

Supplementary Materials for

Thermoelectric properties of cubic $\text{Ag}_{1-x/2}\text{Bi}_{1-x/2}\text{Sn}_x\text{Se}_2$ solid solution

Xiao-Cun Liu^{1,*} and Ming-Yan Pan²

¹ School of Civil Engineering, Shandong Jiaotong University, Jinan, Shandong 250023, China

² Key Laboratory of Materials for High Power Laser, Shanghai Institute of Optics and Fine Mechanics, Chinese Academy of Science, Shanghai 201800, China

* Correspondence: liuxiaocunde@163.com.

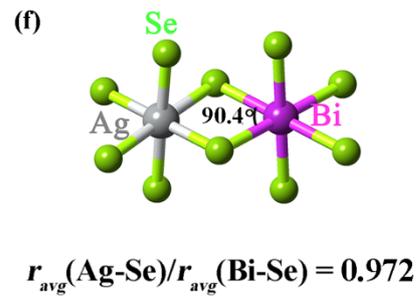
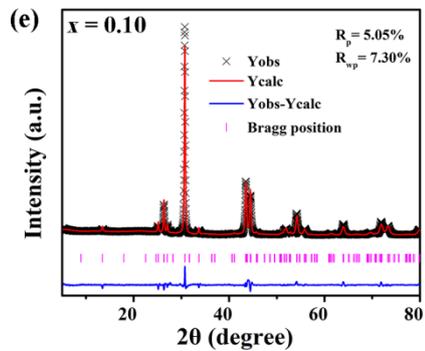
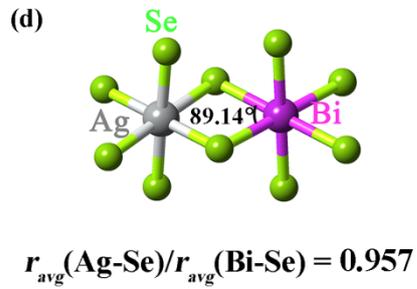
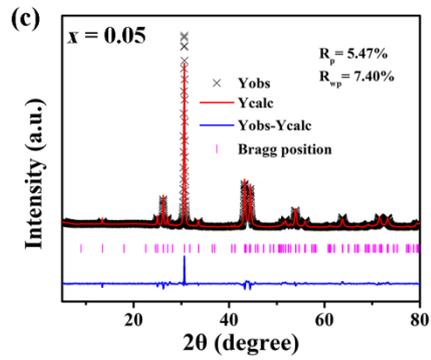
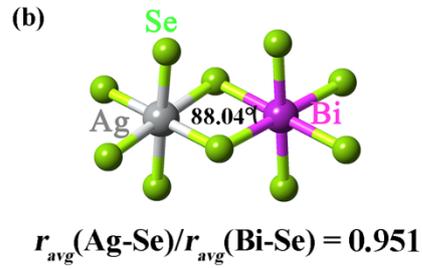
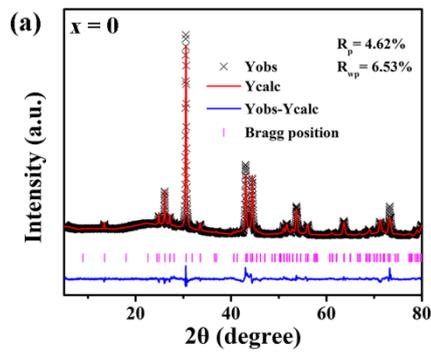


Figure S1. (a), (c) and (e) Rietveld refinements of AgBiSe_2 , AgBiSe_2 , $\text{Ag}_{0.975}\text{Bi}_{0.975}\text{Sn}_{0.05}\text{Se}_2$, and $\text{Ag}_{0.95}\text{Bi}_{0.95}\text{Sn}_{0.10}\text{Se}_2$. The $r_{avg}(\text{Ag-Se})$, $r_{avg}(\text{Bi-Se})$, $r_{avg}(\text{Sb-Se})$ and $r_{avg}(\text{As-Se})$, in the figure are average bonding distances of Ag-Se, Bi-Se, Sb-Se and As-Se in octahedrons, respectively.

