Special Issue

An Overview of Highly Porous Adsorbent Materials: Synthesis, Properties and Applications

Message from the Guest Editors

Porous materials contain regions of empty spaces into which quest molecules can be selectively adsorbed and sometimes chemically transformed. This has made them useful in both industrial and domestic applications, ranging from gas separation, energy storage, and ion exchange to heterogeneous catalysis and green chemistry. Advanced porous materials such as metalorganic frameworks (MOFs), covalent organic frameworks (COFs), porous aromatic frameworks (PAFs), and porous carbon materials with high specific surface areas, abundant functional groups, accessible pore structures, tunable pore sizes, and easy modifications are attractive as adsorbents for the capture of toxic heavy metal ions, organic pollutants, and radionuclides from aqueous solutions. For more details, please click the special issue website:

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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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