

7 Project 26 - Deformation Mechanisms in Refractory-Based Complex, Concentrated Alloys

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Program Goal

The strength and deformation of Refractory Complex Concentrated Alloys (RCCAs) are not fully understood

Approach

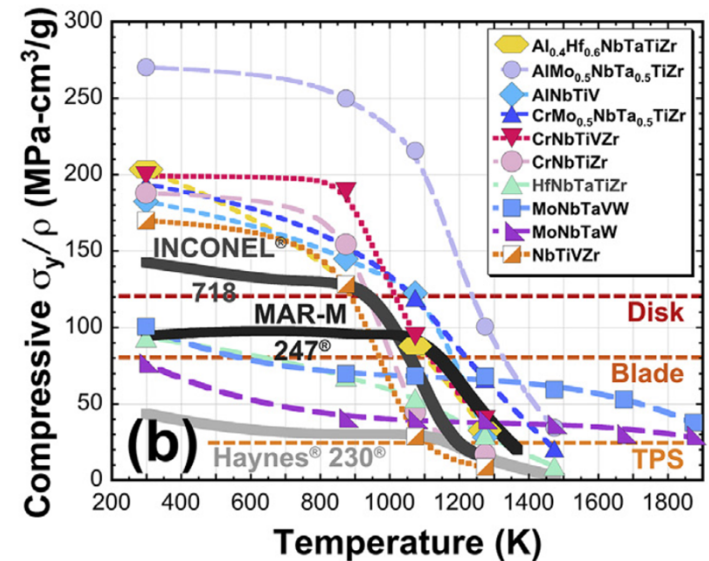
Analyze the strength and the deformation behavior of several RCCAs

Compare results with theoretical models, expanding them if necessary

Benefits

Enable better RCCA alloy design

Improve understanding and prediction capabilities in the multicomponent space



D.B. Miracle and O.N. Senkov, Acta Mater. **122**, 448 (2017)

Strength of different RCCAs in comparison with conventional superalloys over a wide temperature range

Project Duration

Ph.D. November 2016 – Aug. 2019



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