

Special Issue

Advances in Microstructure and Properties of Welded-Brazed Joints

Message from the Guest Editors

Recent advancements in welded-brazed joints have significantly enhanced their microstructure and mechanical properties, making them more suitable for various industrial applications. Innovations in welding and brazing techniques have led to joints with improved strength, durability, and resistance to environmental factors. Key advancements include optimizing the welding parameters, introducing novel filler materials, and applying hybrid welding-brazing processes.

Microstructural analysis has shown that these advancements result in finer grain structures and reduced porosity, improving the joints' overall mechanical performance. The integration of computational modeling and simulation has further accelerated the development of optimized welding-brazing procedures, enabling precise control over joint properties.

This Special Issue aims to collect original works on new advances in welded-brazed joints' microstructure and properties, with a focus on novel filler materials and the application of hybrid welding-brazing processes resulting in refined microstructures with improved overall mechanical performance.

Guest Editors

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Message from the Editor-in-Chief

Materials (ISSN 1996-1944) was launched in 2008. The journal covers twenty-five comprehensive topics: biomaterials, energy materials, advanced composites, advanced materials characterization, porous materials, manufacturing processes and systems, advanced nanomaterials and nanotechnology, smart materials, thin films and interfaces, catalytic materials, carbon materials, materials chemistry, materials physics, optics and photonics, corrosion, construction and building materials, materials simulation and design, electronic materials, advanced and functional ceramics and glasses, metals and alloys, soft matter, polymeric materials, quantum materials, mechanics of materials, green materials, general. *Materials* provides a unique opportunity to contribute high quality articles and to take advantage of its large readership.

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