Special Issue

Design, Synthesis and Characterization of Novel Porous Materials

Message from the Guest Editor

For decades, scientists and industry have been fascinated by the properties of porous metals and metal foams. The diverse porous structure, with pores ranging from the nanoscale to the macroscale, is possible due to a variety of manufacturing techniques based on foaming, sintering and casting, resulting in unique structural properties such as light weight, energy absorption and structural damping. Although mainly structural properties are investigated, over the past decade, functional properties (arising from the open porosity) have been emerging. Advanced manufacturing techniques and usage of high-added-value metallic materials make porous material even more attractive and promising materials. This Special Issue welcomes novel contributions including:

- Innovations in processing methods and synthesis of porous metal;
- Production of advanced porous metals;
- Coatings and surface treatments for porous metals and foams;
- Developments in characterization and properties of porous metals and metal foams.

Guest Editor

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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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