

## Supporting Information

### **Anisotropic crystal orientations dependent mechanical properties and fracture mechanisms in zinc-blende ZnTe nanowires**

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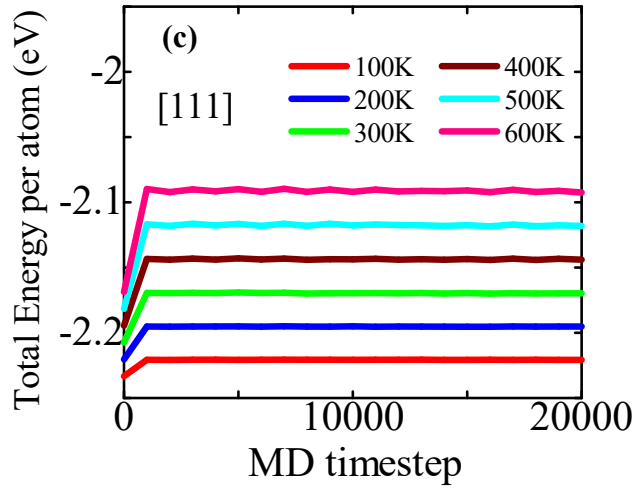
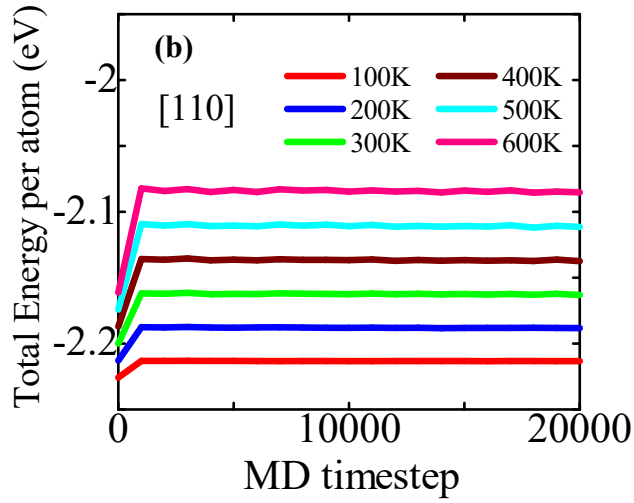
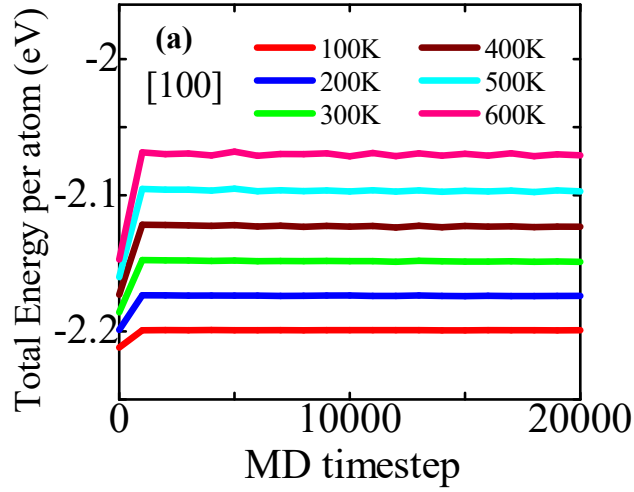
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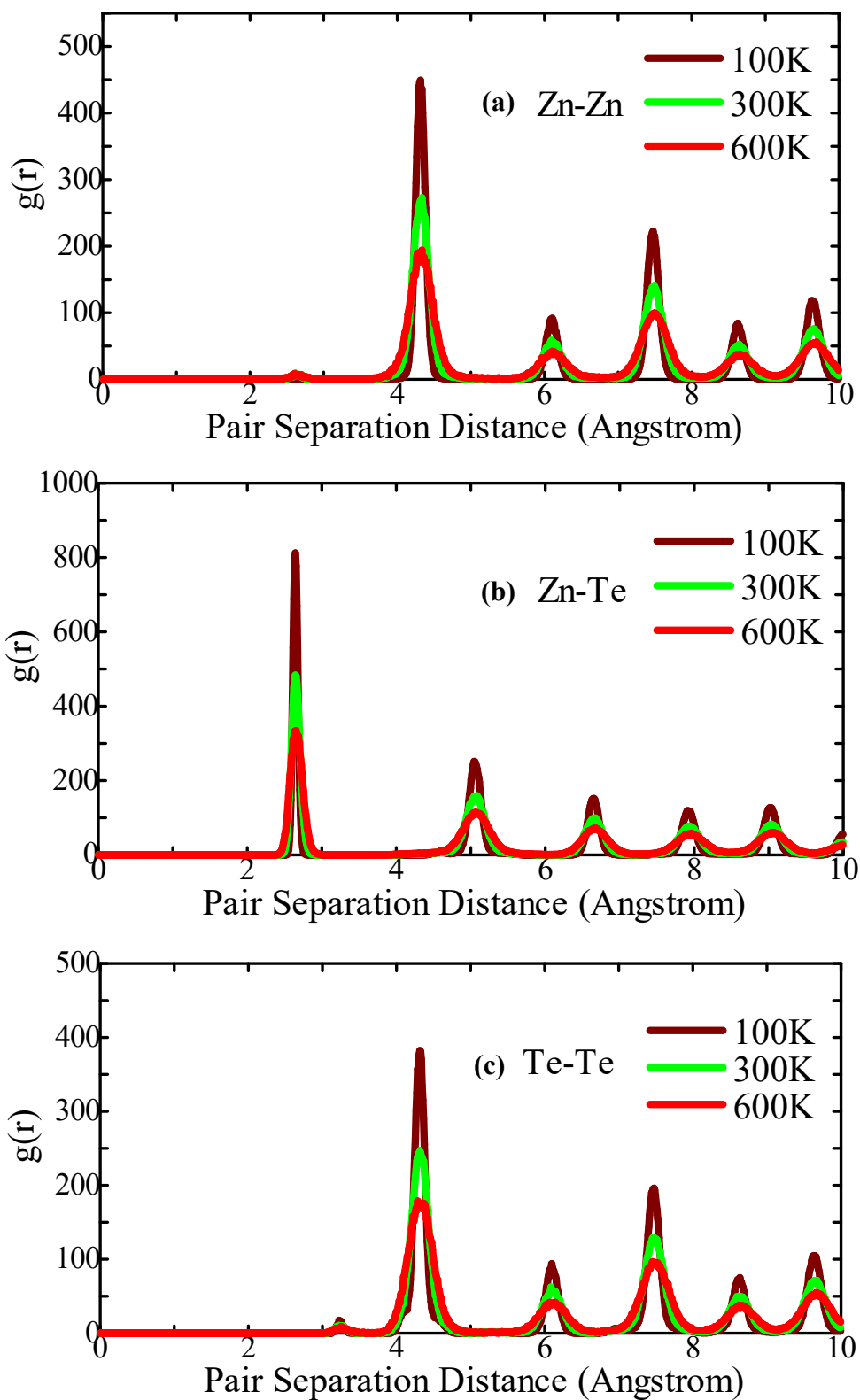
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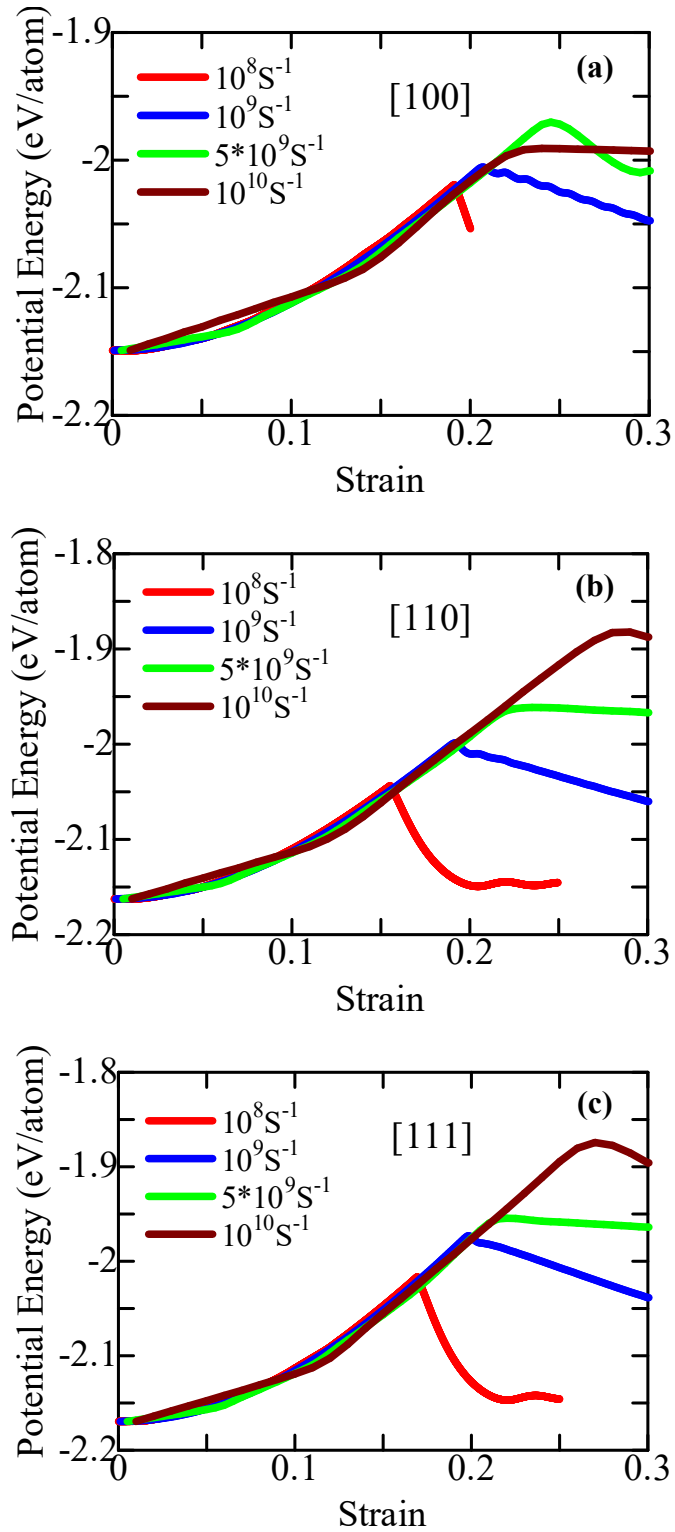
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**Fig. S1.** Total energy per atom of (a) [100], (b) [110] and (c) [111]-oriented 18.25 nm<sup>2</sup> ZB ZnTe NW for different temperatures.



**Fig. S2.** The Radial distribution function (RDF),  $g(r)$  of (a) Zn-Zn (b) Zn-Te and (c) Te-Te pairs of ZnTe NW at three different temperatures.



**Fig. S3.** The potential energy per atom curves for (a) [100], (b) [110], and (c) [111]-directed ZB ZnTe NWs at 300 K.