**Nanowires under uniaxial stretching and compression.**

**Mechanical properties of CdZnTe nanowires under uniaxial stretching and compression: A molecular dynamics simulation study**

Structural and mechanical properties of ternary CdZnTe nanowires have been investigated by performing molecular dynamics simulations using an atomistic potential. The simulation procedures are carried out as uniaxial stretching and compression at 1 K and 300 K. The results demonstrate that the mechanical properties of CdZnTe ternary nanowires significantly show a dependence on size and temperature under uniaxial stretching and compression.

CdZnTe nanowires

Strain

Molecular dynamics

Bond order potential