Special Issue

Nanoscale Electronic Devices: Modeling and Applications

Message from the Guest Editors

The integration of nanoscale materials into electronic devices has opened up new possibilities for the development of high-performance, low-power, miniature devices for a broad range of applications. Envisaged applications of nanoscale electronic devices include high-frequency electronics, wireless communications, advanced sensing, biomedical engineering, and aerospace.

This Special Issue seeks original research papers and reviews of the state-of-the-art that advance the understanding and application of nanoscale electronic devices, such as field-effect transistors, detectors, and sensors, based on graphene, carbon nanotubes, nanowires, transition metal dichalcogenides (TMDC), and other nanomaterials.

Contributions are solicited on a wide range of topics, including the following:

- Nanoscale electronic device physics;
- Advanced nanoscale device modeling;
- Novel device architectures at the nanoscale;
- Fabrication and characterization of nanomaterial-based devices;
- Circuit design based on nanoscale devices;
- Nanomaterial-based sensors and detectors;
- Nanoscale electronic device applications.

Guest Editors

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Deadline for manuscript submissions

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About the Journal

Message from the Editor-in-Chief

As the world of science becomes ever more specialized, researchers may lose themselves in the deep forest of the ever increasing number of subfields being created. This open access journal Applied Sciences has been started to link these subfields, so researchers can cut through the forest and see the surrounding, or quite distant fields and subfields to help develop his/her own research even further with the aid of this multi-dimensional network.

Editor-in-Chief

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