Special Issue

Mechanical and Metallurgical Behaviour of Welded Materials

Message from the Guest Editor

Welding is a common connection method used in production, and efficient smart welding methods can increase productivity. Additionally, additive manufacturing based on layer-by-layer stacking has a significant advantage in processing efficiency; it is also the most promising processing and manufacturing technology for the future. In view of the current problems of additive manufacturing, it is necessary to develop new additive methods and modification processes that can significantly improve the performance of the deposited components. Thus, publications about the manufacturing, microstructure characterization, and property analysis of metallic materials manufactured by welding and additive manufacturing are encouraged to be submitted for publishing in this Special Issue. Furthermore, the structure design, microstructure configuration, and strengthening mechanism analysis of the alloys manufactured by welding and additive manufacturing will also be fully considered. This Special Issue is thus organized to publish state-of-the-art works that aim to offer some guidance on the manufacturing, investigation, and application of alloys fabricated using welding and additive manufacturing.

Guest Editor

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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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