingly described as "GaNification". The rapid development of epitaxy techniques of Si, Ge, GaAs, and InP could be progressed as good quality and cheap monocrystalline substrates were available. In the case of gallium nitride, the lack of such lattice-matched substrate delayed the progress, but is contributing to the dynamic development of the heteroepitaxial growth techniques. After the success of blue optoelectronics in the global reduction of energy consumption, it is time to improve the efficiency of electronic devices working in systems producing green energy. This Special Issue focuses on epitaxial growth by various techniques utilizing any semiconductor material. I am confident that every article published in this open access Special Issue will be read and cited by a large number of scientists and will disseminate knowledge about epitaxy.

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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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