Special Issue

Development, Properties, and Applications of Carbon-Based Nanomaterials

Message from the Guest Editor

In the last 35 years, several different types of carbon nanomaterials have been discovered, including graphene, carbon nanotubes, and carbon dots. These breakthroughs have sparked a revolution in the field of nanotechnology as researchers have sought to explore the exciting applications of these materials. Different allotropes of carbon exhibit unique properties and promote their use in diverse fields. Various carbon nanoparticles have shown promise in areas such as drug delivery, energy storage, and photocatalysis based on their easily modifiable surface and unique electronic and optical properties. Despite the promise shown by the various types of carbon nanomaterials, there remain many fundamental questions about their properties and obstacles to maximizing their use in fields such as nanomedicine, electronics, and manufacturing. This Special Issue encompasses research based on new and improved synthesis/development of carbon nanomaterials, enhanced understanding of their properties, and advances in the use of these materials in various applications.

Guest Editor

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Message from the Editor-in-Chief

Materials (ISSN 1996-1944) was launched in 2008. The journal covers twenty-five comprehensive topics: biomaterials, energy materials, advanced composites, advanced materials characterization, porous materials, manufacturing processes and systems, advanced nanomaterials and nanotechnology, smart materials, thin films and interfaces, catalytic materials, carbon materials, materials chemistry, materials physics, optics and photonics, corrosion, construction and building materials, materials simulation and design, electronic materials, advanced and functional ceramics and glasses, metals and alloys, soft matter, polymeric materials, quantum materials, mechanics of materials, green materials, general. Materials provides a unique opportunity to contribute high quality articles and to take advantage of its large readership.

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