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Buildings and Structures under Extreme Loads

Guest Editors:

Dr. Chiara Bedon

Department of Engineering and Architecture, University of Trieste, Via Valerio, 6/1, 34127 Trieste, Italy

Dr. Flavio Stochino

 Department of Civil, Environmental Engineering and Architecture, University of Cagliari, 09100 Cagliari, Italy
Edificio A, Via Marengo 2, 09123 Cagliari, Italy

Dr. Daniel Honfi

RISE Research Institutes of Sweden, Gothenburg, Sweden

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Message from the Guest Editors

Exceptional design loads on buildings and structures have different causes, including high-strain natural hazards, man-made attacks, and accidents, as well as extreme operational conditions. All of these aspects can be critical for specific structural typologies and/or materials that are particularly sensitive to external conditions. In this regard, dedicated and refined methods are required for their design, analysis, and maintenance under the expected lifetime. Major challenges are related to the structural typology and material properties, with respect to the key features of the imposed design load. Further issues can be derived from the need for the mitigation or retrofit of existing structures, as well as from the optimal and safe design of innovative materials/systems. In some cases, no appropriate design recommendations are available, and thus experimental investigations can have a key role within the overall process.

This Special Issue intends to publish papers on the structural performance of buildings and structures under exceptional loads. Both new design projects or the retrofit and mitigation of existing structures will be of interest for the Special Issue.









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Editor-in-Chief

Message from the Editor-in-Chief

Prof. Dr. Giulio Nicola Cerullo Dipartimento di Fisica, Politecnico di Milano, Piazza L. da Vinci 32, 20133 Milano, Italy As the world of science becomes ever more specialized, researchers may lose themselves in the deep forest of the ever increasing number of subfields being created. This open access journal Applied Sciences has been started to link these subfields, so researchers can cut through the forest and see the surrounding, or quite distant fields and subfields to help develop his/her own research even further with the aid of this multi-dimensional network.

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