

## Special Issue

# Physical Phenomena, Microstructures, and Properties Unique to Metal Additive Manufacturing

### Message from the Guest Editors

Manuscripts are solicited for the Special Issue entitled “Physical phenomena, microstructures, and properties unique to metal additive manufacturing” of MDPI’s journal *Crystals*. The interplay of several physical phenomena spanning across several length and time scales makes metal additive manufacturing (AM) processing routes unique. Such unique processing conditions subsequently lead to unique microstructures and properties in additively manufactured metals and alloys. The objective of this Special Issue is to curate a collection of works that enhance the current understanding of the following:

- The physical phenomena that occur during AM processing;
- The unique evolution of microstructures in AM-processed metals and alloys;
- The unique mechanical behavior, including deformation and damage mechanisms, of AM-processed metals and alloys.

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### Guest Editors

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### Deadline for manuscript submissions

closed (30 October 2024)



## Crystals

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## About the Journal

### Message from the Editor-in-Chief

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.

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### Editor-in-Chief

Prof. Dr. Alessandra Toncelli  
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