



Characterization, Synthesis and Applications of 1D and 2D Materials

Guest Editor:

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Message from the Guest Editor

Dear Colleagues,

1D and 2D materials exist in a variety of forms and composition including, for example, carbon nanotubes and graphene, which represent the 1D and 2D forms of carbon. Their remarkable properties, such as high surface area to volume ratio, surface charge, structure, anisotropic nature and tunable functionalities, have found applications in a wide range of scientific disciplines and fields of study including, for example, energy production and storage, microscopy, drug delivery, biomedical science, sensing, filtration, and microelectronics. New methods to fabricate 1D or 2D materials are always being investigated, and techniques to precisely characterize these nanomaterials are vital in understanding their properties and applying them to academic and industrial scientific research. This Special Issue of *Applied Sciences* is therefore aimed at presenting the latest developments in the synthesis, characterization, and application of 1D and 2D materials by leading research groups throughout the international scientific community and highlights their current and future potential in scientific research and device applications.

Dr. Christopher Gibson
Guest Editor





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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.

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