Special Issue

Seismic Design and Strengthening of Reinforced Concrete, Masonry and Steel Structures with Innovative Materials and Devices

Message from the Guest Editors

This Special Issue is open to papers devoted to all kinds of research concerning the seismic design of reinforced concrete, steel, masonry, or new timber structures, or retrofitting and strengthening of existing ones by means of innovative material and devices. Contributions aimed at the formulation of analytical and mechanical models for the evaluation of the seismic capacity and response of elements and structures, results and interpretations of experimental tests, analysis by means of numerical models of sample elements and structures, and descriptions of research conducted by means of paradigmatic case studies may form part of the proposed contributions. Research contributions may involve work that analyses the use of seismic response control and mitigation systems, as well as structural reinforcement interventions using innovative materials or sustainable materials with low environmental impact. For further reading, please follow the link to the Special Issue Website at:

https://www.mdpi.com/journal/buildings/special_issues / 9849.149G18

Guest Editors

Dr. Piero Colajanni

Department of Engineering, Università degli Studi di Palermo, Viale delle Scienze, 90128 Palermo, PA, Italy

Dr. Jennifer D'Anna

Department of Engineering, Università degli Studi di Palermo, Viale delle Scienze, 90128 Palermo, PA, Italy

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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.

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

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