

Development of high entropy alloys for laser powder bed fusion (L-PBF) and solidification control during printing

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Advisor: Lars Nyborg and Sheng Guo

Research Scope:

- Development of single and dual phase high entropy alloys for L-PBF.
- Study the transformation thermodynamics and kinetics and using ICME approach to understand the behavior of HEAs during under L-PBF conditions.
- Study the microstructural evolution for various alloys during the printing process.
- Controlling the solidification during printing, especially the columnar growth of grains in the L-PBF process.

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