



materials



Special Issue Reprint

Heat and Mass Transfer in Porous Materials

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Porous media play an important role in a wide range of scientific and engineering problems. Therefore, the problems of their application are associated with the solution of multiscale processes that combine the transfer of mass, momentum, and energy.

This Special Issue is devoted to the actual scientific problem of studying the processes of interconnected heat and mass transfer in porous media. This problem is one of the most complex and important fundamental areas of modern science and is of great applied importance. The results of heat and mass transfer studies in porous materials can be used to intensify heat transfer at various power plants in order to increase their energy efficiency.

The purpose of this Special Issue is to showcase the latest developments in PM heat transfer and mass transfer technologies that contribute to sustainable development. Despite the fact that considerable attention has been paid to these issues, there is constant demand for innovative solutions to solve a wide range of problems in this area. Therefore, this Special Issue attempts to highlight and propose new solutions to these problems. These works develop a basic understanding of the scientific problems of heat and mass transfer in porous materials. Thematically, it is possible to distinguish three areas covered by the studies within this Special Issue: mass transfer in porous media, methods for the formation of a porous medium, and conjugate heat and mass transfer.



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