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Electronic Supplementary Information

High thermoelectric and mechanical performance in highly dense $Cu_{2-x}S$ bulks prepared by a melt-solidification technique

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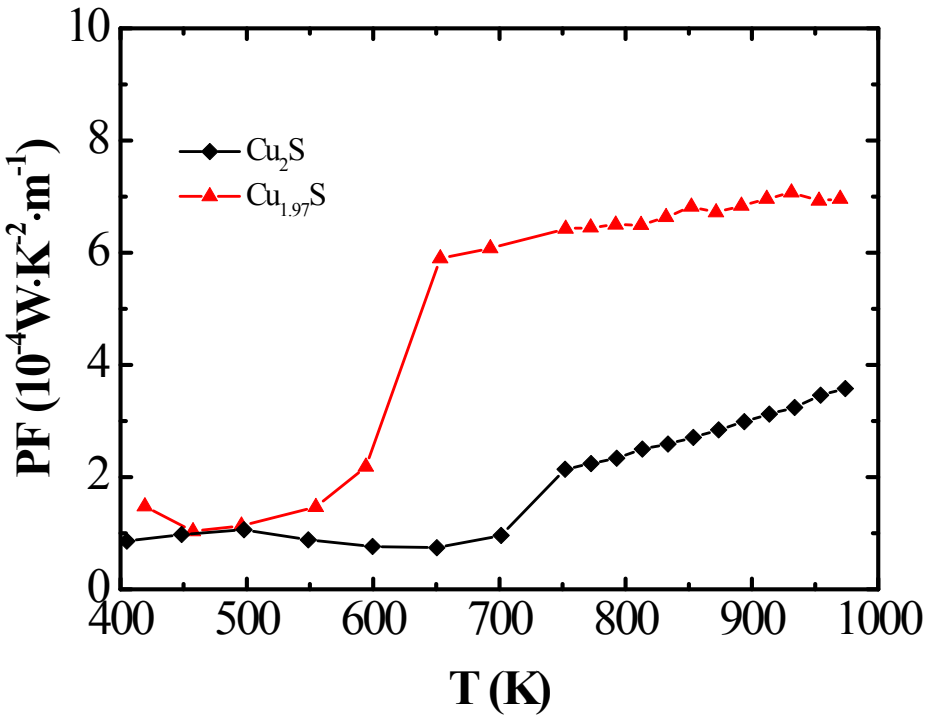

Fig. S1 Temperature dependence of power factor (PF) for the fabricated Cu_2S and $Cu_{1.97}S$ bulks

