

Supporting Information for

High entropy effect on thermoelectric properties of nonequilibrium cubic phase of $\text{AgBiSe}_{2-2x}\text{S}_x\text{Te}_x$ with $x = 0\text{--}0.6$

Asato Seshita,^a Aichi Yamashita,^{a,*} Takayoshi Katase,^b Yoshikazu Mizuguchi^a

^a *Department of Physics, Tokyo Metropolitan University, 1-1 Minami-Osawa, Hachioji-shi, Tokyo 192-0397, Japan*

^b *MDX Research Center for Element Strategy, International Research Frontiers Initiative, Tokyo Institute of Technology, 4259 Nagatsuta, Midori, Yokohama 226-8501, Japan.*

*Corresponding author: Aichi Yamashita

E-mail: aichi@tmu.ac.jp

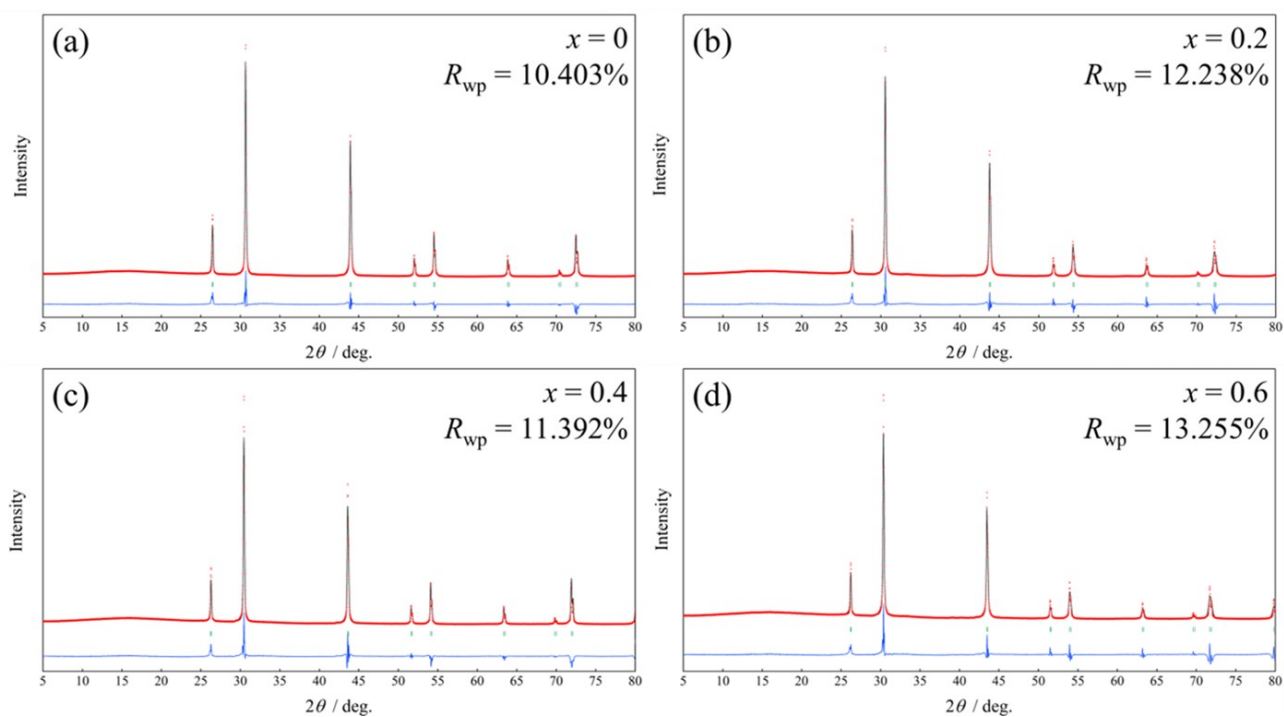


Fig. S1 The result of Rietveld refinement for quenched $\text{AgBiSe}_{2-2x}\text{S}_x\text{Te}_x$ samples.

