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The formation of cellular precipitate and its effect on the tensile properties of a precipitation strengthened high entropy alloy

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- A precipitation strengthened high entropy alloy was subjected to thermosmechanical process.
- Chemical instability of supersaturation and migration of grain boundaries can cause formation of cellular precipitate.
- Tensile ductility drop occurred around 750 °C in present high entropy alloy due to cellular precipitate.
- Cellular precipitate does not affect tensile ductility at room temperature.
- The formation of cellular precipitate can be suppressed by alloy design and cooling rate during heat-treatment.

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