Supplementary Information

Manipulation of Rashba effect in layered tellurides MTe (M=Ge, Sn, Pb)

Chang Liu¹, Heng Gao¹, Yongchang Li¹, Kangying Wang¹, Lee A. Burton¹, and Wei Ren^{1,2,3,*}

1 Department of Physics, State Key Laboratory of Advanced Special Steel, and International Center of Quantum and Molecular Structures, Shanghai University, Shanghai 200444, China

- 2 Materials Genome Institute and Shanghai Key Laboratory of High Temperature Superconductors, Shanghai University, Shanghai 200444, China
- 3 State Key Laboratory of Solidification Processing, Northwestern Polytechnical University, Xi'an 710072, China

* renwei@shu.edu.cn

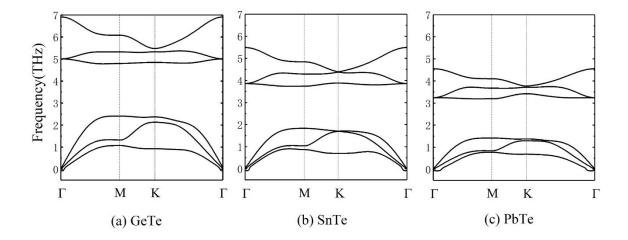


Figure.S1. Phonon spectra of (a) GeTe monolayer, (b) SnTe monolayer and (c) PbTe monolayer.

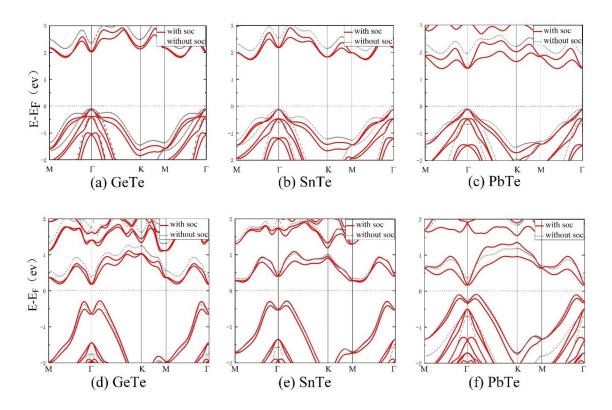


Figure.S2. Band structures of MTe monolayer (a-c) and bilayer (d-f) at the HSE06 level with and without inclusion of SOC.

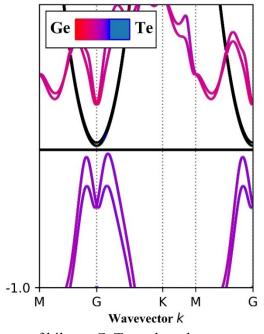


Figure S3. Band structure of bilayer GeTe under a large external electric field of 0.4V/Å.