

Special Issue

Influence of Surface Treatment on Corrosion Behavior of Steels

Message from the Guest Editor

Surface treatments are essential in various fields, as a promising method to obtain desirable surface properties for different usages, such as the abrasive blasting before painting in construction or marine structures, or laser surface treatment that includes separate purposes of peening, texturing, or even cleaning. The steel materials usually undergo surface treatment before being put to use. In service, corrosion is one of the major problems for the durability and safety of steel materials. The relationship between surface treatments and corrosion behaviors of steels is thereby an important issue for application. This Special Issue is dedicated to current developments in and research on the corrosion behavior of steels, prepared by surface treatment. All kinds of surface treatment are included, as long as they are targeting steel materials. The corrosion behavior will cover, but is not limited to, anodic oxidation, high temperature oxidation, biochemical corrosion and passivity, etc. Original papers, communications, and review articles ranging from highly theoretical to essentially practical are welcomed.

Guest Editor

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Message from the Editor-in-Chief

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.

Editor-in-Chief

Prof. Dr. Yong Zhang

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