Special Issue

Modification and Interfacial Adsorption of Porous Composites

Message from the Guest Editors

Our Special Issue focuses on the study of interfacial sorption properties of porous composites. Assuming that the composite under study consists of two porous bodies with a defined chemical composition and defined textural properties, i.e., porosity, their mixture can be characterised by additive textural properties, or if a binder is used to form a specific composite with a defined chemical composition with new textural properties. The field of porous composites is rapidly evolving, with significant research focusing on their modification and interfacial adsorption properties. Current hotspots include the development of advanced modification techniques to enhance the structural and functional performance of these materials. Researchers are investigating the incorporation of nanoparticles, polymers, and bio-inspired materials to tailor the adsorption characteristics for specific applications, such as gas capture, water purification, and energy storage. We also welcome discussions on the theoretical modeling of adsorption phenomena and the implications of these processes in real-world applications.

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Message from the Editor-in-Chief

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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