

# Supporting Information for: Thermoelectric Penta-Silicene with a High Room-Temperature Figure of Merit

Zhibin Gao\* and Jian-Sheng Wang

*Department of Physics, National University of Singapore, Singapore 117551, Republic of  
Singapore*

E-mail: [zhibin.gao@nus.edu.sg](mailto:zhibin.gao@nus.edu.sg)

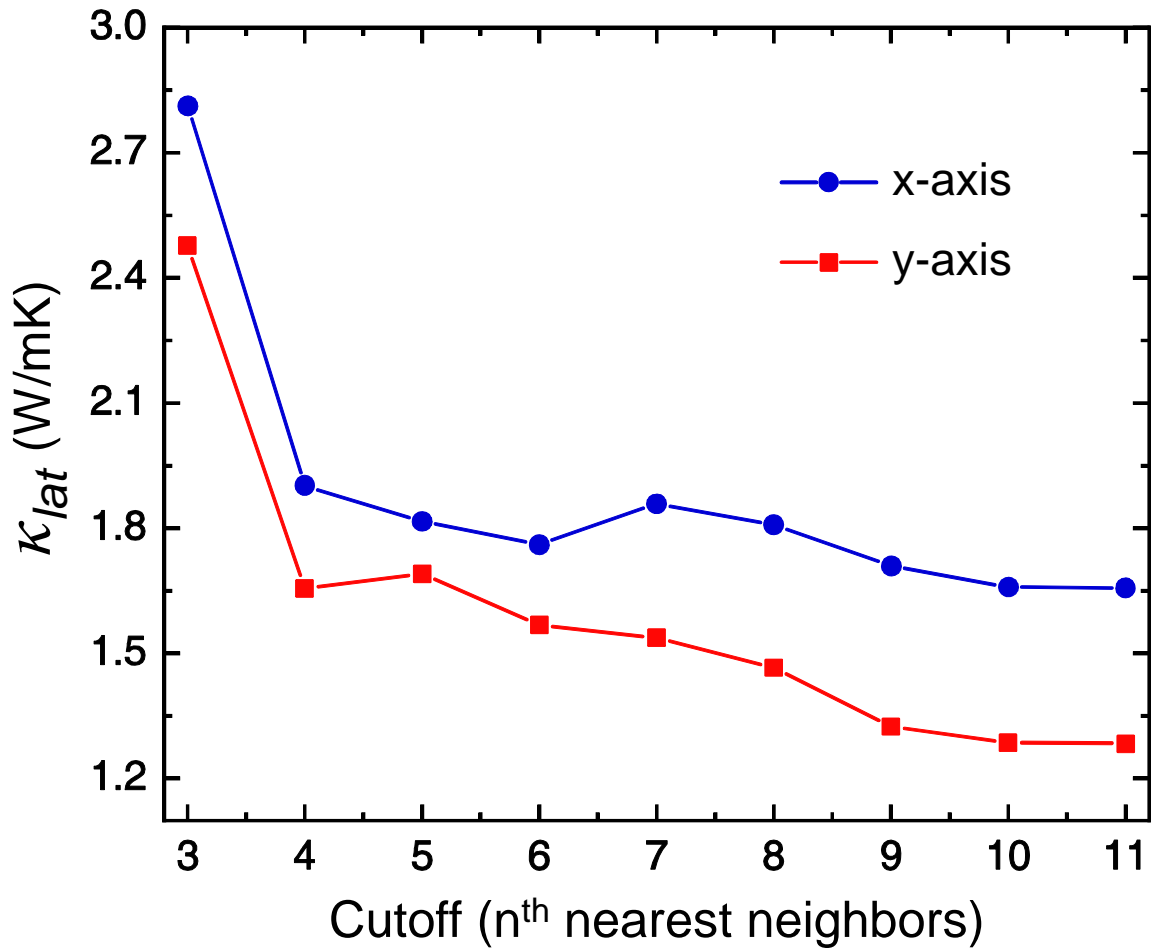


Figure S1: The room temperature lattice thermal conductivity of penta-silicene as a function of the cutoff for the interaction range of anharmonic force constants.

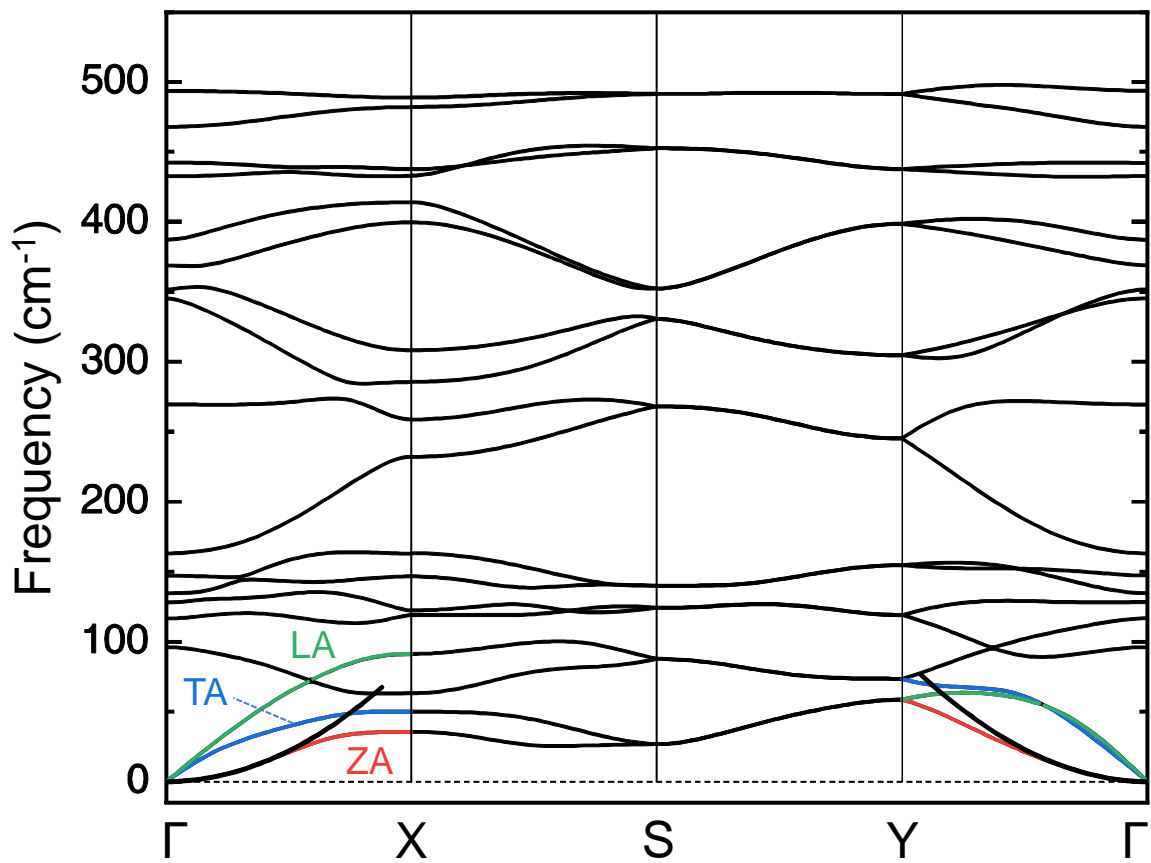


Figure S2: Phonon dispersion of penta-silicene superposed on the spectra from continuum theory for the ZA mode in the black solid lines near  $\Gamma$ .