

Impact of COVID-19 Pandemics on Buildings' Energy Consumptions and Indoor Environmental Quality: Current Issues and Future Needs

Guest Editors:

Prof. Fabio Fantozzi

Department of Energy Systems
Territory and Construction
Engineering, Università di Pisa,
Pisa, Italy

Dr. Giulia Lamberti

Department of Energy Systems
Territory and Construction
Engineering, Università di Pisa,
56122 Pisa, Italy

Deadline for manuscript
submissions:

closed (15 August 2022)

Message from the Guest Editors

Today, the need for ensuring healthy indoor conditions is becoming increasingly relevant, as people spend most of their time indoors and, as a result of the COVID-19 pandemic, this necessity became even more evident.

There is a necessity to analyse the problems related to Indoor Environmental Quality (IEQ), reduction of the infection risk, and energy consumption, all of which will be crucial in the post-pandemic period. Potential research issues are focused on, but are not limited to, the following:

- Integration between IEQ and energy-related issues;
- Impact of enhanced IEQ on energy consumptions;
- Use of HVAC systems to decrease the infection risk and improve IEQ;
- Effect of people's behaviour on IEQ and energy consumptions;
- Role of ventilation on reducing the infection risk and improve indoor conditions;
- Strategies to minimize airborne transmission of diseases;
- Designing safe and healthy buildings.

For scholars interested to submit papers to the Special Issue, please click "Submit to Special Issue" or contact Astoria Yao: astoria.yao@mdpi.com.



mdpi.com/si/82542

Special Issue

Editor-in-Chief

Prof. Dr. David Arditi

Construction Engineering and
Management Program,
Department of Civil,
Architectural, and Environmental
Engineering, Illinois Institute of
Technology, 3201 South
Dearborn Street, Chicago, IL
60616, USA

Message from the Editor-in-Chief

Current urban environments are home to multi-modal transit systems, extensive energy grids, a building stock, and integrated services. Sprawling neighborhoods are composed of buildings that accommodate living and working quarters. However, it is expected that the cities and communities of the future will face complex and enormous challenges, including maintenance, interconnectivity, resilience, energy efficiency, and sustainability issues, to name but a few. A smart city uses advanced technologies and a digital infrastructure to improve the outcomes in every aspect of a city's operations. A smart building optimizes the experience of occupants, staff, and management by using a modern and connected environment. Innovations in technology that can bring dramatic improvements to design, planning, and policy are critical in developing the cities and buildings of the future.

Author Benefits

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

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

Journal Rank: JCR - Q2 (Construction and Building Technology) / CiteScore - Q1 (Architecture)

Contact Us

Buildings Editorial Office
MDPI, Grosspeteranlage 5
4052 Basel, Switzerland

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

mdpi.com/journal/buildings
buildings@mdpi.com
[X@Buildings_MDPI](https://twitter.com/Buildings_MDPI)