Special Issue

Advances in Architectural Acoustics

Message from the Guest Editors

The present Special Issue aims to explore new trends in the field of architectural acoustics. Particular emphasis is placed on new developments related to the components for acoustic enhancement. The purpose of this planned Issue of the magazine is to present the latest research results related to the design of architectural spaces and building elements from an acoustic point of view. The thematic scope is not limited exclusively to experimental research; predicting sound models or numerical analysis regarding architectural acoustics are also expected. The main topics of the number include the following:

- Absorption solutions for the acoustic improvement of architectural spaces
- Acoustic diffusion in rooms
- Variable room acoustics and smart acoustics
- Acoustic design for architectural spaces
- Predicting sound models
- Psychoacoustics—perception of sound in architectural spaces.

Keywords:

- Diffusion
- Absorption
- Smart acoustics
- Variable acoustics
- Prediction sound models
- Sound perception
- Psychoacoustics

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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.

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