Supplement Materials

Novel Strategy to Prepare Pure Cu_4TiSe_4 and Its High-Pressure Raman and Thermoelectric Performance Investigation

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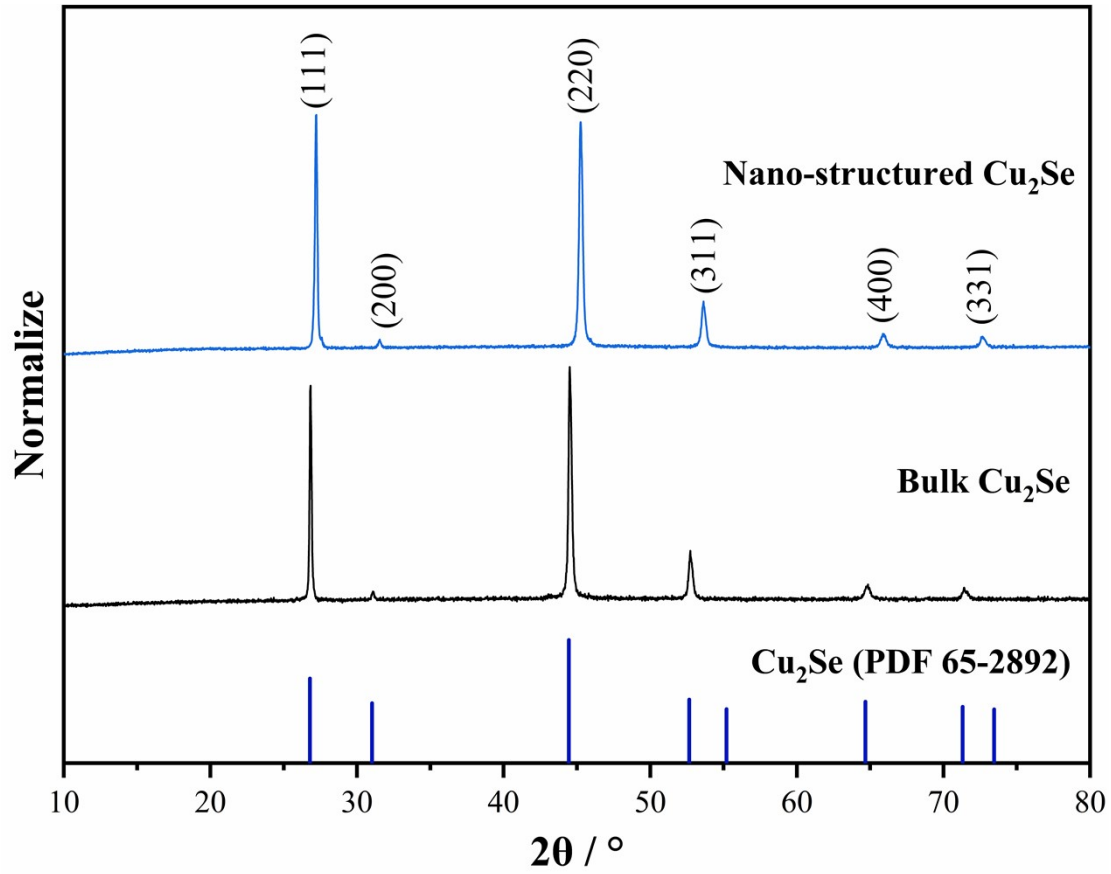

Figure S1 XRD patterns of Cu_2Se after different treatments in comparison with the standard card.

