



energies



an Open Access Journal by MDPI

Heat and Mass Transfers Modelling with Applications in Energy Efficiency in Buildings

Guest Editor:

Prof. Dr. Rafik Belarbi

Department of Civil and
Mechanical, University of La
Rochelle, LaSIE UMR CNRS 7356,
17000 La Rochelle, France

Deadline for manuscript
submissions:

closed (25 September 2021)

Message from the Guest Editor

The coupled Heat and Moisture Transfer in porous building materials represents a major social concern related to the improvement of the living environment of buildings through the use of low-energy solutions with a low environmental footprint. The current thermal regulations recommend the design of buildings more thermally insulated with very low permeability. These regulations also lead to new issues, as it may affect summer comfort and indoor air quality.

The special issue deals with heat and moisture transfer at different scales: from the microstructure, to the material and building scales. It covers not only the aspects related to the numerical and experimental modeling of transfer mechanisms at two microscopic-macroscopic scales, numerical and experimental phenomenological modeling at the material scale, but also contributions associated to the characterization of the properties of building materials, eco-materials and bio-based materials: microstructural, mechanical, thermal, hydric. All the original works applied to the evaluation of the energy performances of buildings and the reduction of environmental impacts are also concerned.



mdpi.com/si/73279

Special Issue



energies



an Open Access Journal by MDPI

Editor-in-Chief

Prof. Dr. Enrico Sciubba

Department of Mechanical and
Aerospace Engineering,
University of Roma Sapienza, Via
Eudossiana 18, 00184 Roma, Italy

Message from the Editor-in-Chief

Energies is an international, open access journal in energy engineering and research. The journal publishes original papers, review articles, technical notes, and letters. Authors are encouraged to submit manuscripts which bridge the gaps between research, development and implementation. The journal provides a forum for information on research, innovation, and demonstration in the areas of energy conversion and conservation, the optimal use of energy resources, optimization of energy processes, mitigation of environmental pollutants, and sustainable energy systems.

Author Benefits

Open Access: free for readers, with article processing charges (APC) paid by authors or their institutions.

High Visibility: indexed within Scopus, SCIE (Web of Science), Ei Compendex, RePEc, Inspec, CAPlus / SciFinder, and other databases.

Journal Rank: CiteScore - Q1 (*Engineering (miscellaneous)*)

Contact Us

Energies Editorial Office
MDPI, St. Alban-Anlage 66
4052 Basel, Switzerland

Tel: +41 61 683 77 34
www.mdpi.com

mdpi.com/journal/energies
energies@mdpi.com
[X@energies_mdpi](https://twitter.com/energies_mdpi)