

Special Issue

Mechanical Properties of High-Performance Bimetallic Steels

Message from the Guest Editors

With the advancement of infrastructure construction in high-erosion areas such as coastal areas and islands, the durability of structures is becoming increasingly important. To improve the durability of the structure and reduce the cost of structural maintenance, the development and application of corrosion-resistant steel is particularly important. High-performance bimetallic steels can balance mechanical properties, corrosion resistance, and cost, having broad application prospects for structures built in high-erosion areas. To further promote the application of high-performance bimetallic steels in the field of civil engineering, this Special Issue focuses on publishing research papers and reviews on the mechanical properties of high-performance bimetallic steel materials and structures. We welcome papers on topics including, but not limited to, the following:

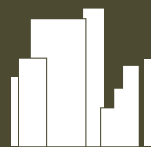
- Bimetallic steel;
- Corrosion-resistant steel;
- Corrosion mechanism;
- Stainless steel;
- Innovative material;
- Marine structures;
- Durability and long-term behavior;
- Mechanical properties;
- Structural health monitoring;
- Nondestructive testing;
- Repair and maintenance strategy.

Guest Editors

Dr. Xuanyi Xue
Dr. Zhilu Wang
Dr. Fei Wang

Deadline for manuscript submissions

closed (30 September 2025)



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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

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