



## Advances on Smart Cities and Smart Buildings

Guest Editors:

**Dr. Michele Roccotelli**

Department of Electrical and Information Engineering (DEI), Politecnico di Bari, Via Orabona, 4, 70125 Bari, Italy

**Prof. Dr. Agostino Marcello Mangini**

Department of Electrical and Information Engineering (DEI), Politecnico di Bari, Via Orabona, 4, 70125 Bari, Italy

Deadline for manuscript submissions:

**closed (20 November 2021)**

### Message from the Guest Editors

In recent years, smart and green building management has become one of the main challenges for automation and building construction. In addition to the utilization of renewable energy resources, the necessity to ensure both high-level comfort and energy efficiency can be satisfied by adopting new suitable and intelligent building energy management systems (BEMs) to be integrated in building automation control systems. In this context, the main challenge is to minimize energy consumption, guaranteeing a high level of indoor comfort conditions in buildings, which generally depends on three factors: thermal comfort, visual comfort, and air quality comfort. To this purpose, novel models, algorithms, and tools can be proposed to maximize the indoor life quality with the minimum energy consumption both via active “energy consuming” systems (e.g., HVAC) and passive strategies (e.g., natural ventilation).

- smart buildings
- building energy management system
- near-zero energy buildings (NZEB)
- smart grids
- intelligent power and energy systems
- smart urban environments
- intelligent transportation systems
- green mobility
- autonomous vehicles and smart cities





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## Editor-in-Chief

**Prof. Dr. Giulio Nicola Cerullo**  
Dipartimento di Fisica,  
Politecnico di Milano, Piazza L.  
da Vinci 32, 20133 Milano, Italy

## Message from the Editor-in-Chief

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*Applied Sciences* Editorial Office  
MDPI, Grosspeteranlage 5  
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