



energies



an Open Access Journal by MDPI

Dynamic, Adaptive Technologies for Thermal Control of Building Envelopes and Building Energy Efficiency

Guest Editors:

Dr. Rydge B. Mulford

Department of Mechanical Engineering and Aerospace Engineering, University of Dayton, Dayton, OH 45469-0238, USA

Prof. Dr. Kevin Hallinan

Department of Mechanical Engineering and Aerospace Engineering, University of Dayton, Dayton, OH 45469-0238, USA

Deadline for manuscript submissions:

20 September 2024

Message from the Guest Editors

Adaptive dynamic building envelopes (ADBEs) are technologies which feature real-time control of thermal behavior either through active or passive methods. In fact, the effective use of building thermal envelopes plays a key role in sustainable and energy-efficient building design. Technologies might use active or passive methods to achieve variation in thermal properties, where active indicates an external power source providing the energy required to modify behavior.

This Special Issue is dedicated to original research and review articles focusing on advancements in the field of adaptive dynamic building envelopes and energy-efficient building design. Topics of special interest include but are not limited to:

- Building envelope materials and systems enhancing indoor comfort and energy efficiency;
- Proposal of new passive or active adaptive sustainable building technologies;
- Smart materials and renewable energy in building envelopes;
- Experimental validation and building models of dynamic technologies for building applications;
- Integrated building envelope technologies for high-performance buildings and cities.



mdpi.com/si/158773

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://x.com/energies_mdpi)