

Special Issue

Next-Generation Sorbent Materials: From Fundamentals to Applications

Message from the Guest Editors

The Special Issue “Next-Generation Sorbent Materials: From Fundamentals to Applications” in *Materials* aims to provide a platform for researchers to present recent advances in the development and application of innovative sorbent materials. The growing demand for efficient and sustainable solutions in environmental protection and resource recovery highlights the need for next-generation sorbents with improved performance and functionality. This Special Issue welcomes contributions that address both fundamental and applied aspects of sorption processes, including adsorption mechanisms, material design, and structure–property relationships. Topics of interest include, but are not limited to, bio-based sorbents, nanostructured materials, hybrid composites, and advanced porous systems. Studies focusing on adsorption efficiency, selectivity, regeneration, and scalability are particularly encouraged, as well as works bridging laboratory research with real-world applications.

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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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