

Supplementary information

Thermoelectric properties of p-type polycrystalline

SnSe doped with Ag[†]

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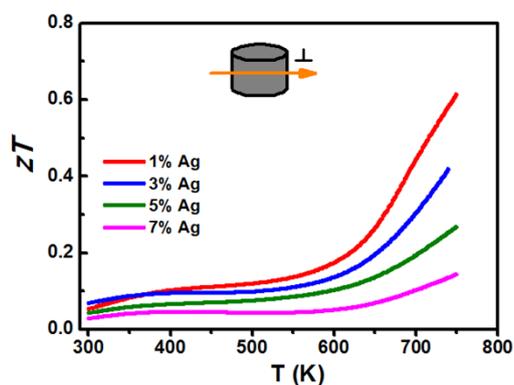


Fig. S1 (a) Temperature dependent zT of a series of SnSe alloys when the measurements were performed during heating up process, and their transport properties are perpendicular to the pressure direction.

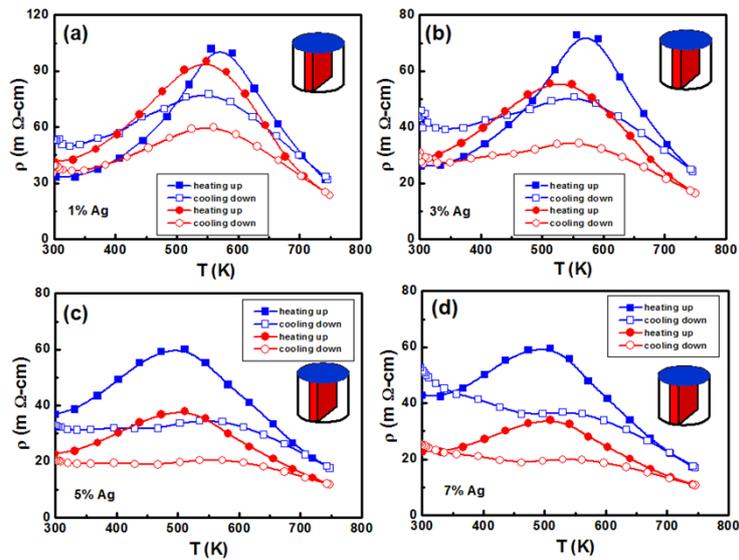


Fig. S2 Comparison of electrical resistivity for the Ag-alloyed SnSe between two different measured direction. Different coloring in these figures represents results measured from each slice of the cylinder.

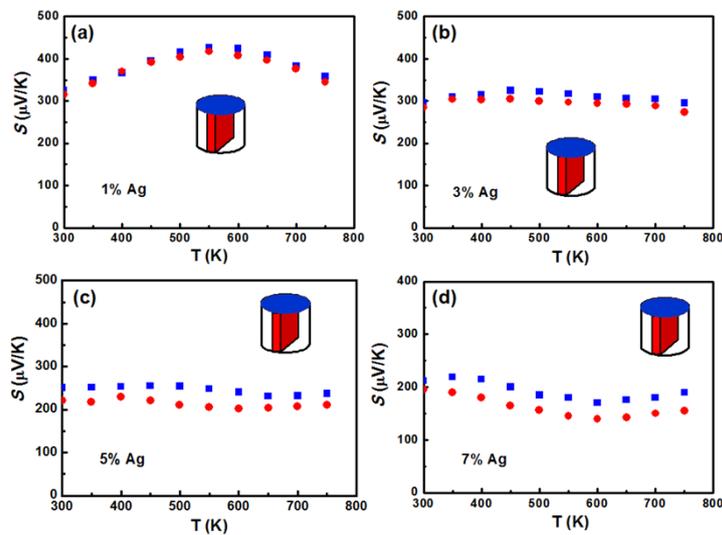


Fig. S3 Comparison of Seebeck coefficients for the Ag-alloyed SnSe between two different measured direction. Different coloring in these figures represents results

measured from each slice of the cylinder.

