Special Issue

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

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.

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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.

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