



Laser-Assisted Processing of Alloys and Metal Surface Layers

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Deadline for manuscript
submissions:

closed (20 September 2022)

Message from the Guest Editor

Despite the fact that laser surface treatment of materials has been known for many years and is increasingly being used in industry, scientific research is still being carried out on the interaction of the laser beam with metals and their alloys.

Laser Surface Texturing (LST) is one of the most efficient surface modification approaches for improving the tribological properties of engineering materials. The LST process can be performed by means of direct laser ablation, laser interference, and laser shock processing.

One of the most commonly used laser treatments is laser ablation. The laser ablation process is used to produce thin films in the Pulsed Laser Deposition (PLD) method. This technique allows the deposition of thin films on various substrates (metals, ceramics, polymers). Moreover, the laser ablation process carried out in various gas or liquid environments has a positive effect on the corrosion resistance of ablated metals.

This Special Issue will concern innovative processes of laser surface treatment of metals and alloys.





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Message from the Editor-in-Chief

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