

Special Issue

Nanostructured Molecular Beam Epitaxy Growth and Quantum Device

Message from the Guest Editors

Nanostructured materials are at the forefront of 21st-century device innovation. The understanding and exploitation of nanoscale electronic materials, such as quantum dots and quantum wires, has been the subject of intense research. In addition, nanoplasmonics and functional biomaterials are emerging fields with tremendous potential. However, the underlying nanostructuring process methodology has not evolved significantly over very many years. Among technologies that harness interactions between light and matter, quantum information processing is an emerging field of science in which photons are employed to encode, transmit, and process information in the form of quantum bits. This Special Issue will focus on the developments in the field of semiconductor nanostructured molecular beam epitaxy (MBE) growth and quantum devices. The articles presented in this Special Issue will cover various topics, including but not limited to, the optimization of MBE growth, quantum dots, quantum wires, nanowires/pillars, nano-patterned growth, quantum devices, quantum light sources, and nanophotonics.

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Message from the Editorial Board

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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