Special Issue

Microstructure and Mechanical Properties of Austenitic Stainless Steels

Message from the Guest Editors

Austenitic stainless steels constitute about 70% of stainless steel production, and are widely used in many industrial fields (e.g., chemical, petrochemical, fertilizer, food, medical and nuclear) owing to their excellent corrosion resistance, superior mechanical properties and good workability. To meet the requirements of extreme operating environments such as cryogenic temperature, higher temperature, higher operating pressure, severe corrosive environment, radiation environment and longer lifetime, the continuing development of austenitic stainless steels is still underway. Currently, promising methods including novel alloying design, processing techniques and fabrication techniques are proposed to further improve the mechanical properties. This Special Issue titled "Microstructure and Mechanical Properties of Austenitic Stainless Steels" aims to highlight recent progress in microstructural modification and mechanical properties improvement in austenitic stainless steels.

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Welcome to *Crystals*, the journal dedicated to the fascinating world of crystallographic research! Crystals are more than mere decorative elements; they hold the key to understanding the fundamental structure of matter. Our mission is to explore the crucial significance of this research across various fields. From medicine to technology, chemistry to geology, crystals play a vital role. Their structure provides insights into new advanced materials, innovative drugs, and groundbreaking technologies. Through *Crystals*, we delve into the microscopic world to discover solutions that will shape the future. Join us on a journey through the *Crystals*, where science merges with beauty and innovation.

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