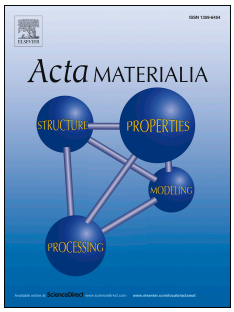
Accepted Manuscript



Stable and large superelasticity and elastocaloric effect in nanocrystalline Ti-44Ni-5Cu-1Al (at%) alloy

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Graphical Abstract

Stable and large superelasticity and elastocaloric effect in nanocrystalline Ti-44Ni-5Cu-1Al (at%) alloy

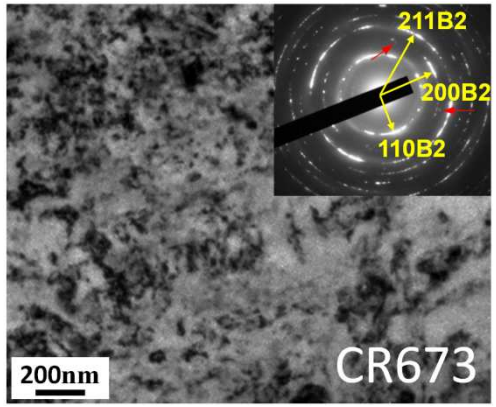
Ti-44Ni-5Cu-1Al (at%)

Hot rolling at 1123 K

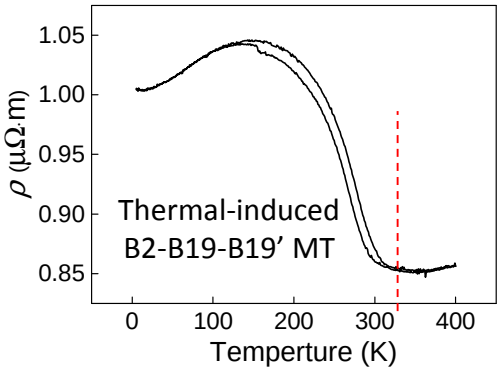
Cold rolling at RT

Annealing at 673K/5min

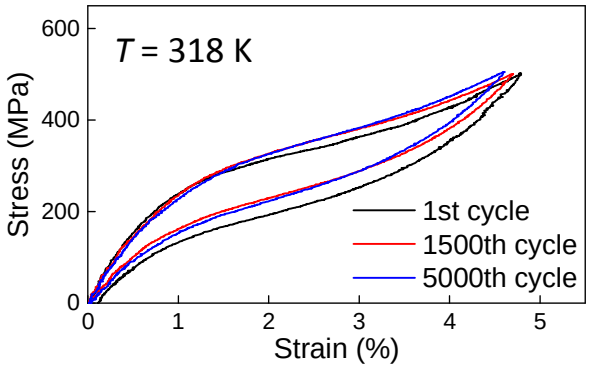
Nano-sized fine B2-phase grain



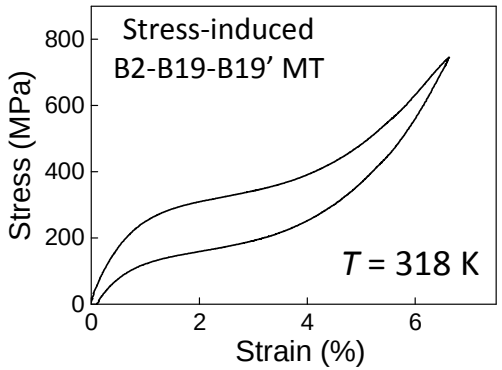
Narrow hysteresis



Stable superelasticity



Large reversible strain



Stable elastocaloric effect