



## Advances in Electronic and Optical Properties of Nanostructured Materials

Guest Editor:

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### Message from the Guest Editor

Nanostructured materials have attracted considerable interest due to their novel physical properties and diversity for potential electronic and optoelectronic device applications. Two main methods were mostly developed to form well-defined and controlled nanostructures, namely, the top-down approach, which uses lithography and etching technologies, and the bottom-up approach or self-assembly, which uses chemical or physical forces operating at the nanoscale to assemble basic units into larger structures. In the past twenty years, a combination of these two methods has developed to design nanostructured materials with desired electronic and optical properties. At the same time, as the material sizes decrease, the surface plays a major role in their physical properties, and specific attention should be paid to take into account these effects and/or to passivate the surface. Currently, nanostructured materials are the basic building blocks of almost all devices used in the microelectronics and optoelectronics fields.





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## Message from the Editor-in-Chief

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