Special Issue

Advanced Analysis and Design for Steel Structure Stability

Message from the Guest Editors

Steel structures have been widely used in buildings and infrastructures due to their superior performance in providing high strength, and ductile and sustainable load resisting systems.Therefore, the future of stability analysis and design for steel structures is very exciting. This Special Issue of *Buildings* is intended for a wide and interdisciplinary audience, covering recent research advances and new developments, including the above-mentioned challenges in the following areas:

- Research Methods: Theoretical, experimental and numerical studies, including optimization, or design codification-oriented studies.
- Members or Structures: beams, columns, beam–columns, frames, joints and connections, steel composite structures, steel bridges, etc.
- Materials: hot-formed steel or cold-formed steel.
- Loads: static or dynamic, extreme loads such as wind load or earthquake load.

The hope that this Special Issue provides an overview of the current research activities contributing to the stability analysis and design of steel structures.

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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.

Editor-in-Chief

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