

# Special Issue

## Model of Laser Welding

### Message from the Guest Editor

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.

### Guest Editor

Prof. Dr. Jean-Pierre Bergmann

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### Deadline for manuscript submissions

closed (15 February 2020)



## Applied Sciences

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As the world of science becomes ever more specialized, researchers may lose themselves in the deep forest of the ever increasing number of subfields being created. This open access journal *Applied Sciences* has been started to link these subfields, so researchers can cut through the forest and see the surrounding, or quite distant fields and subfields to help develop his/her own research even further with the aid of this multi-dimensional network.

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### Editor-in-Chief

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