Special Issue

Advanced Welding in Alloys and Composites

Message from the Guest Editors

This Special Issue, entitled “Advanced Welding in Alloys and Composites”, addresses the cutting-edge welding technologies in the realm of alloys and composites. The aim is to broaden the knowledge regarding recent scientific developments in various aspects of welding technologies for alloy and composites. The topics of interest include, but are not limited to, the following:

- Welding processes: friction-based welding, high-energy density welding, hybrid welding, dissimilar materials welding, welding in extreme conditions, etc.
- Welding materials: advanced high-strength steels, high-temperature alloys, high-entropy alloys, shape memory alloys, light alloys, polymer and metal matrix composites, etc.
- Joining mechanism: modelling and simulation is encouraged to understand the physics and/or chemistry of advanced welding technologies for alloy and composites.
- Microstructure and properties: the characterization and evaluation of welded joints in terms of microstructure and their mechanical, thermal, and corrosion properties.

We look forward to receiving your contributions.

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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