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Latest Research in Joining and Welding Processes

Guest Editor:

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Message from the Guest Editor

Dear Colleagues,

To utilize the advantages of different materials, they are usually used in combination; thus, welding and joining technologies are required. Welding is also an “additive manufacture” method that combines simple parts into complex components. The principles of welding and joining are fusion and diffusion between atoms. In different applications, the welding size ranges from nanoscale to meter scale, the metallurgical reaction time ranges from milliseconds to seconds, and the service environment of the welding structure also varies greatly. Research on welding and joining not only involves the nonequilibrium metallurgical reaction mechanisms of various materials, but also involves precise control. The service reliability of welding structures in complex environments should be evaluated. Therefore, welding and joining is still a broad and fast-growing research field with promising potential in modern industry.

In this Special Issue of *Materials* dedicated to the latest research in welding and joining processes, you are invited to contribute original research, short communications, and review articles



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Special Issue



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Message from the Editor-in-Chief

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