Advanced Carbon Nanomaterials for Sensor Applications

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Message from the Guest Editors

Dear Colleagues,

Due to the abundance of carbon materials in nature, a novel device based on 1D, 2D, and 3D carbon-based materials is particularly appealing. These materials' diverse structural compositions provide a number of novel physicochemical properties, rendering them ideal choices for sensing applications. However, one must tailor their physicochemical characteristics for a specific functional application without compromising performance. In this context, numerous carbon-based sensor materials have been developed to date via functionalization, heteroatom doping, molecular engineering, interlayer chemistry, and so on. New gadgets are also being developed that are based on optical, luminescence, fluorescence, surface plasmon, electrochemical, colorimetry, and polarization phenomena. Though the available works address a wide range of sensing applications, there is a lack of understanding about commercialization and practicality. Therefore, this issue invites manuscripts that address issues related to sensing of healthcare-related biomolecules, environmental hazard chemical species , industrial manufacturing, food, pharmaceutical, etc.

Special Issue

Editor-in-Chief

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Message from the Editor-in-Chief

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