



Joining of Unweldable Materials: Concepts, Techniques and Processes

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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.





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Message from the Editor-in-Chief

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