Special Issue

Building Materials: Assessment of the Radon Exhalation and the Radiological Risk Due to Natural Radioactivity Content

Message from the Guest Editors

Radon is a naturally occurring radioactive gas whom long-term exposure to can increase the risk of developing lung cancer. This concern has been considered in detail by the European Union (EU) in the Directive 2013/59 EURATOM, which highlights the importance of investigating all potential sources of indoor radon, including building materials. To assess the possible radiological health risk posed by radon, it is essential to calculate external hazard indexes based on the natural radioactivity content, according to the European recommendations. Furthermore, the geological characteristics of building materials, such as their origin, textural and compositional analyses, porosity, geochemistry, permeability, crystalline abundance, and degradation attitude, must be considered, as these properties are fundamental in correlating with radon exhalation rates.

Topics of interest include (but are not restricted to):

- building materials;
- radon exhalation;
- environmental radioactivity;
- radiation protection from healthcare to environment and scientific research.

Guest Editors

Prof. Dr. Francesco Caridi

Dr. Stefania Da Pelo

Dr. Giuliana Faggio

Dr. Michele Guida

Dr. Silvestro Antonio Ruffolo

Deadline for manuscript submissions

20 January 2026



Applied Sciences

an Open Access Journal by MDPI

Impact Factor 2.5 CiteScore 5.5



mdpi.com/si/207485

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

mdpi.com/journal/applsci





Applied Sciences

an Open Access Journal by MDPI

Impact Factor 2.5 CiteScore 5.5



About the Journal

Message from the Editor-in-Chief

As the world of science becomes ever more specialized, researchers may lose themselves in the deep forest of the ever increasing number of subfields being created. This open access journal Applied Sciences has been started to link these subfields, so researchers can cut through the forest and see the surrounding, or quite distant fields and subfields to help develop his/her own research even further with the aid of this multi-dimensional network.

Editor-in-Chief

Prof. Dr. Giulio Nicola Cerullo

Dipartimento di Fisica, Politecnico di Milano, Piazza L. da Vinci 32, 20133 Milano, Italy

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, Inspec, CAPlus / SciFinder, and other databases.

Journal Rank:

JCR - Q2 (Engineering, Multidisciplinary) / CiteScore - Q1 (General Engineering)

