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Supporting Information

Biaxial Tensile Strain-Induced Enhancement of Thermoelectric Efficiency of α-Phase Se_2Te and $SeTe_2$ Monolayers

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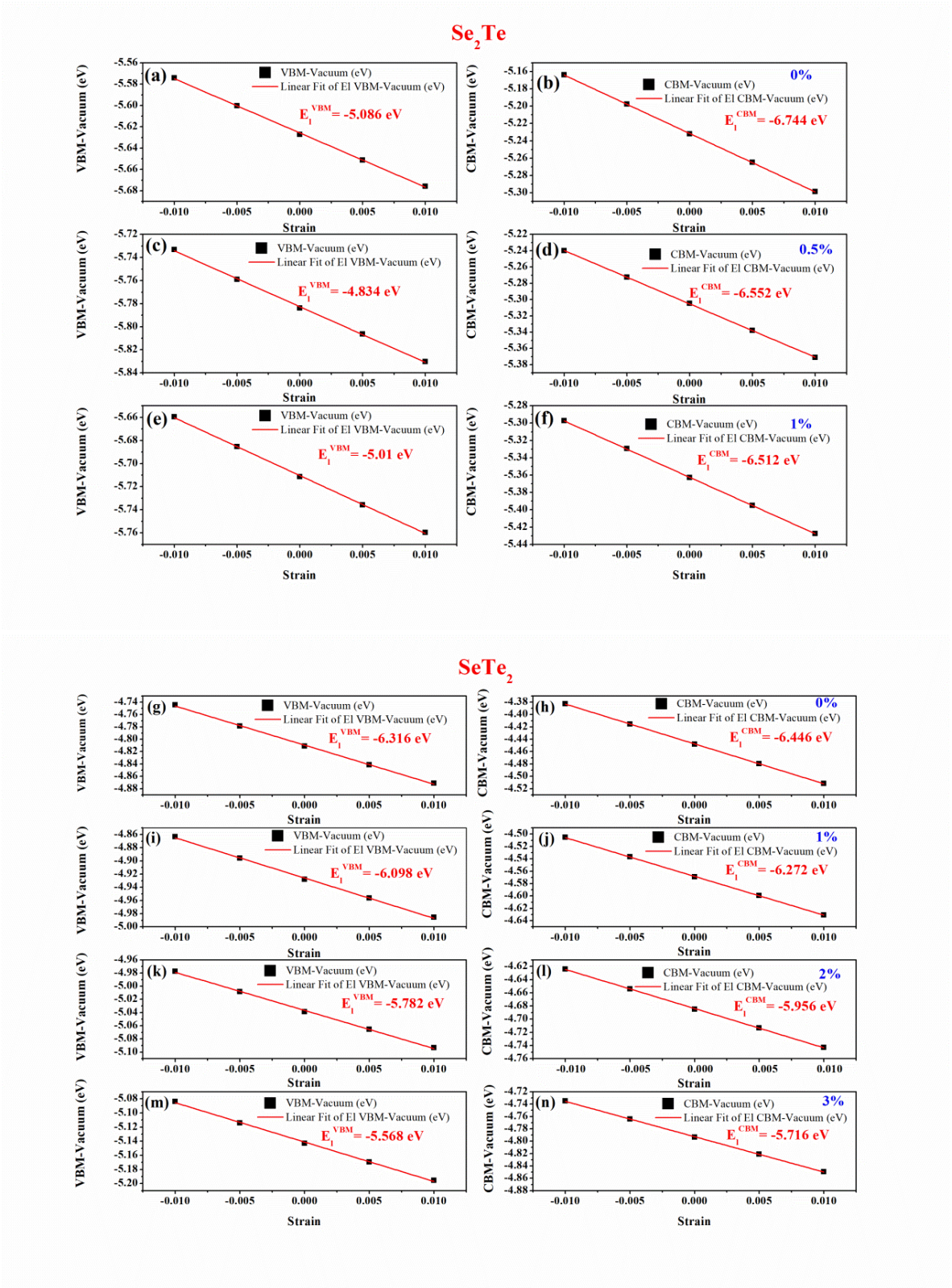

Figure S1. (Color online) The strain-dependent of deformation potential constants E_l of α-phase (a-f) Se_2Te and (g-n) $SeTe_2$ monolayer based on PBE+SOC band structures, respectively. The red straight line is the linear fitting curve.

