Electronic Supplementary Information (ESI) for CrystEngComm

Potential for improved transport in core-shell $CuInS_2$ nanoparticle solar cells from an Ag surface termination

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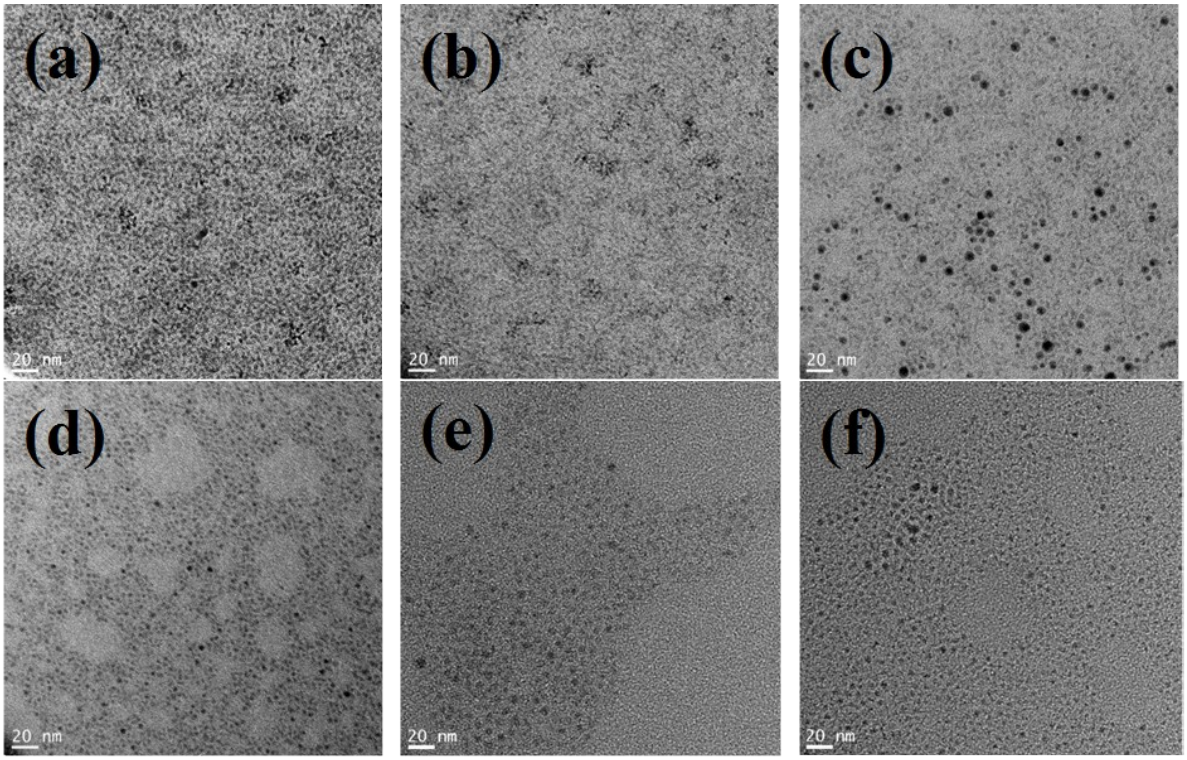

Figure S1. TEM images showing the morphology of Ag:$CuInS_2$ synthesized at 80°C for 30 mins with (a) 0.0625 mmol, (b) 0.125 mmol and, (c) 0.25 mmol of the Ag precursor. The image in (c) shows the formation of a new phase, identified as Ag_2S by XRD. Also, Ag: CuInS2 nanoparticles synthesized using 0.125 mmol of Ag precursor with different growth times of (d) 30 mins, (e) 45 mins and, (f) 1 hour are shown.

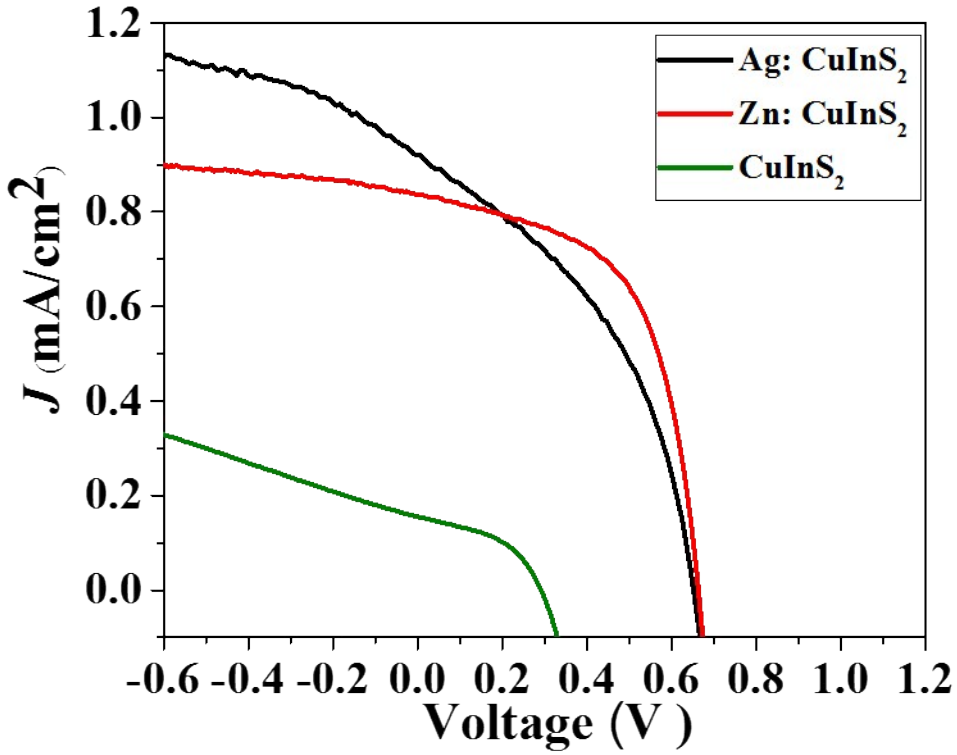

Figure S2. J-V curves of Zn:$CuInS_2$, Ag:$CuInS_2$ and pure $CuInS_2$ solar cells. For $CuInS_2$, J_{sc}=0.15 *mA/cm*^{2}, V_{oc}= 291 *mV*, FF = 44.9%, and PCE = 0.02%.