Special Issue

Advances in Joining of Automotive Alloys

Message from the Guest Editor

The automotive industry has identified the use of lightweighting as a response to increasing pressures to improve fuel economy and reduce emissions. Technological development by car manufacturers and materials producers has led to increasing use of aluminum and magnesium alloys. At the same time, the steel industry has responded with the development of new steels that can be used at lower gauge thickness while maintaining the strength of a vehicle. This Special Issue aims to present the latest research in the wider area of automotive joining. Research articles focusing on new developments in joining of automotive alloys are welcome for consideration of publication. The techniques that may be addressed include all types of welding, adhesive bonding, mechanical fastening, processes requiring single-sided access, hybrid joining, metal-to-plastics joining, etc. Articles addressing the performance of joints, joining process selection, cost comparison of joining processes, energy use comparison, non-destructive testing of joints, repair of joints, joining for recyclability, etc., will be considered.

Guest Editor

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Deadline for manuscript submissions

closed (15 July 2019)



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About the Journal

Message from the Editorial Board

Metallic materials play a vital role in the economic life of modern societies; contributions are sought on fresh developments that enhance our understanding of the fundamental aspects related to the relationships between processing, properties and microstructure – disciplines in the metallurgical field ranging from processing, mechanical behavior, phase transitions and microstructural evolution, nanostructures, as well as unique metallic properties – inspire general and scholarly interest among the scientific community.

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