Special Issue

Laser Melting of Metals and Metal Matrix Composites

Message from the Guest Editor

With the rapid development of various laser-melting processing technologies, one of the primary research interests is the metallic components made of metals, alloys or metal matrix composites that have far-reaching application potential in the fields of aerospace, marine, automobile, biomedicine, etc. Laser-melting processing technologies include but are not limited to laser additive manufacturing, laser welding and laser cladding. Microstructure and mechanical properties are the key performance indicators for structural metal materials and metal matrix composites. Different laser melting processes or different metallic material compositions may lead to various performance characteristics in application. As a result, the regulation of microstructure and the improvement of mechanical properties are particularly important. For some functional metals or metal matrix composites, the optimal implementation of the desired function is the core goal. Moreover, numerical simulation methods are also welcome because they are helpful to deeply study the thermal, mechanical, flow and phase fields of laser-melting processes.

Guest Editor

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Welcome to *Crystals*, the journal dedicated to the fascinating world of crystallographic research! Crystals are more than mere decorative elements; they hold the key to understanding the fundamental structure of matter. Our mission is to explore the crucial significance of this research across various fields. From medicine to technology, chemistry to geology, crystals play a vital role. Their structure provides insights into new advanced materials, innovative drugs, and groundbreaking technologies. Through *Crystals*, we delve into the microscopic world to discover solutions that will shape the future. Join us on a journey through the *Crystals*, where science merges with beauty and innovation.

Editor-in-Chief

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