Special Issue

Practical Application of Functionalized Carbon-Based Nanomaterials

Message from the Guest Editors

Carbon nanomaterials, such as activated carbons, nanotubes, graphene, and nanodiamonds, and composites based on them, are currently one of the most promising materials for electrochemical, energy storage, and biological applications. The requirements for the structure and physicochemical properties of carbon nanomaterials change depending on the specific field of application. The synthesis of carbon nanomaterials with a given set of properties remains a difficult task, which necessitates the development of methods for controlling their structure and physicochemical properties for practical application in various devices.

This Special Issue will showcase the latest work in the modification of carbon nanomaterials, including for the formation of new composites, from microstructure to simulation and practical applications. We invite publications that include: functionalization methods; structure of functionalized carbon nanomaterials; composites based on nanostructured carbon; modeling the structure and properties of modified carbon-based materials; supercapacitors; Li- and Na-ion batteries; oxygen reduction electrocatalysts; biosensors.

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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 multidimensional network.

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