Special Issue

Advances in Welding of Alloy and Composites

Message from the Guest Editors

Welding is a promising way to fabricate multi-material structures to achieve weight reduction and high functionalization. However, no welding method can be applied or used universally for different materials, such as aluminum alloys, copper alloys, steel, etc. With the development of new materials such as metal matrix composites and high entropy alloys, different welding methods have been developed and used in addition to conventional fusion welding, e.g., friction stir welding, ultrasonic spot welding, laser–arc hybrid welding, diffusion welding, and so on. It is difficult to obtain high-strength and defect-free welding joints for materials with various physical properties. Research has concentrated on the welding characteristics of different alloys and composites, and the acquisition of high-strength welding joints will be the most important criterion for their wider application. The goal of this Special Issue is to describe recent developments in this developing research field. Therefore, we invite you to submit manuscripts to this Special Issue. Full papers, communications, and reviews are all welcome.

Guest Editors

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Deadline for manuscript submissions

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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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