

# Special Issue

## Towards Effective BIM/GIS Data Integration for Smart City

### Message from the Guest Editors

Compared with ten years ago, more techniques and data standards are now available, such as the labelled property graph (LPG)-based database, 3D tiles, and Indexed 3D Scene Layer (I3S), not to mention the newly published CityGML 3.0. These new techniques and data standards might bring new opportunities or challenges to the data integration between building information modelling (BIM) and geographic information systems (GIS); therefore, papers contributing to topics including but not limited to the following are encouraged:

- New integration patterns (e.g., how geometric information and semantic information can be more effectively relinked on the GIS side);
- Graphs (e.g., LPG) for semantics transfer;
- RDF for semantics transfer;
- CityGML 3.0 and BIM/GIS data integration;
- The comparison between new techniques and data models with old ones;
- Information requirements for BIM model production considering BIM/GIS integration;
- More effective geometry conversion;
- Other topics relating to BIM/GIS data integration.

For scholars interested to submit papers to the [Special Issue](#), please click "[Submit to Special Issue](#)" or contact Astoria Yao: [astoria.yao@mdpi.com](mailto:astoria.yao@mdpi.com).

---

### Guest Editors

Dr. Junxiang Zhu

1. Civil Engineering, Department of Engineering, The University of Cambridge, Cambridge CB2 1TN, UK
2. School of Design and the Built Environment, Curtin University, Perth, Australia

Dr. Yi Tan

Colledge of Civil and Transportation Engineering, Shenzhen University, Shenzhen 518052, China

---

### Deadline for manuscript submissions

closed (10 July 2023)



## Buildings

---

an Open Access Journal  
by MDPI

---

Impact Factor 3.4  
CiteScore 5.6



[mdpi.com/si/105783](https://mdpi.com/si/105783)

*Buildings*  
Editorial Office  
MDPI, Grosspeteranlage 5  
4052 Basel, Switzerland  
Tel: +41 61 683 77 34  
[buildings@mdpi.com](mailto:buildings@mdpi.com)

[mdpi.com/journal/  
buildings](https://mdpi.com/journal/buildings)





# Buildings

---

an Open Access Journal  
by MDPI

---

Impact Factor 3.4  
CiteScore 5.6



[mdpi.com/journal/  
buildings](https://mdpi.com/journal/buildings)



## 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

Prof. Dr. David Arditi

Construction Engineering and Management Program, Department of Civil, Architectural, and Environmental Engineering, Illinois Institute of Technology, 3201 South Dearborn Street, Chicago, IL 60616, USA

---

### Author Benefits

#### High Visibility:

indexed within SCIE (Web of Science), Scopus, Ei Compendex, Inspec, and other databases.

#### Journal Rank:

JCR - Q2 (Engineering, Civil) / CiteScore - Q1 (Architecture)

#### Rapid Publication:

manuscripts are peer-reviewed and a first decision is provided to authors approximately 14.7 days after submission; acceptance to publication is undertaken in 3.5 days (median values for papers published in this journal in the first half of 2026).