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Advances in Semiconducting Nanomaterials

Guest Editor:

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Message from the Guest Editor

Dear Colleagues,

Semiconducting nanomaterials are new materials with characteristic sizes in the nanometer scale. The structures are usually low-dimensional structures rather than threedimensional bulk materials, such as zero-dimensional quantum dots, one-dimensional quantum wires, twodimensional superlattices, quantum wells, and other lowdimensional structures. Due to surface effects, volume effects, quantum size effects, and the macro quantum tunneling effect, as well as some nontrivial optical, electrical, and magnetic properties, semiconducting nanomaterials have been widely used to manufacture artificial microstructures and advanced devices with superior performance since their rise in the 1990s.

In this Special Issue, we invite the submission of research papers highlighting semiconducting nanomaterial synthesis, device fabrication, performance characterization, and physical analysis.

- Nanomaterials
- Quantum dots
- Quantum wires
- Nanocrystals
- Superlattices
- Optoelectronic devices
- Large-scale integrated circuit









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Message from the Editor-in-Chief

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