Electronic Supplementary Material (ESI) for Inorganic Chemistry Frontiers.

Supporting Information

The synergistically optimized thermoelectric properties of $Ag_{1+x}In_5Se_8$ alloys

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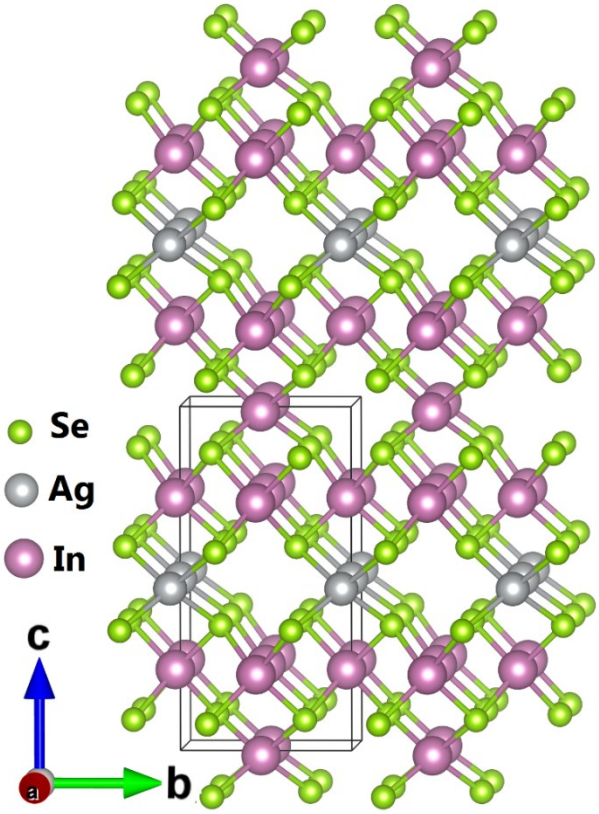

Fig. S1 The crystal structure of $AgIn_5Se_8$.

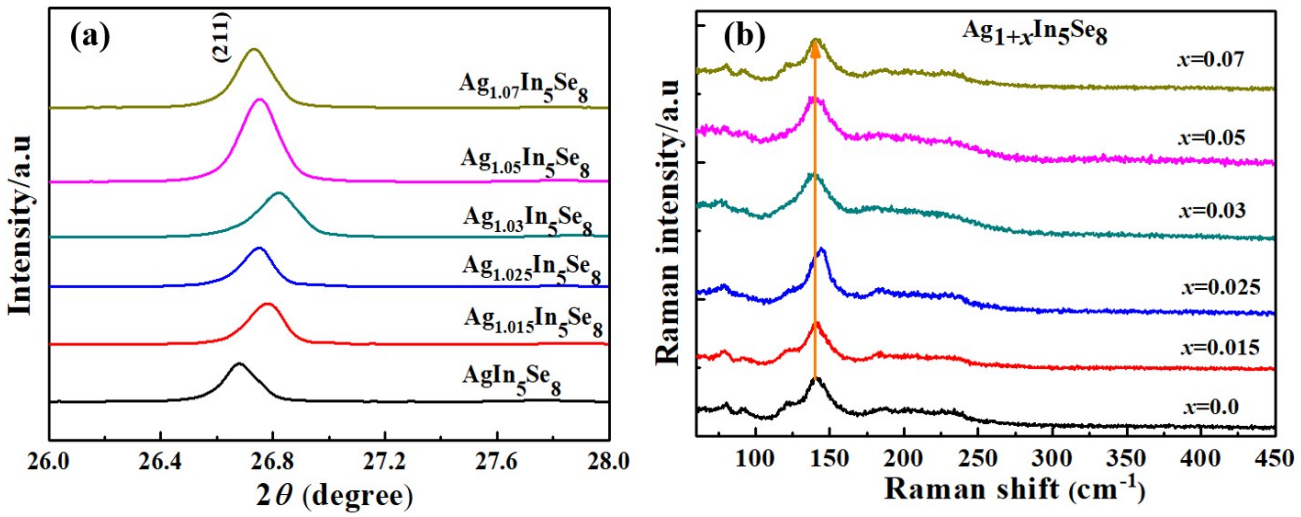

Fig. S2 (a) The magnified segment of XRD patterns of $Ag_{1+x}In_5Se_8$ with nominal content (x = 0.0, 0.015, 0.025, 0.03, 0.05, 0.07) around 26.5°. (b) Raman spectra of samples with nominal composition of $Ag_{1+x}In_5Se_8$ (x = 0.0, 0.015, 0.025, 0.03, 0.05, 0.07).

