

Special Issue

Advances in Energy Efficiency in Buildings

Message from the Guest Editor

In the building sector, interest in improving energy efficiency and saving energy is on the rise. The development and application of energy-saving methods are crucial in the stages of building design and construction, and the management, automation, and optimization of energy systems are vital in the stage of building operation. Recently, in the field of building energy, research on improving building energy efficiency using advanced technology such as artificial intelligence is being actively conducted. This Special Issue welcomes original research in the area of energy-efficient technology in buildings, smart and intelligent buildings, sustainable and net-zero energy buildings, building optimal control and operation, and building commissioning. Topics of this Special Issue include, but are not limited to, the following specific issues:

- Building energy conversation and efficiency measure
- Building energy management System(BEMS)
- Building energy systems design, modeling and optimization
- Building optimal control and operation
- Heating, ventilating and air conditioning (HVAC) and renewable energy system
- Machine and deep learning based control
- Smart and virtual sensor

Guest Editor

Prof. Dr. Young-Hum Cho

School of Architecture, Yeungnam University, Gyeongsan 38541, Republic of Korea

Deadline for manuscript submissions

closed (20 February 2025)



Applied Sciences

an Open Access Journal
by MDPI

Impact Factor 2.5
CiteScore 5.5



mdpi.com/si/182352

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

mdpi.com/journal/appls





Applied Sciences

an Open Access Journal
by MDPI

Impact Factor 2.5
CiteScore 5.5



[mdpi.com/journal/
applsci](https://mdpi.com/journal/applsci)



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)