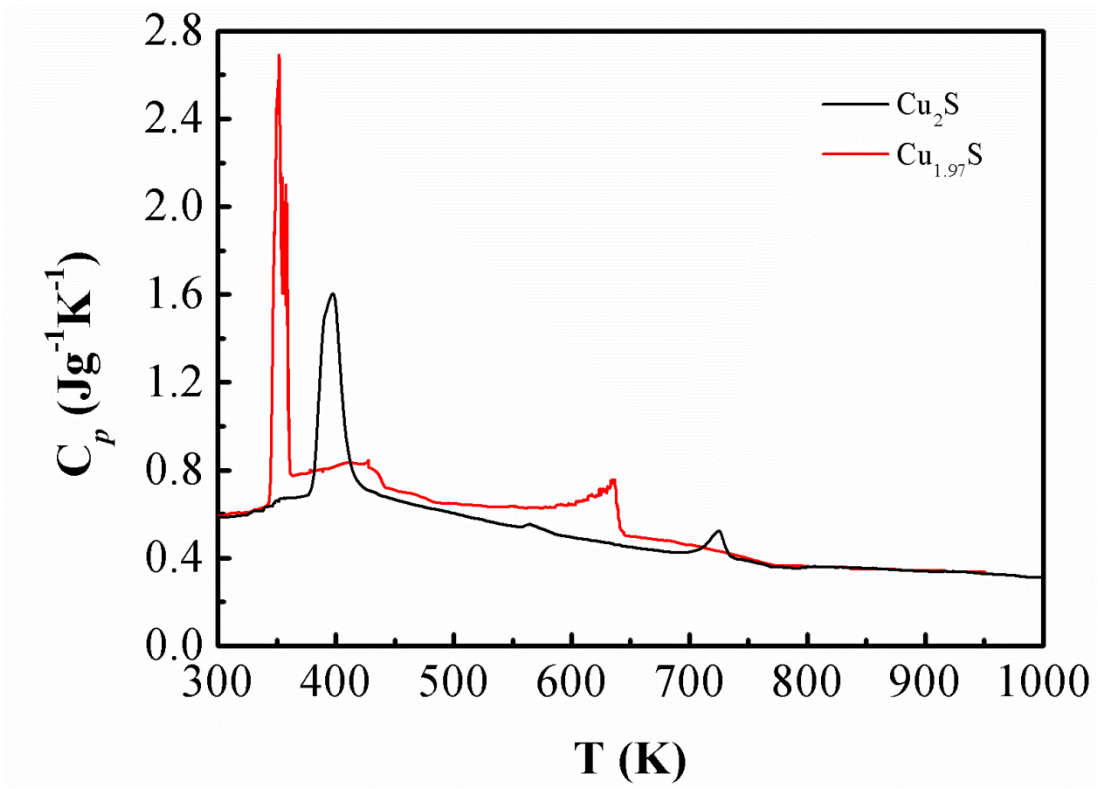

Fig. S2 Temperature dependence of the specific heat for the fabricated Cu_2S and $Cu_{1.97}S$.

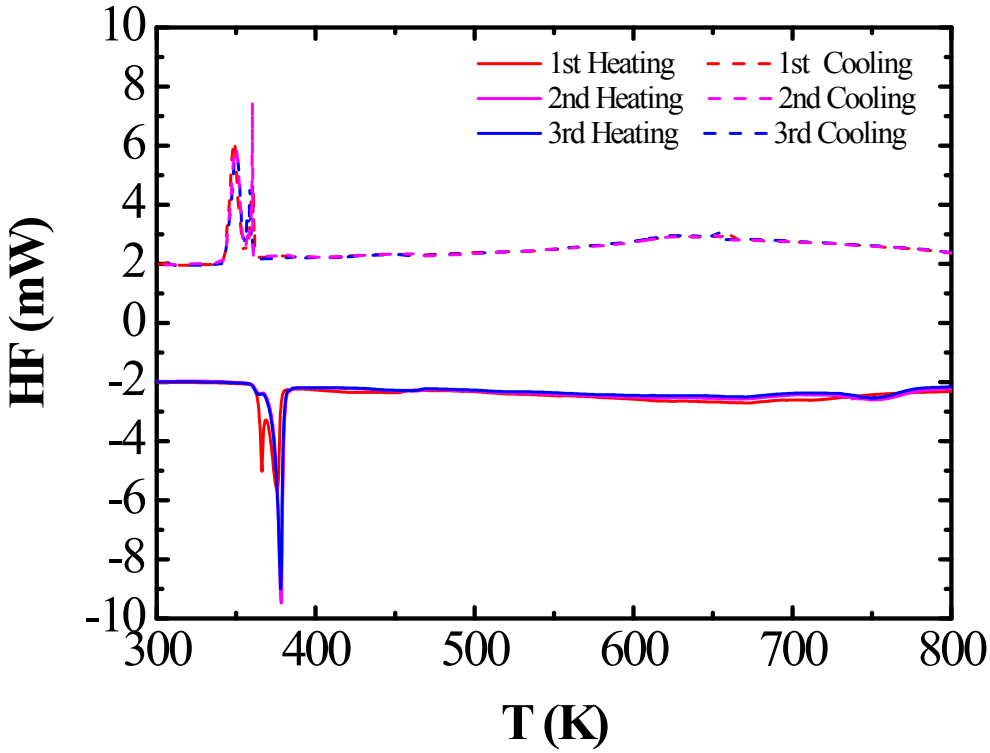

Fig. S3 Differential scanning calorimeter thermal response plots for the fabricated $Cu_{1.97}S$ bulks.

