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Welding and Joining Processes of Metallic Materials

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Message from the Guest Editors

Dear Colleagues,

The last two decades have seen an intensive improvement in material welding, joining and additive manufacturing methods, enabling the weight reduction and high functionalization of multi-material structures. Today, it is possible to fabricate large-sized and thin-walled structures made of different types of metallic alloys with a more complicated geometry of reinforcement, including nanoparticles or precipitated phases. The advanced welding, joining and additive manufacturing processes of complex structures allows for the development of new technologies, with recent advances in manufacturing techniques further maximizing functionality while retaining the original character of the structure.

The main purpose of this Special Issue is to collect research on the advanced processes in material welding, joining and additive manufacturing aspects. The main content of this Special Issue includes, but is not limited to, arc welding, high-energy beam welding, friction stir welding, wire arc additive manufacturing, friction stir additive manufacturing, laser additive manufacturing and their modelling techniques.

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Message from the Editorial Board

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