Supporting Information

Enhancement of the thermoelectric performance of Cu_3SbSe_4 particles by controlling morphology using exfoliated selenium nanosheets

Minsu Kim[1], Dabin Park[1], and Jooheon Kim[1,2,3]*

1. School of Chemical Engineering & Materials Science, Chung-Ang University, Seoul 06974, Republic of Korea
2. Department of Advanced Materials Engineering, Chung-Ang University, Anseong-si, Gyeonggi-do 17546, Republic of Korea
3. Department of Intelligent Energy and Industry, Graduate School, Chung-Ang University, Seoul 06974, Republic of Korea

*Corresponding author: Jooheon Kim, E-mail address: jooheonkim@cau.ac.kr

Supporting Information:

Figures

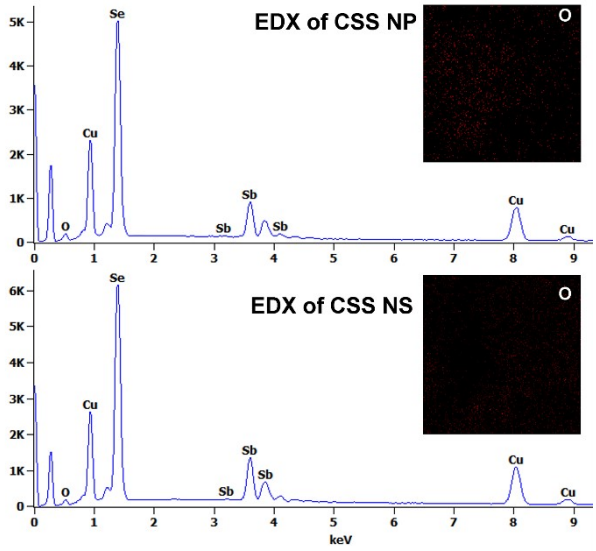

Fig. S1. EDX spectra and EDS elemental mapping of O of CSS NP and CSS NS.

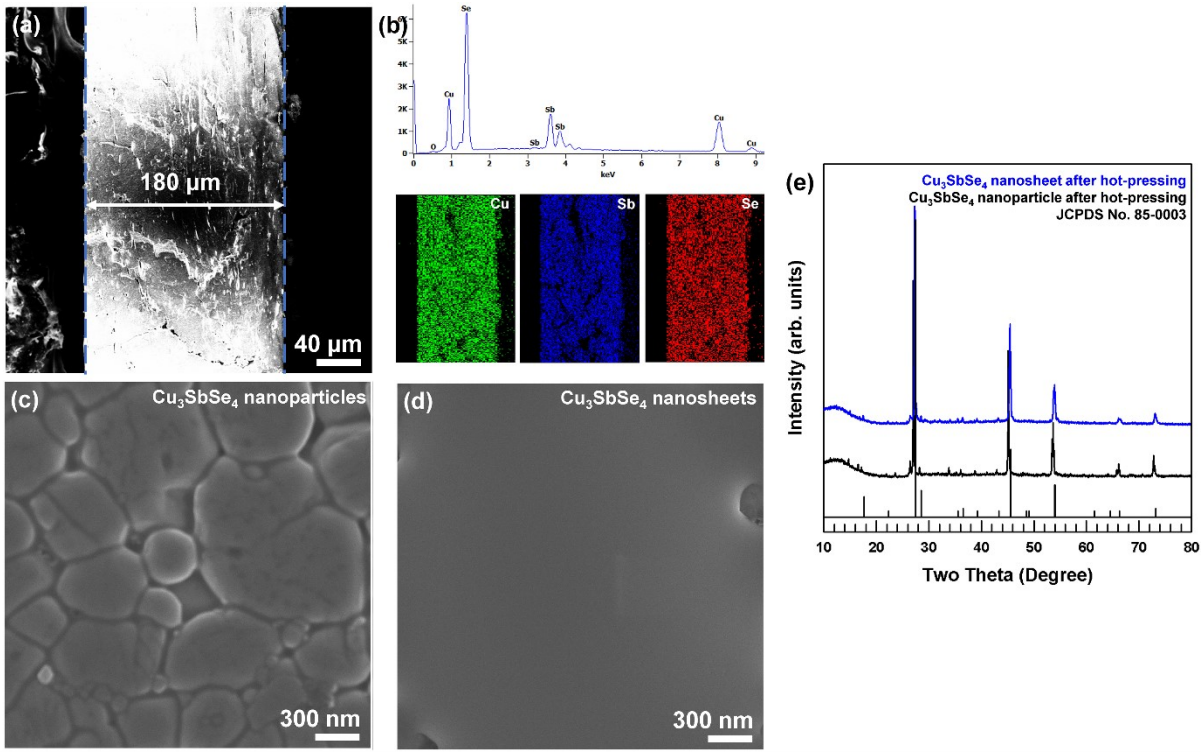

Fig. S2. (a) Cross-sectional FE-SEM image (b) EDX spectra and EDS elemental mapping of Cu (green), Sb (blue) and Se (red) of Cu_3SbSe_4 disk pellet and FE-SEM images of (c) Cu_3SbSe_4 nanoparticle disk pellet and (d) Cu_3SbSe_4 nanosheet disk pellet. (e) the XRD patterns of Cu_3SbSe_4 nanoparticle and Cu_3SbSe_4 nanosheet after hot-pressing.

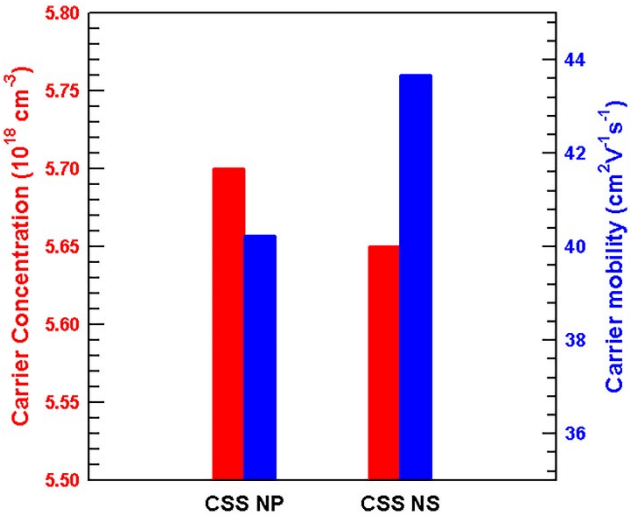

Fig. S3. Carrier concentration and carrier mobility of CSS NP and CSS NS at 298 K.