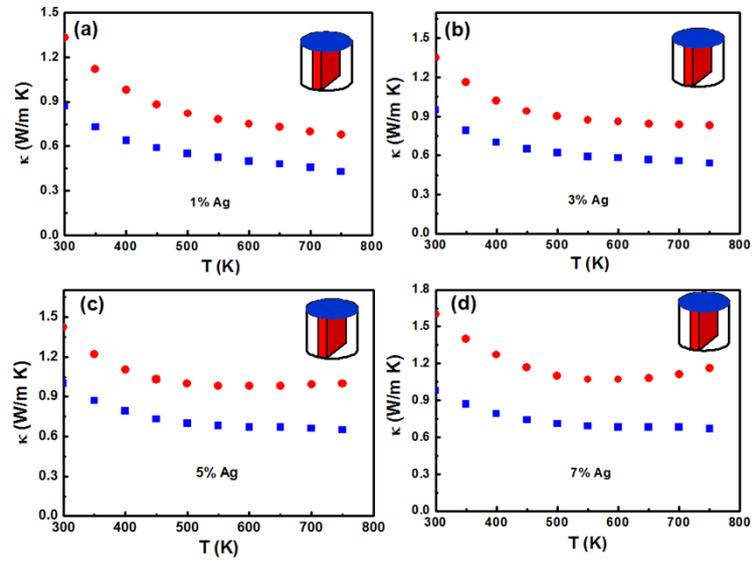


Fig. S4 Comparison of thermal conductivity for the Ag-alloyed SnSe between two different measured direction. Different coloring in these figures represents results measured from each slice of the cylinder.

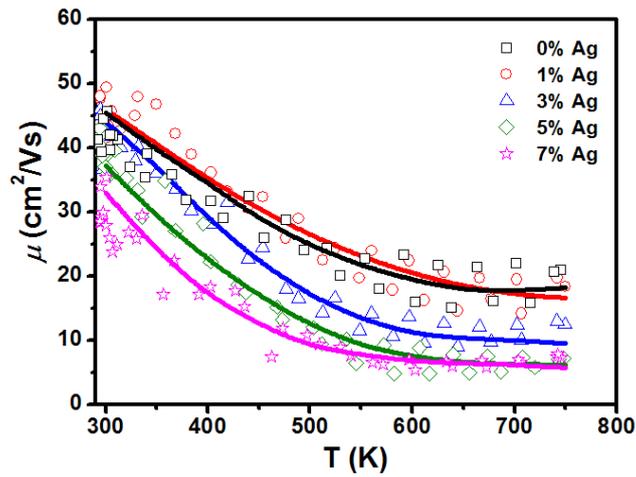


Fig. S5 Temperature dependent Hall mobility for a series of SnSe alloys. The data are fitted with the curves for the guide to the eye.

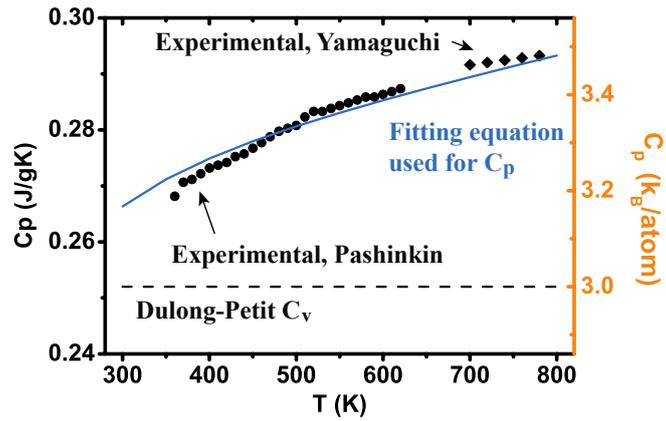


Fig. S6. Heat capacity used for calculation of κ , from fitting equation given by Pashinkin et al. based on experimental measurement, which is consistent with result for higher temperatures given by Yamaguchi et al.

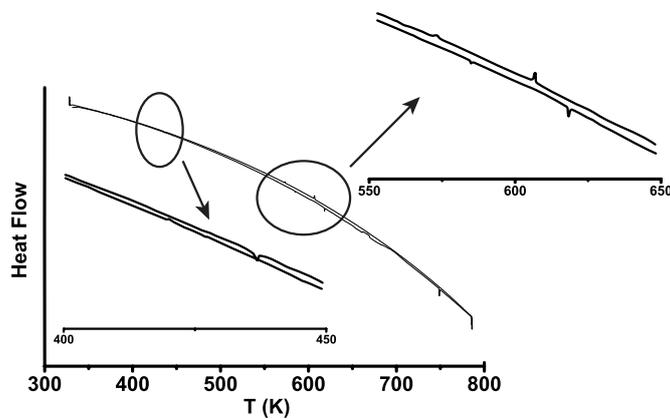


Fig. S7. DSC scan for undoped SnSe. Very small peaks are observed around 430 K, 580 K and 610 K.