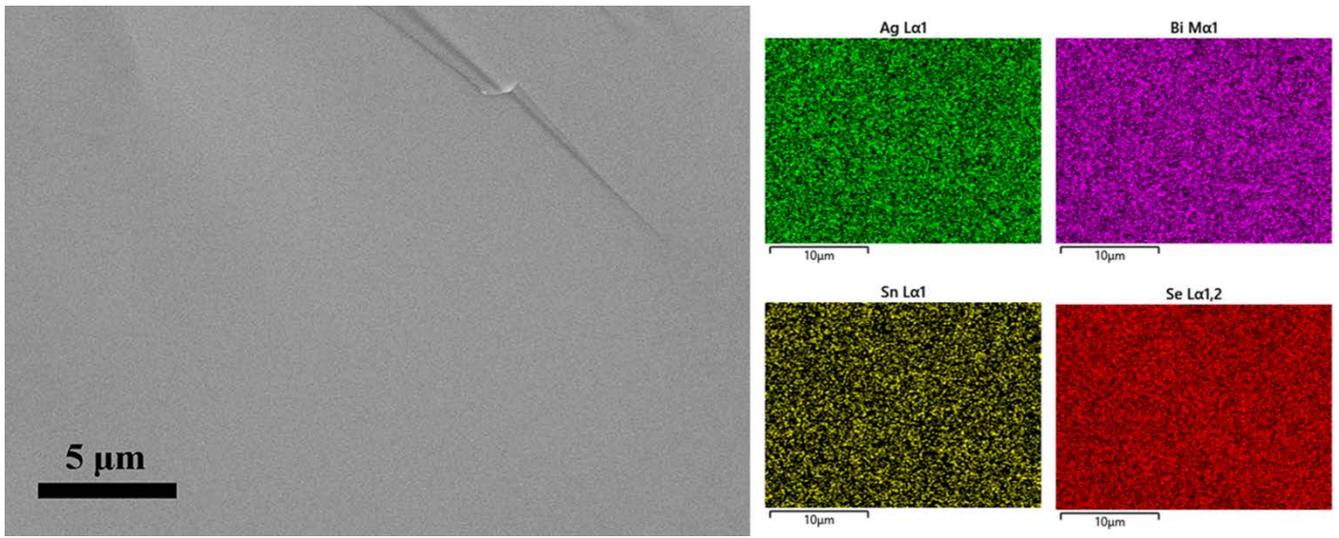


Figure S2. Cross-sectional SEM image and EDS mapping for sintered $\text{Ag}_{0.90}\text{Bi}_{0.90}\text{Sn}_{0.20}\text{Se}_2$ sample.

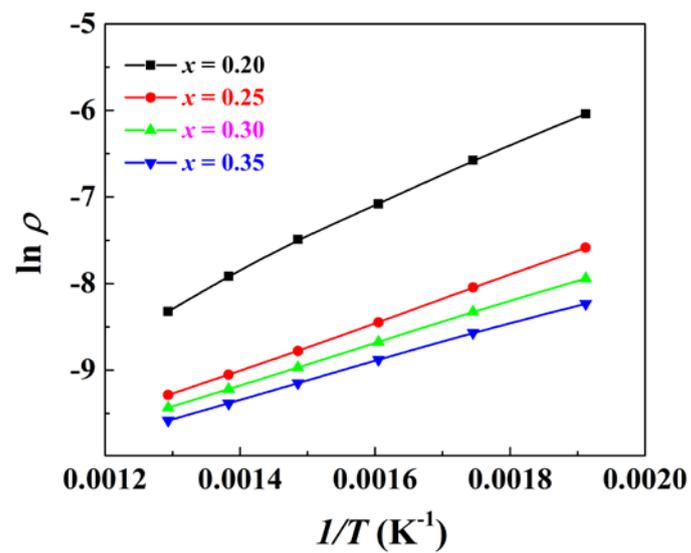


Figure S3. The $\ln \rho$ versus $1/T$ in the high-temperature region and linear regression for $\text{Ag}_{1-x/2}\text{Bi}_{1-x/2}\text{Sn}_x\text{Se}_2$.