

## **Impact of Coinage Metal Insertion on the Thermoelectric Properties of GeTe Solid-State Solutions**

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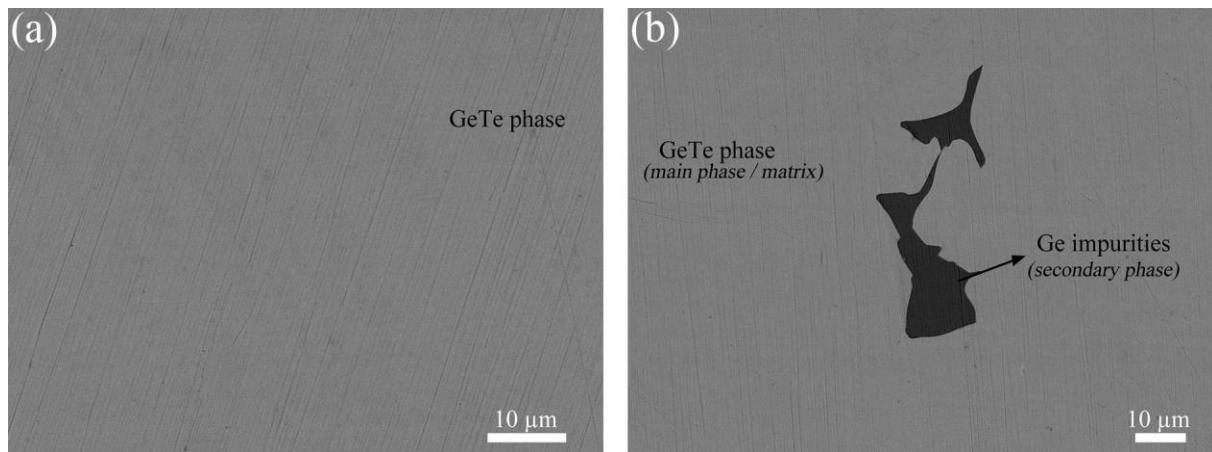
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### **Synopsis – Supporting Information**

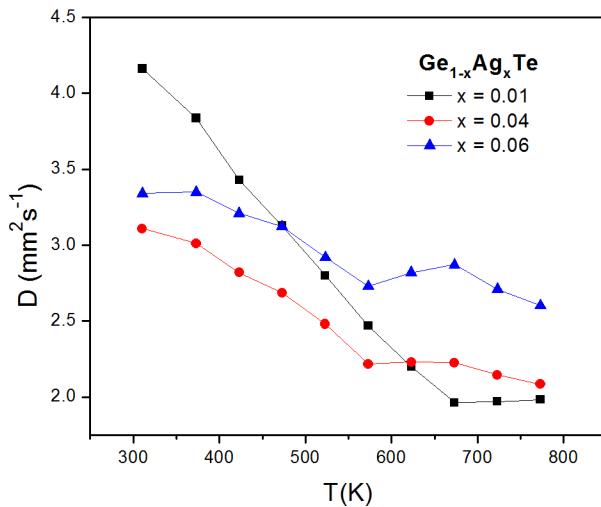
1. Microstructural analysis – SEM
2. Thermal Diffusivity, D
3. Estimation of Lorenz number, L
4. Density of States computation

## 1. Microstructural Analysis



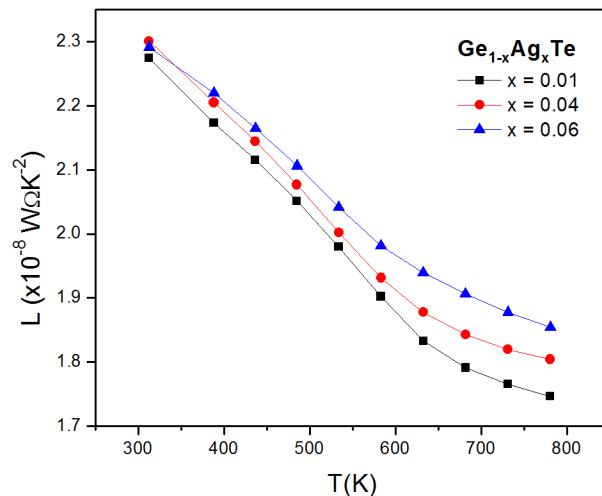
**Figure S1.** SEM images of  $\text{Ge}_{0.99}\text{Ag}_{0.01}\text{Te}$  showing predominantly the GeTe phase and few secondary Ge inclusions (consistent with the PXRD results).

## 2. Thermal Diffusivity D



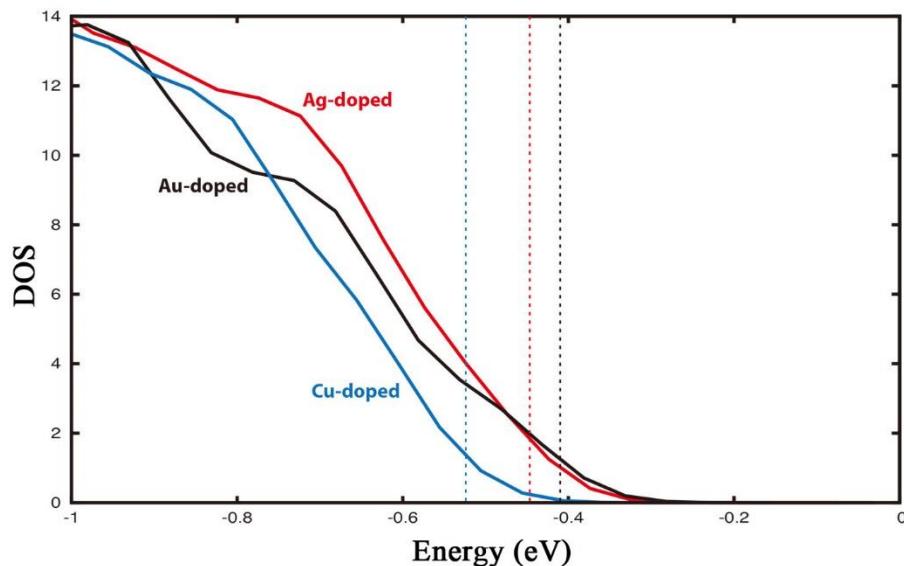
**Figure S2.** Temperature-dependent thermal diffusivity (D) for  $\text{Ge}_{1-x}\text{Ag}_x\text{Te}$  samples.

### 3. Estimation of Lorenz number L



**Figure S3.** Temperature dependence of the Lorenz number (L) for Ge<sub>1-x</sub>Ag<sub>x</sub>Te samples, calculated by fitting the respective Seebeck coefficient values.

#### 4. Density of States



**Figure S4.** Density of states with Fermi levels (dashed lines) for  $M_{0.042}Ge_{0.958}Te$  ( $M = Cu, Ag$  and  $Au$ ).