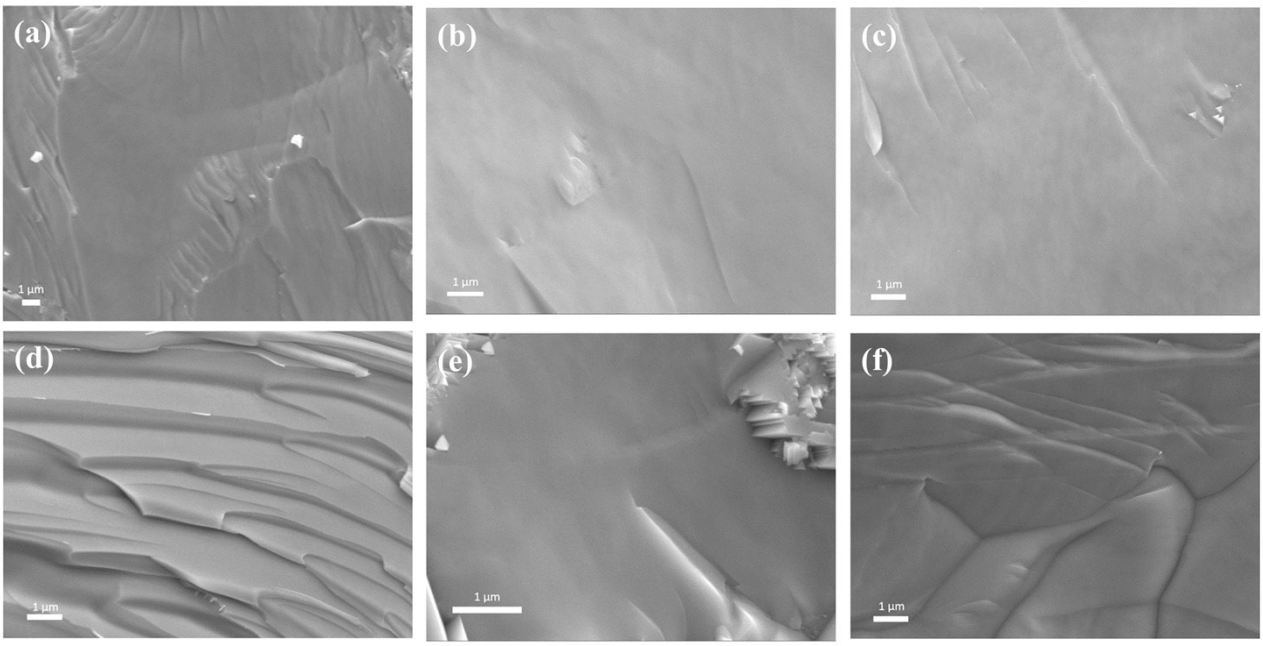

Fig. S3 (a-f) SEM images of $Ag_{1+x}In_5Se_8$ with nominal content (x = 0.0, 0.015, 0.025, 0.03, 0.05, 0.07).

