



Electronic Materials and Devices

Guest Editor:

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Message from the Guest Editor

Modern semiconductor technology is inexorably approaching the threshold of miniaturization and, as a result, its efficiency against the background of rapidly growing needs for high-performance processing systems, and the storage and safe transfer of large amounts of data.

Building such platforms is possible on the basis of such promising functional elements as highly efficient sources of single and entangled photons (quantum communication and cryptography), quantum registers (quantum computing and memory/quantum computing), structural units (blocks) of cellular automata, functional and structural blocks of hybrid integral schemes, etc. This, in turn, requires the development of new methods and approaches in the field of designing functional elements of nano- and optoelectronics, conducting research in the field of creating new functional materials based on various types of nanostructures, etc.

This Special Issue will be a collection of full papers, short communications and review papers focusing on recent progress in the field of semiconductor nanostructures, the technology of their production and promising nano- and optoelectronic elements and devices based on them.





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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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