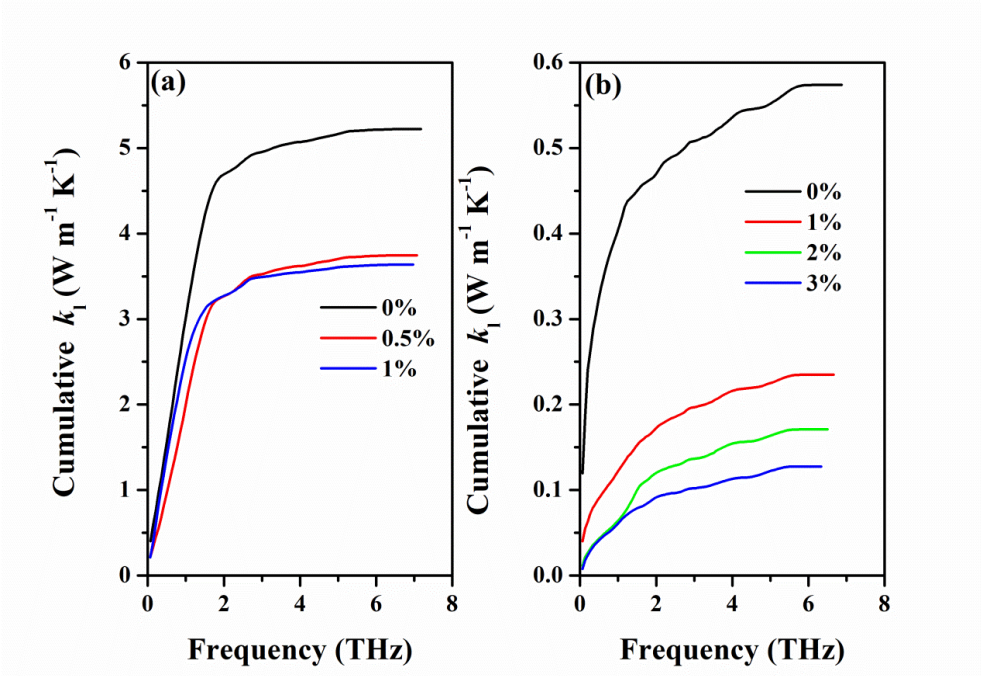

Figure S2. (Color online) The strain-dependent of cumulative k_l of (a) Se_2Te and (b) $SeTe_2$ monolayer at 300 K as a function of frequency, respectively.

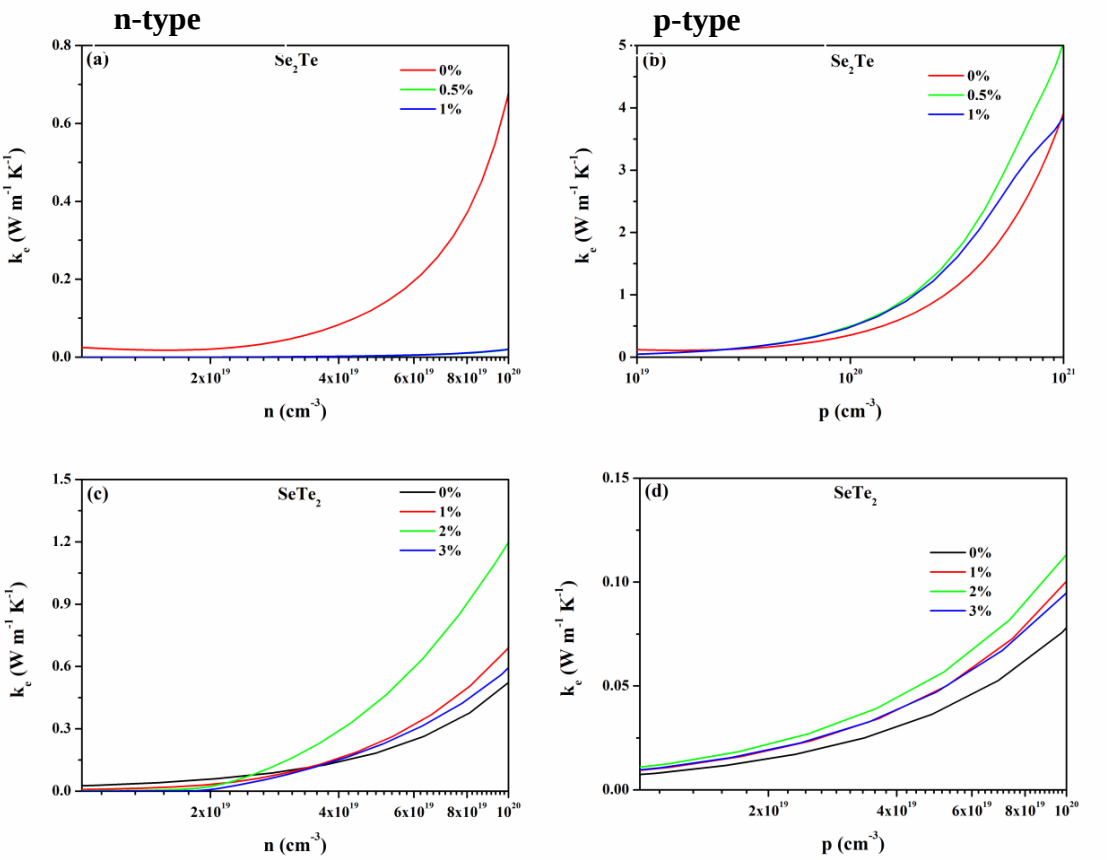

Figure S3. (Color online) The strain-dependent of electronic thermal conductivity k_e of (a, b) Se_2Te and (c, d) $SeTe_2$ monolayer at 300 K as a function of concentration for n-type and p-type doping, respectively.