



Carbon Dot Sensors, Volume II

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Message from the Guest Editor

Dear Colleagues,

In 2004, a new family of carbon nanomaterials, named carbon dots or carbon quantum dots, was identified in the purification of carbon nanotubes. Meanwhile, these nanomaterials have been shown to have excellent photophysical and photochemical properties, and low toxicity, and can be produced from renewable materials under sustainable conditions. Currently, ongoing research is improving these features far beyond standard values. Carbon dots are becoming real alternatives to other luminescent nanomaterials in applications involving toxicity and natural resources sustainability issues. Fluorescent, chemiluminescent, and upconversion fluorescent carbon nanomaterials have been reported. These properties confer an important role in analytical/bioanalytical sensing chemistry and imaging/bioimaging because extended linear concentration ranges, very low detection limits, and high selectivity are foreseen and have already been demonstrated.

The present Special Issue is focused on the sensor design, preparation, and analytical applications of carbon dots in currently analytical challenges in environmental and biological sciences.





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Message from the Editor-in-Chief

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