

Advanced Technologies for Urban and Architectural Design

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Message from the Guest Editors

Dear Colleagues,

Urban and architectural design play a critical role in shaping and functioning the cities and spaces we inhabit. As the world continues to urbanize at an unprecedented pace, the need for innovative solutions to address the challenges of urbanization becomes increasingly important. Advanced technologies, such as artificial intelligence (AI)-enabled solutions and digital ecosystems, are emerging as powerful tools that can revolutionize the way we design, plan, and build our cities, taking into consideration long-term and broader impacts on social habitats. This Special Issue explores the significance and necessity of advanced technologies for urban and architectural design, highlighting their potential to create more sustainable, efficient, and livable urban environments.

The Guest Editors cordially welcome high-quality papers focusing on, but not limited to, the following topics:

- smart buildings
- smart cities
- advanced technology
- intelligent transportation system
- innovative urban solutions
- automation in building design
- sustainable and energy-efficient design

We look forward to receiving your submissions.



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Special Issue

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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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