Special Issue

Development and Characterization of Bio-Based Insulation Materials

Message from the Guest Editors

Reduction in the environmental impact of construction requires the development of building materials that reduce the energy needs and the carbon footprint of buildings. Bio-based insulation building materials, made from bio-based fibers or aggregates, meet these two objectives simultaneously. They can also contribute to indoor comfort. Such materials can be used in new buildings or for retrofit. However, these materials still represent a very small part of the construction market. There is a need to summarize and increase our knowledge of their properties, their durability, and their application in buildings. We invite you to submit new or state-of-the-art research on the development and characterization of bio-based insulating building materials, with a particular focus on hygrothermal and acoustic properties and life cycle assessment. Studies can investigate physical characteristics at material scale, physical behavior at wall or building scale, or ambient conditions (comfort, air quality). Experimental and numerical studies are welcome, including the development of experimental methods or numerical codes.

Guest Editors

Prof. Dr. Florence Collet

Dr. Sylvie Prétot

Dr. Eshrar Latif

Deadline for manuscript submissions

closed (20 February 2024)



an Open Access Journal by MDPI

Impact Factor 3.2 CiteScore 6.4 Indexed in PubMed



mdpi.com/si/61009

Materials Editorial Office MDPI, Grosspeteranlage 5 4052 Basel, Switzerland Tel: +41 61 683 77 34 materials@mdpi.com

mdpi.com/journal/ materials





an Open Access Journal by MDPI

Impact Factor 3.2 CiteScore 6.4 Indexed in PubMed



materials



About the Journal

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.

Editor-in-Chief

Prof. Dr. Maryam Tabrizian

1. Department of Biomedical Engineering, Faculty of Medicine and Health Sciences, McGill University, Montreal, QC H3A 2B6, Canada 2. Faculty of Dentistry and Oral Health Sciences, McGill University, 3640 Rue University, Montreal, QC H3A 0C7, Canada

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), PubMed, PMC, Ei Compendex, CaPlus / SciFinder, Inspec, Astrophysics Data System, and other databases.

Journal Rank:

JCR - Q2 (Metallurgy and Metallurgical Engineering) / CiteScore - Q1 (Condensed Matter Physics)