



Model of Laser Welding

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Message from the Guest Editor

Dear Colleagues,

The development of new high intensity laser sources with lower wavelengths presents new challenges and phenomena for the welding pool and key hole, especially for steel and aluminum. High intensity IR lasers show high spatter formation at high speed before the pre-humping regime, while green lasers show different behaviors during the transition from heat conduction to key-hole welding. This Special Issue focuses on models resulting from experimental investigation as well as modeling and simulation approaches that can aid in the understanding of melt flow conditions around the key hole and can be used to evaluate key hole dynamics. In addition, papers correlating spatter formation with the manipulation of the melt pool and key hole dynamics are welcome.

Prof. Dr. Jean-Pierre Bergmann
Guest Editor





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Message from the Editor-in-Chief

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