

Thermoelectric properties of Si-doped In_2Se_3 polycrystalline alloys

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S1. Specific heat capacity C_p estimated by differential scanning calorimetry (DSC)

Specific heat capacity C_p describes the energy required to induce a certain change in the temperature of a unit mass of the materials. In this study, differential scanning calorimeter (DSC) was used to measure the C_p of the In_2Se_3 . Figure S1 shows the C_p as a function of temperature.

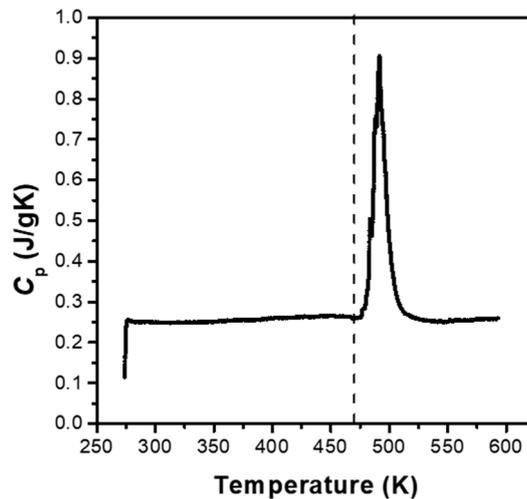


Figure S1. C_p of the In_2Se_3 as a function of temperature measured by differential scanning calorimetry

S2. Energy-dispersive spectroscopy (EDS) by scanning electron microscopy (SEM)

Energy-dispersive spectroscopy (EDS) by scanning electron microscopy (SEM) was performed for $\text{In}_{2-x}\text{Si}_x\text{Se}_3$ with $x = 0.01$ and 0.02 to verify the existence of Si dopants. Figure S2 shows the EDS results of for $\text{In}_{2-x}\text{Si}_x\text{Se}_3$ with $x = 0.01$ and 0.02 and Table 1 shows the atomic percentage measured by EDS-SEM for $\text{In}_{2-x}\text{Si}_x\text{Se}_3$ with $x = 0.01$ and 0.02 .

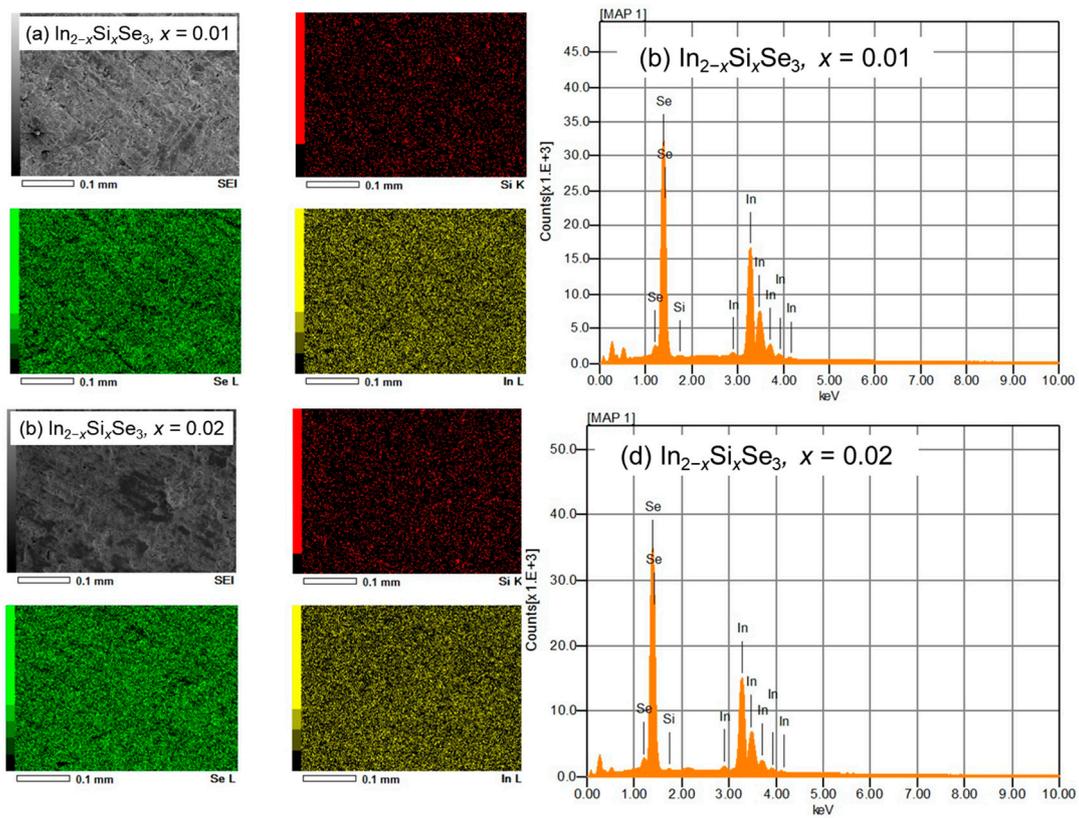


Figure S2. EDS results of for $\text{In}_{2-x}\text{Si}_x\text{Se}_3$ with $x = 0.01$ and 0.02

Table S1. Atomic percentage measured by energy-dispersive spectroscopy (EDS) for $\text{In}_{2-x}\text{Si}_x\text{Se}_3$ with $x = 0.01$ and 0.02 .

$\text{In}_{2-x}\text{Si}_x\text{Se}_3$	In	Si	Se
$x = 0.01$	44.98	0.12	54.90
$x = 0.02$	40.70	0.28	59.02