Special Issue

Microscale Heat and Mass Transfer: Materials, Process, and Applications

Message from the Guest Editor

Rapid increases in heat fluxes within small areas in microelectronic, defense, energy, solar and medical components have prompted an urgent need for microscale heat and mass transfer. These areas have attracted widespread research interest in the last three to four decades. Nevertheless, underlying problems in the selection, design and fabrication of materials pose severe challenges for practical applications of microscale heat and mass transfer in high heat flux dissipations. To address the above mentioned issue, numerous efforts have been made in terms of the design and fabrication of microscale heat and mass transfer devices, and significant enhancement in microscale heat and mass transfer has been achieved. This Special Issue aims to provide a collection of the latest research and findings in the selection, design and fabrication of materials for use in microscale heat and mass transfer.

Guest Editor

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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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