Special Issue

Thermal and Mechanical Properties of Porous Materials and Composites

Message from the Guest Editor

Porous and composite media have seen strong development these last few years. Among them, fibrous media, honeycomb, and open or closed cell foams materials present not only thermal and lightness but also mechanical properties, which make them very interesting for numerous applications.

Advances have been achieved in recent years in parallel in various scientific communities, such as materials, heat transfer, and mechanics. Research has been focusing on the characterization of thermal and mechanical effective properties of these materials, via analytical, numerical, and experimental methods. Because of the complex architecture of these materials, it is difficult to predict their properties using analytical calculations without important simplifications to the architecture. Analytical methods often require a simplified architecture, while numerical approaches model physical mechanisms in a representative elementary volume using a discretized architecture.

It is our pleasure to invite you to submit a manuscript for this Special Issue. Full papers, communications, and reviews are all welcome.

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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