Special Issue

Joining of Unweldable Materials: Concepts, Techniques and Processes

Message from the Guest Editors

The use of new engineering materials developed for special purposes related to assembly has become a challenge for the general industry. In fact, beyond the development of these important cutting-edge materials, their capability to be joined is also a huge challenge. This is mostly due to the complete absence of knowledge on the permanent joining of these materials by well-known joining methods, plus the industrial interest in their combination with materials commonly used in engineering applications. The objective of the present Special Issue is to illustrate recent developments on the joining of unweldable materials, focusing the main concepts, techniques, and processes. We intend to gather a significant number of multidisciplinary contributions addressing the following issues:

- Joining of dissimilar materials;
- Joining of new materials;
- Joining of unweldable or hardly weldable materials;
- Permanent joining processes;
- Proof of concept;
- New techniques for material joining;
- New process approaches for material joining;
- Conventional manufacturing processes applied on material joining;
- Microstructural and mechanical analysis;
- Numerical simulation.

Guest Editors Prof. Dr. Carlos Leitao

Dr. Ivan Galvão

Dr. Rui Manuel Leal

Deadline for manuscript submissions

closed (31 October 2024)



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About the Journal

Message from the Editor-in-Chief

Journal of Manufacturing and Materials Processing (JMMP)(ISSN 2504-4494) is a new MDPI peer-reviewed, open access venue with a focus on the scientific fundamentals and engineering methodologies of manufacturing and materials processing. We offer an online platform facilitating effective exchange of innovative scientific and engineering ideas and the dissemination of recent, original, and significant research and developmental findings. On behalf of the Editorial Board, I extend an invitation to our scientific and engineering colleagues to contribute high-quality, innovative, and ground-breaking research articles to JMMP.

Editor-in-Chief

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