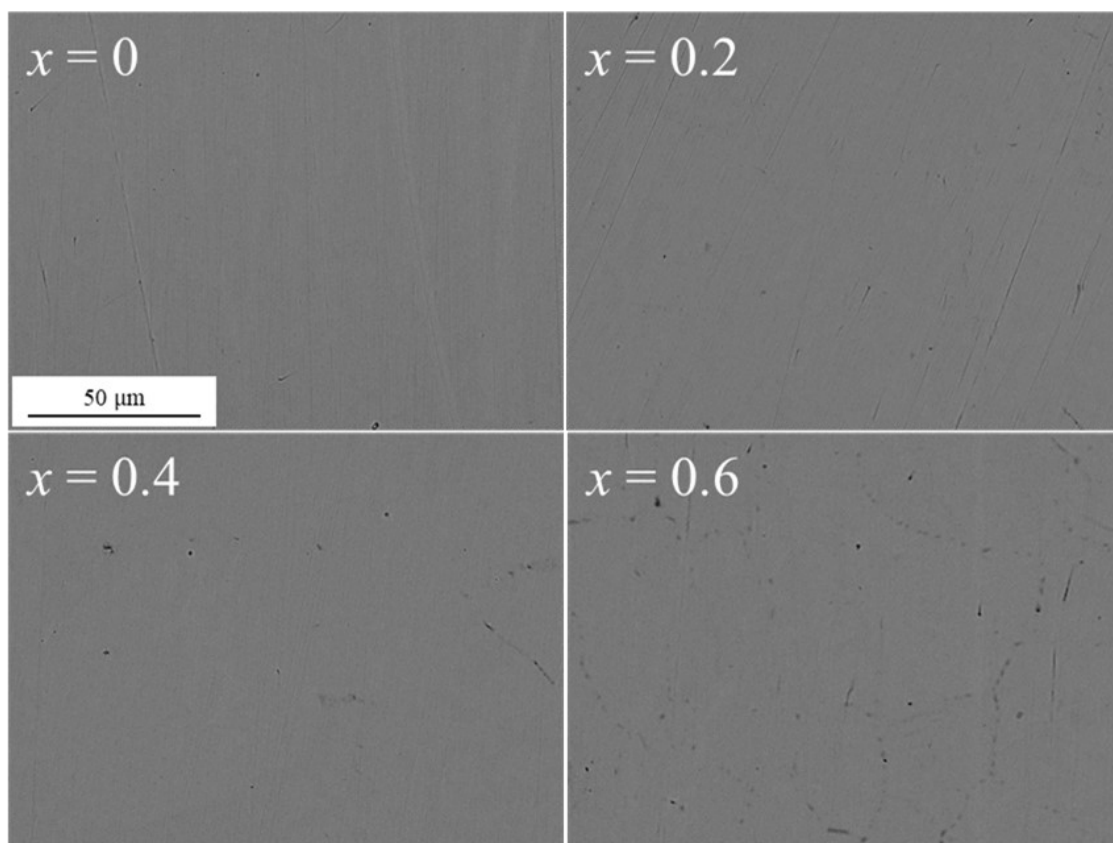


Fig. S2 SEM images for quenched $\text{AgBiSe}_{2-2x}\text{S}_x\text{Te}_x$ samples.

