



## Materials Formed under Extreme Conditions in Additive Manufacturing: Creation of Materials by Super-Thermal Field

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Deadline for manuscript  
submissions:  
**closed (20 September 2024)**

### Message from the Guest Editors

Additive manufacturing (AM) is a process that creates materials with unique microstructures and properties under extreme conditions such as high cooling rates, temperature gradients, and solidification rates. These conditions affect various materials. However, the characteristics of these materials depend on their physical properties and the process conditions. Therefore, there have been various attempts to control the microstructure in AM by applying specially designed processes and optimizing the parameters. This Special Issue aims to present the latest research on materials with unique microstructures and properties formed under extreme conditions in AM.

This special issue was organized by the Organizing Committee of the international conference "Creation of Materials by Super-Thermal Field (CMSTF) 2023," which will be held in Osaka from November 15 to 17, 2023. Submissions are encouraged in conjunction with participation in the conference, but we welcome submissions regardless of whether you are able to attend. For more detail about the conference, please visit the website of the conference at <https://www-mat.eng.osaka-u.ac.jp/CMSTF2023/>





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## Message from the Editor-in-Chief

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