

# Two Phase TiAl Polycrystalline Microstructure Property Enhancement

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# Model Creation

Unit cell of TiAl and  $\text{Ti}_3\text{Al}$  TiAl is **L10** structure,  $\text{Ti}_3\text{Al}$  is **hcp** structure

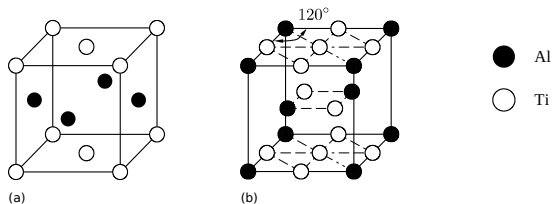
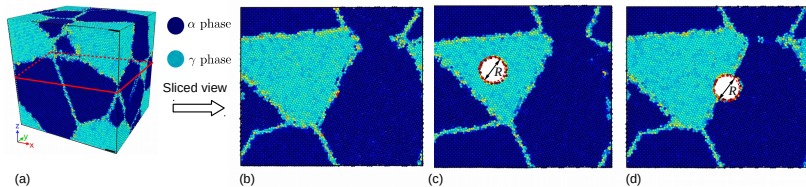


Figure: Unit cell of TiAl (a) and  $\text{Ti}_3\text{Al}$  (b)

# Model Creation

Create polycrystalline with and without void defect



**Figure:** Model with no void defect (b), with void inside  $\alpha_2$  phase (c) with void at  $\alpha_2 - \gamma$  interface (d)