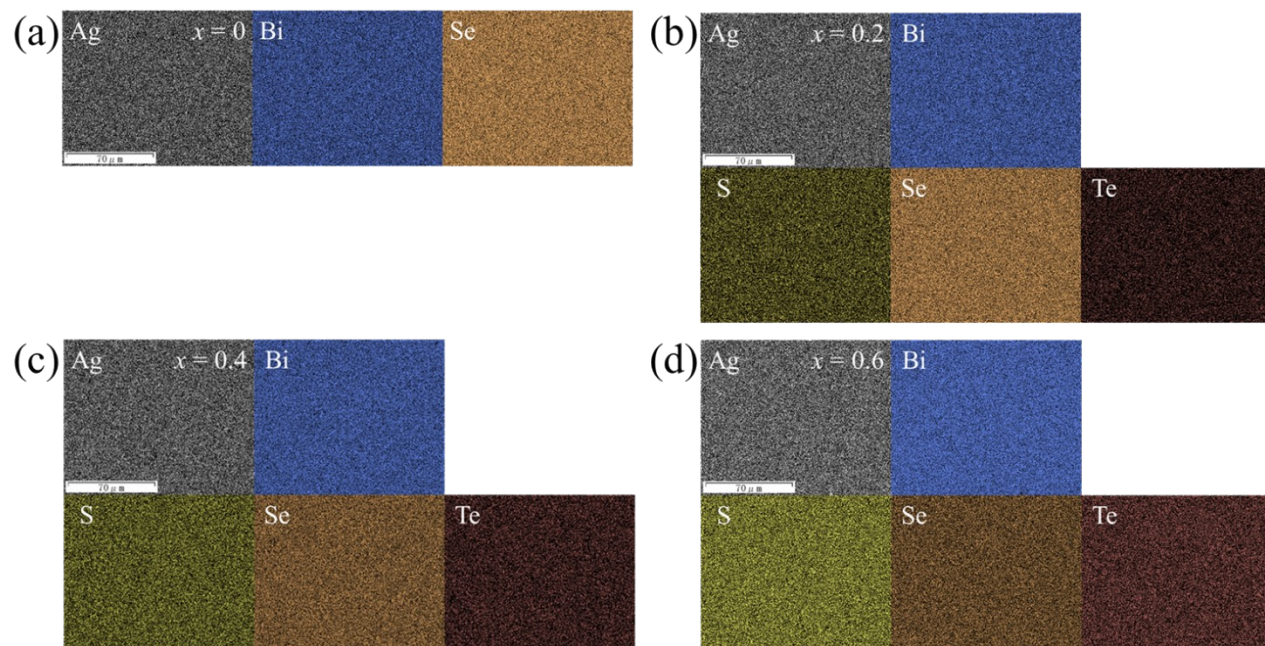


Fig. S3 EDX mapping for quenched $\text{AgBiSe}_{2-2x}\text{S}_x\text{Te}_x$ samples.

