Special Issue

Computational Lighting Design for Comfort, Energy Efficiency, and Carbon Reduction

Message from the Guest Editors

This Special Issue will cover a wide range of topics related to building lighting and integrated lighting design, aiming to communicate emerging issues, advanced technologies, new findings, and scientific theories. Cross-cutting and multidisciplinary research is encouraged, focusing on advanced building facade design, intelligent sensing and control, lighting retrofitting strategies, life cycle assessment and cost analysis, simulation tool development for sustainability, building information modeling (BIM) and IoT for integrated lighting design, and integrated systems (electric lighting, photovoltaics, and solar shading systems). For further reading, please follow the link to the Special Issue Website at:

https://www.mdpi.com/journal/buildings/special_issues / LOHQ321IJ3

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About the Journal

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.

Editor-in-Chief

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