

# Characterization and Structural Rehabilitation of Ancient Masonry Buildings

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## Message from the Guest Editors

All over the world, there are countless ancient masonry buildings, and other structures, built by our ancestors, many hundreds and even thousands of years ago.

Many of these constructions, in particular the historic/classified buildings (e.g., monumental, imperial, or religious buildings), have undergone maintenance and conservation action over time, which has allowed them to survive in adequate habitability and safety conditions. However, many other buildings and masonry constructions built in urban and rural environments did not have the same interventions, and collapsed due to either lack of conservation or natural actions, such as earthquakes, floods, fires, landslides, or other man-made actions, e.g., wars and attacks.

**This Special Issue of *Buildings* aims to gather and disseminate research works related to experimental and/or numerical studies and case studies on the constructive and mechanical characterization of walls and foundations of ancient buildings, anomalies, inspection techniques and structural assessment, and rehabilitation and strengthening of ancient constructions.**



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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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