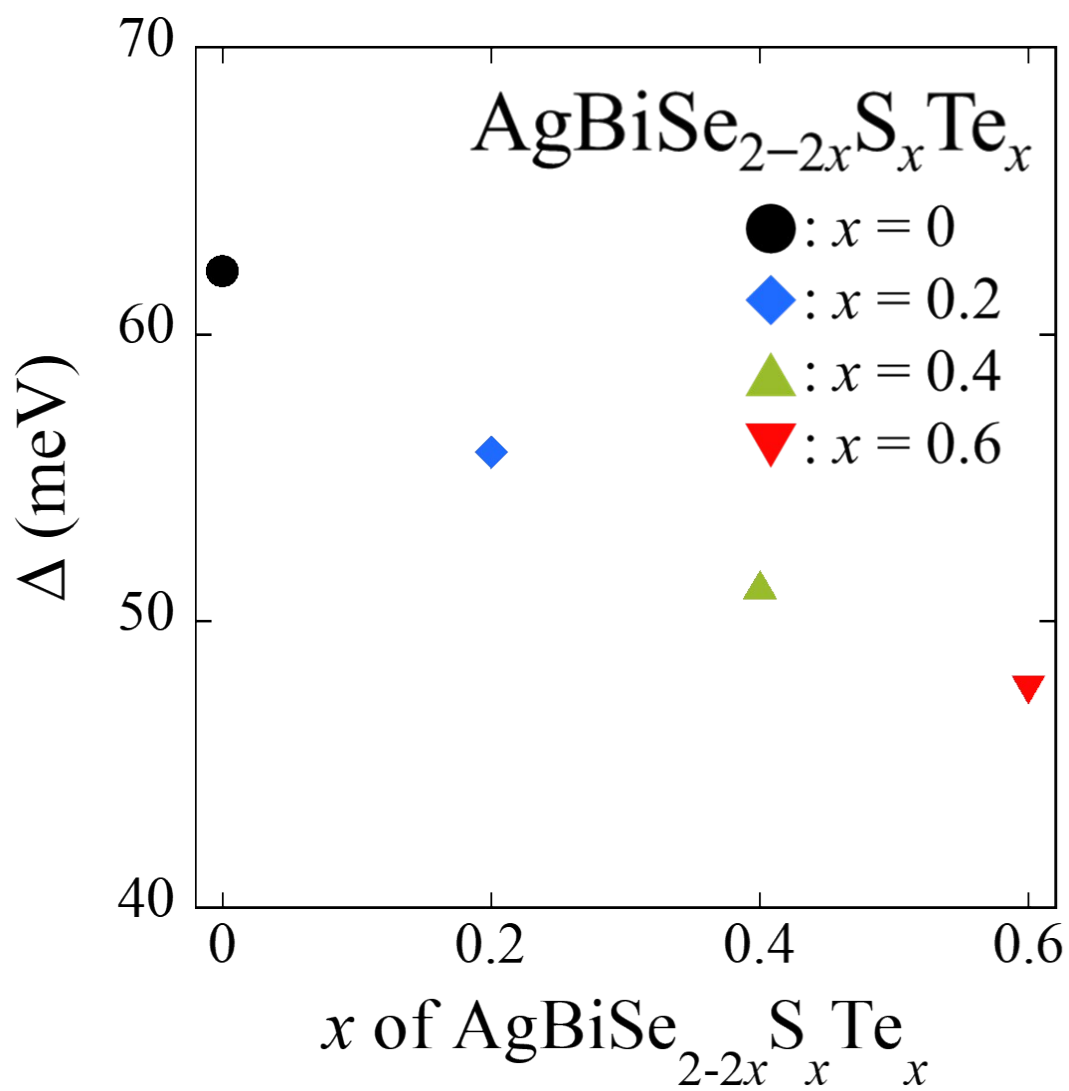


Fig. S4 Activation energy (Δ) of electrical resistivity for quenched AgBiSe_{2-2x}S_xTe_x samples.