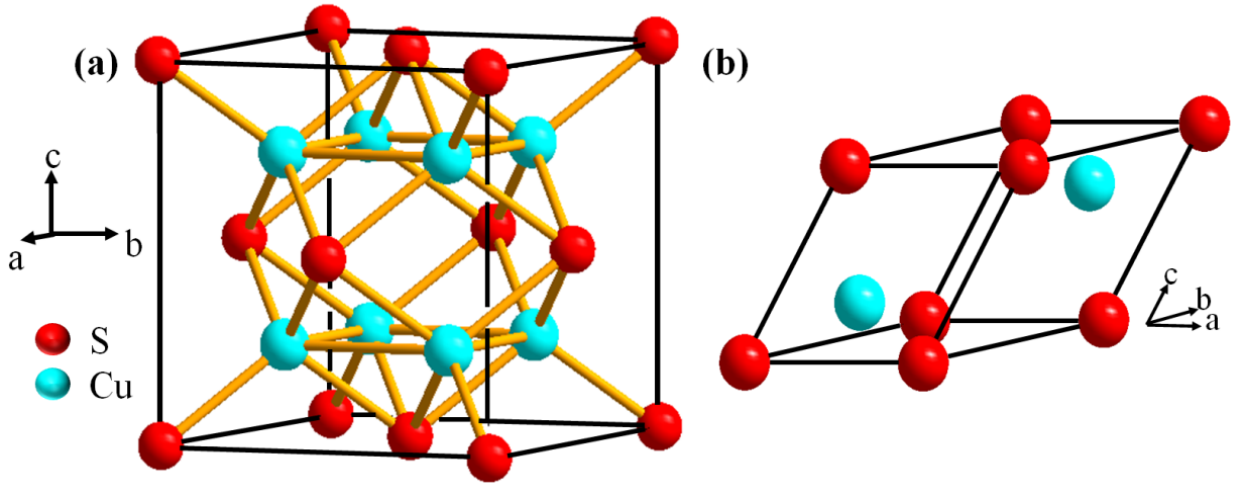

Fig. S4. Ideal version of unit cell (a) and primitive cell (b) for the high temperature α-phase Cu_2S.

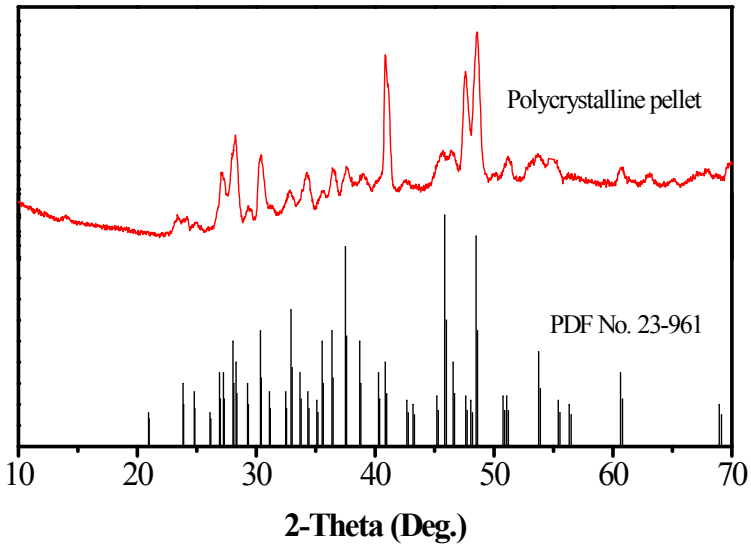

Fig. S5 X-ray diffraction patterns for the polycrystalline pellets used for the thermal diffusion measurements