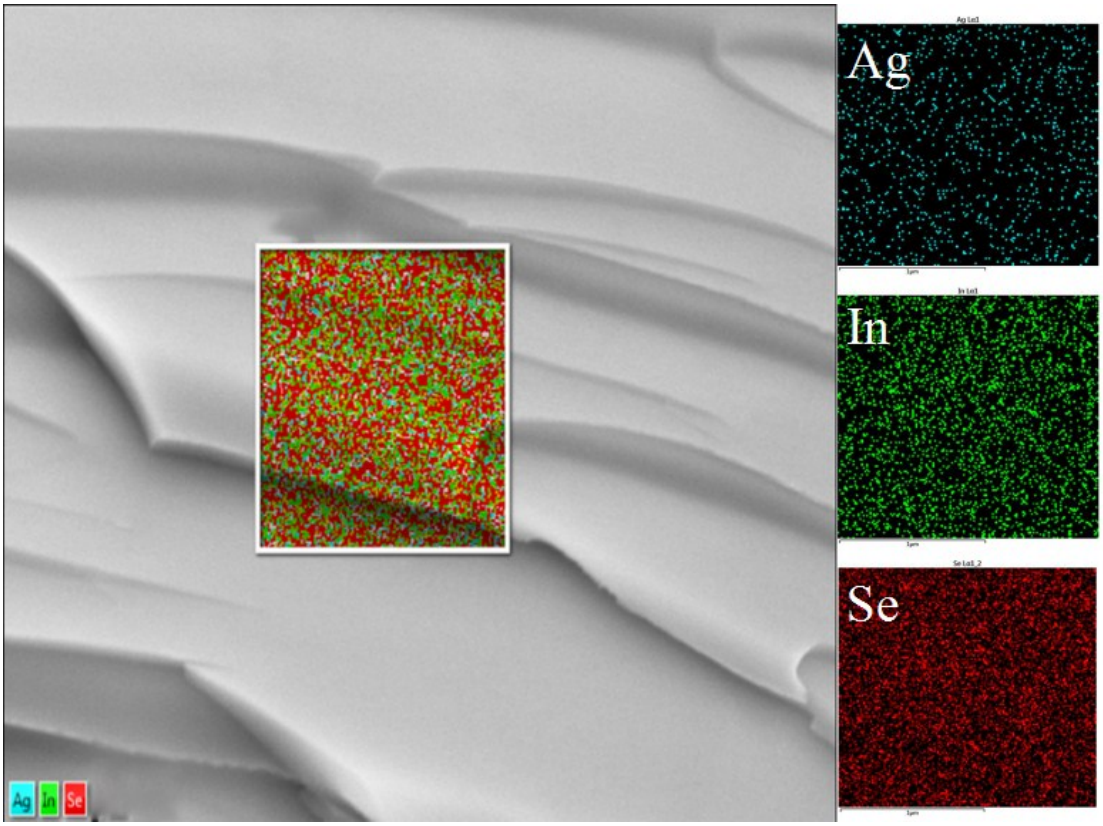

Fig. S4 SEM-EDS elemental mapping images of $Ag_{1.03}In_5Se_8$.

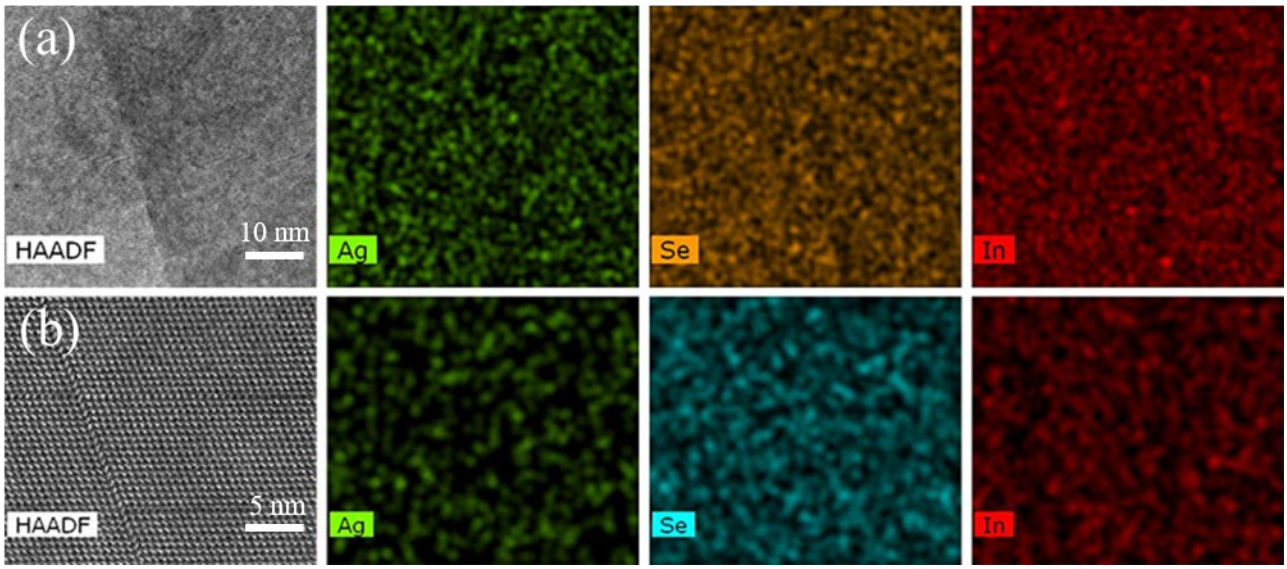

Fig. S5 (a) HAAADF and elemental mapping images of $AgIn_5Se_8$. (b) HAADF and elemental mapping images of $Ag_{1.03}In_5Se_8$. No signal of element segregation were observed in both two cases.