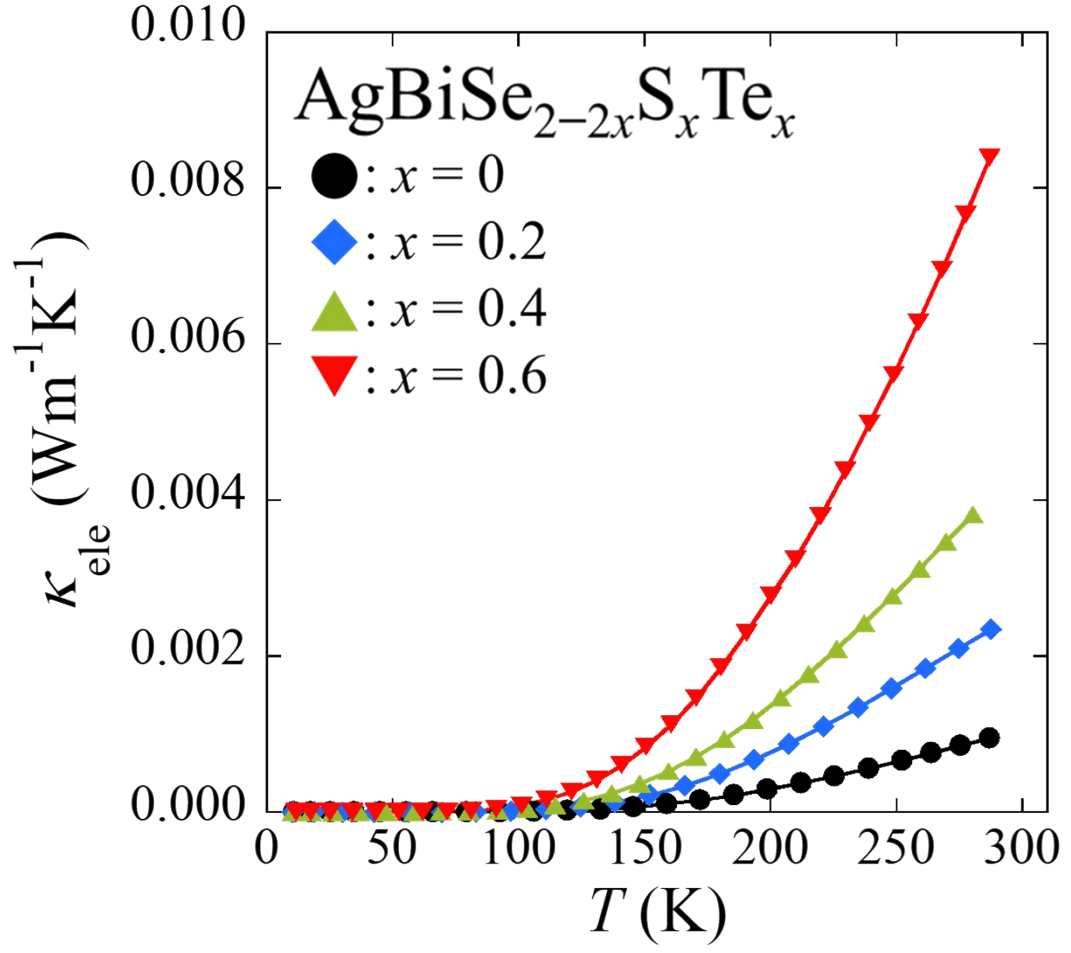


Fig. S5 Temperature (T) dependence of electronic thermal conductivity (κ_{ele}) for quenched $\text{AgBiSe}_{2-2x}\text{S}_x\text{Te}_x$ samples.

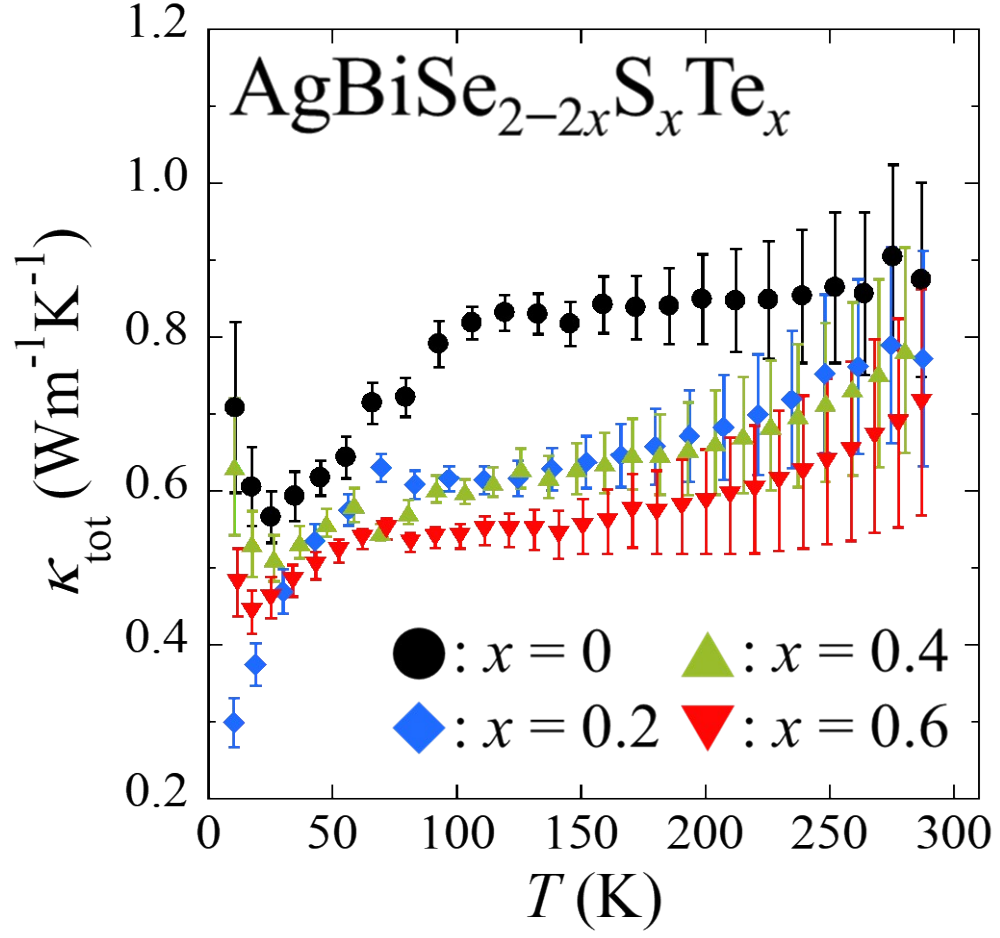


Fig. S6 Temperature dependence (T) of total thermal conductivity (κ_{tot}) with error bar for quenched $\text{AgBiSe}_{2-2x}\text{S}_x\text{Te}_x$ samples.