



The Impact of Evaluated Luminous Environment on the Comfort Level in Buildings

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Message from the Guest Editors

Dear Colleagues,

In recent decades, as individuals spend increasing amounts of time indoors, there has been growing attention towards enhancing the quality of the indoor environment. Among the crucial factors under examination is the luminous environment, produced by a combination of daylight and artificial lighting.

This Special Issue aims to foster a deeper understanding of the multifaceted interactions between occupants and their luminous environment, with a particular focus on maximizing the use of daylight. Topics of interest for this Special Issue include, but are not limited to, the following:

- Impact of advanced windows on daylighting;
- Experimental methods to evaluate human perception on luminous environment;
- Building simulation of luminous environment;
- Performance of adaptive façade/intelligent shading;
- Interactions between daylight and artificial lighting;
- Outdoor luminosity's impact on indoor lighting and comfort;
- Daylight harvesting and indoor environment quality;
- Glare and visual comfort study with exterior lighting considerations;
- Combining natural and artificial lighting for efficiency and comfort.





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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.

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