



metals

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Performance of Mechanical Properties of Ultrahigh-Strength Ferrous Steels Related to Strain-Induced Transformation

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Message from the Guest Editor

This Special Issue of *Metals* is dedicated to advanced ultrahigh-strength ferrous steels related to the strain-induced martensite transformation (or transformation-induced plasticity) of metastable retained austenite. Ferrous steels, such as Transformation-Induced Plasticity (TRIP)-aided bainite/martensite steels, quenching and partitioning steels, nanostructured bainite steels, medium manganese steels, etc., are receiving a great deal of attention from both academic and industry sectors, due to their excellent mechanical properties. To apply ferrous steels to a wide range of components and parts, a detailed understanding of the performance of the mechanical properties, such as toughness, fatigue strength, delayed fracture strength, wear property, etc., after heat-treatment, thermo-mechanical process, plastic working (including hot-stamping, hot-forging), welding, surface treatment, etc., will be of great help to steel engineers in future.



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Special Issue



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Message from the Editorial Board

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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