

Special Issue

Advances in the Design and Behavior Analysis of High-Strength Steels

Message from the Guest Editor

High-strength steel demonstrates remarkable performance in industrial applications, such as in vehicles, ships, airplanes, construction, etc. However, the service life of high-strength steel, especially under extreme conditions such as cyclable loadings, high humidity and salinity, and low-to-high temperatures, requires improvement. Thus, the industrial application of high-strength steel needs further investigation of its microstructural evolution, mechanical properties, and corrosion and wear resistance in various service environments. The aim of this Special Issue is to provide *Metals* readers with the most up-to-date research on high-strength steel development for industrial applications. The scope is particularly related to high-strength steel material design, microstructural evolution in various environments, corrosion and wear mechanisms, the use of advanced techniques for testing, etc. We also welcome reviews and research articles.

Guest Editor

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Metallic materials play a vital role in the economic life of modern societies; contributions are sought on fresh developments that enhance our understanding of the fundamental aspects related to the relationships between processing, properties and microstructure – disciplines in the metallurgical field ranging from processing, mechanical behavior, phase transitions and microstructural evolution, nanostructures, as well as unique metallic properties – inspire general and scholarly interest among the scientific community.

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