

Special Issue

Innovative Approaches to Energy Efficiency in Building Design and Operation

Message from the Guest Editors

In the context of a global push towards sustainability and carbon neutrality, improving energy efficiency in buildings has become a crucial element in the fight against climate change. Buildings account for a significant share of global energy consumption, making them a prime target for energy-saving strategies that can significantly reduce greenhouse gas emissions. This Special Issue of *Applied Sciences* invites contributions that explore cutting-edge research, innovative technologies, and interdisciplinary approaches aimed at enhancing energy efficiency throughout the entire building lifecycle—from design and construction to operation and retrofitting. Key areas of interest include the development of advanced materials and systems for reducing thermal loads, the integration of renewable energy sources into building designs, and the implementation of smart technologies for energy management. Moreover, we welcome studies on passive design strategies, occupant behavior analysis, and artificial intelligence use in optimizing building performance.

Guest Editors

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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

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