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Applications of Functionalized Carbon Materials for Enhanced Sensitivity and Catalytic Activity in Sensors

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Message from the Guest Editors

This Special Issue is a collection of papers on cutting-edge research built on the importance of functionalization of carbon nanomaterials. The nanotechnology developed for sensor and biosensor design has applications in various fields, including electrochemistry, fluorescence, UV–Vis spectroscopy, surface-enhanced Raman spectroscopy (SERS), surface acoustic wave (SAW), etc. Carbon nanomaterials benefit from a variety of physicochemical properties, and their functionalization advances the field through the formation of nanocomposite materials with catalytic efficiency and enhanced sensitivity. This special issue welcomes both reviews and original papers.

The following topics are of interest:

- Green synthesis of carbon-based materials and their characterization:
- Metal, metal oxide or heteroatom functionalized carbon-based materials;
- Methods for fabrication and characterization of nanosensors based on functionalized carbon materials:
- New electrode substrates that promote the adhesion of carbon-based materials for electrochemical sensors applications;
- The development and application of highly sensitive sensors based on functionalized carbonbased nanomaterials



Specialsue







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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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