Special Issue

Heat and Mass Transfer in Porous Materials (Volume II)

Message from the Guest Editor

In this Special Issue, we will present achievements in experimental and computational studies of combined heat and mass transfer in porous media through the use of modern physical methods and models.

Original documents are requested for all scientific advances in the study of physicochemical processes in porous media.

For instance, this includes studies of heat and mass transfer processes in:

heat pipes (micro-heat, sorption and pulsating heat pipes with longitudinal grooves, micro- and nanoscale porous coatings, long heat pipes, vapourdynamic thermosyphons, etc.); in sorption cooling or heating systems; in mini-channels with porous nanocoating; in catalytic systems based on metals and metal-oxide porous materials, etc.

We also welcome studies on heat transfer enhancement in heat exchanger mini- and micro-channels, and on the practical use of heat pipes and thermosyphons.

Recent developments in the optimization of the platelet structure of materials used in various branches of technology for heat and mass transfer processes in porous spaces saturated with liquid or gas (evaporation, condensation, capillary transport, etc.) are of special interest.

Guest Editor

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Deadline for manuscript submissions

closed (20 May 2024)



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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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