



Carbon-Based Functional Nanomaterials: Preparation, Properties and Applications

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Message from the Guest Editor

Dear Colleagues,

Carbon is an extremely versatile element, characterized by a variety of allotropes and structures with different properties due to their sp , sp^2 or sp^3 hybridization. Tremendous progress has been made in the area of carbon nanomaterials since the discovery of buckminsterfullerene in 1985 by Smalley, Kroto and Curl. In the following decades, a great number of novel nanostructured modifications of carbon, namely nanoscale diamonds, carbon nanotubes, and graphene, have been prepared and over a hundred more carbon allotropes theoretically predicted. Due to their unique structural dimensions and excellent mechanical, electrical, thermal, optical and chemical properties, these materials have attracted significant interest in diverse areas. The scope of this Special Issue is to illuminate the most recent developments of research on the production, characterization, properties and broad applications of multifunctional carbon-based nanomaterials, as well as to cover the current challenges and opportunities in their industrial acceptance and potential technological scale-up.





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Message from the Editor-in-Chief

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