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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 optoelecronic elements and devices based on them.









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Message from the Editor-in-Chief

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