

## Special Issue

# Graphene Nanoribbons: Synthesis, Characterization and Applications

### Message from the Guest Editor

The effects of electronic bonding and the state of the electronic edges are important for graphene properties that depend crucially on the ribbon width and the nature of the edge of the ribbon. One of the main challenges towards GNR's synthesis is the preservation of their properties upon device integration. Several top-down and bottom-up approaches have been used for the synthesis of atomically accurate GNRs by means of lithographic, catalytic cutting, chemical, and epitaxial growth methods. Moreover, GNR transparent conductive thin films can be obtained by liquid deposition methods. GNRs have a variety of applications in next-generation nanoelectronics like transistors, logic circuits, and spintronic devices due to their tunable electronic properties. They are also used in energy applications such as transparent conductive films, supercapacitors, and thermoelectric generators. Additionally, GNRs show promise in sensing applications such as chemical and gas sensing, biosensing and bioimaging.

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### Guest Editor

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## Applied Sciences

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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.

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### Editor-in-Chief

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