Special Issue

Tribology in Laser-Based Additive Manufacturing: Current Applications and Future Directions

Message from the Guest Editors

This Special Issue focuses on the latestest research findings in laser-based additive manufacturing technology for advanced metal and alloy materials, including the microstructure, tribology properties, wear resistance properties, and quality control of laser-based additive manufacturing. The key areas of focus are melt pool control mechanisms, defect suppression mechanisms, residual stress regulation mechanisms, numerical simulation of melt pools, the relationship between process–microstructure–tribology properties (or wear resistance properties), mechanism for the improvement of wear resistance, new microstructure regulation methods, process stability, online detection technologies, and so forth. Research topics include, but are not limited to:

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Message from the Editor-in-Chief

Friction, wear, and lubrication are tribological phenomena that govern the behavior of interacting surfaces in a wide range of machine components. Understanding the physical and chemical nature of these phenomena is critical to achieving long component lifetime and economical operation. Research in the field of tribology is highly interdisciplinary, and encompasses the fields of physics, chemistry, engineering, and mathematical modeling. Lubricants invites contributions on new advances in all areas of tribology for publication as peer-reviewed research articles, reviews of current research, letters, and communications. We are committed to providing timely reviews of all articles submitted. Please consider sharing your work with the scientific community through publication in Lubricants.

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