Special Issue

Synthesis and Characterization of Carbon-Based Separation Materials and Their Role in Environmental Application

Message from the Guest Editors

Our Special Issue is focused on recent developments in the 'Synthesis and Characterization of Carbon-Based Separation Materials and Their Role in Environmental Application'. Carbon-based materials have unique morphology and multifaceted properties that enable their use in multidisciplinary scenes. Carbon-based materials such as carbon nanotubes, graphene and biochar have demonstrated superior performance in various water treatment and environmental separation processes. They exhibit properties of high adsorption capacity, good conductivity and excellent stability, making them a versatile platform for designing efficient and functional separation materials for the removal of pollutants in the environment. This Special Issue aims to provide a comprehensive overview of recent advances in carbon-based separation materials, including their synthesis, characterization, separation and adsorption applications. We hope that this Special Issue will stimulate further research in the field of the synthesis/characterization of advanced adsorption materials and develop efficient and sustainable solutions to environmental pollution and related areas.

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Message from the Editorial Board

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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