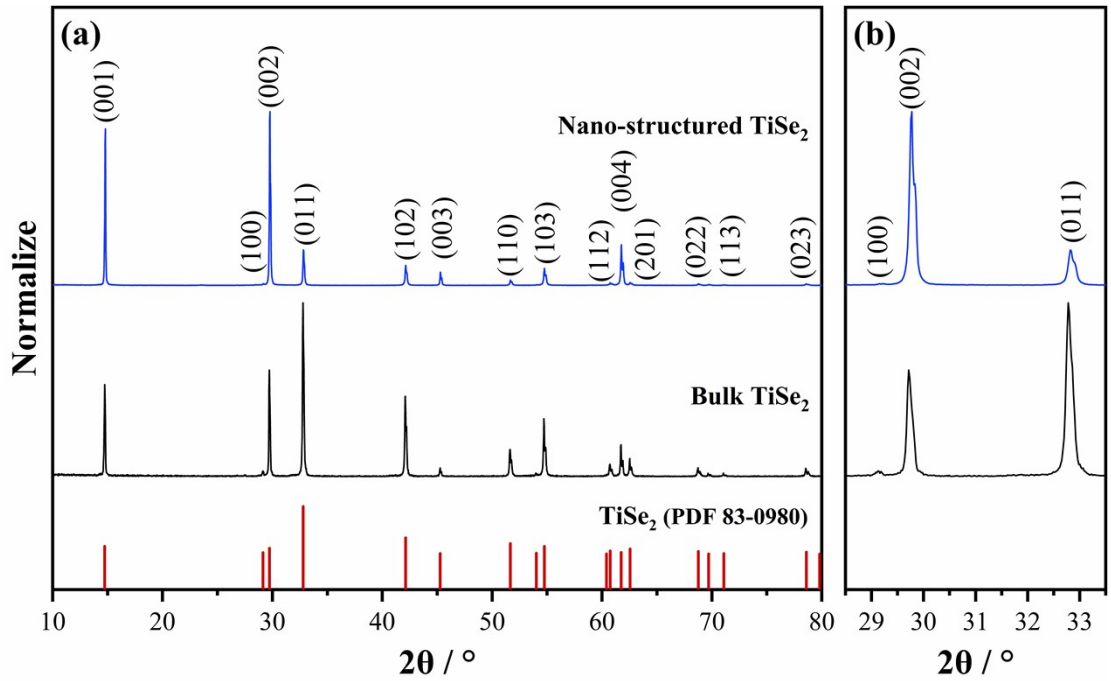

Figure S2 (a)XRD patterns of $TiSe_2$ under different treatments in comparison with the standard card.(b)Amplified X-ray diffraction patterns at 2θ = 28–34°

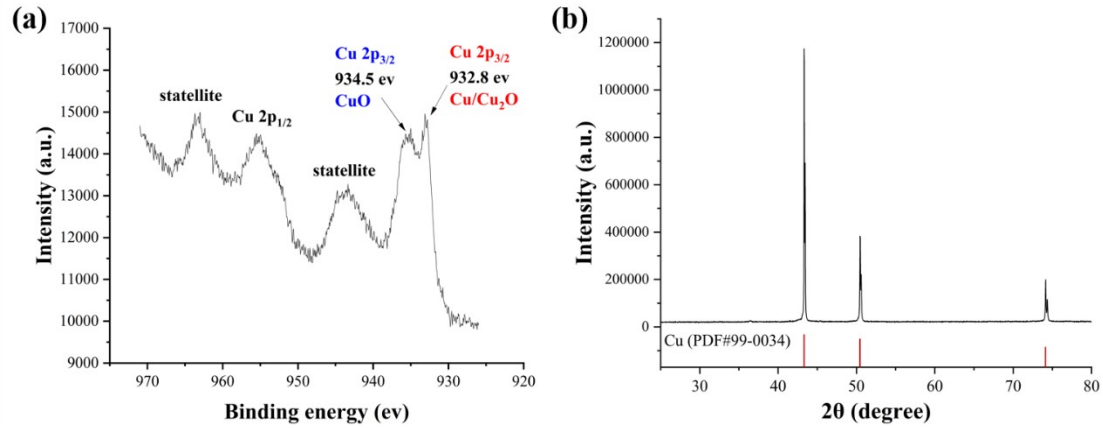

Figure S3 (a) The XPS pattern of Cu powder, (b) XRD pattern of Cu powder.

Table S1 The density of Bulk and Nano-structured Cu_4TiSe_4 calculated by Archimedes' method.

Sample	Density (g/cm^3)	Theoretical density (g/cm^3) (calculated by XRD)
Bulk Cu_4TiSe_4	5.6867	5.699
Nano-structured Cu_4TiSe_4	5.2728	5.702