

SUPPLEMENTARY INFORMATION

Germanium sulfide nanosheet: A universal anode material for alkali metal ion batteries

Feng Li,^{ab} Yuanyuan Qu,^a Mingwen Zhao^{*a}

^a*School of Physics and State Key Laboratory of Crystal Materials, Shandong University, Jinan, 250100, Shandong, China.*

^b*School of Physics and Technology, University of Jinan, Jinan, 250022, Shandong, China.*

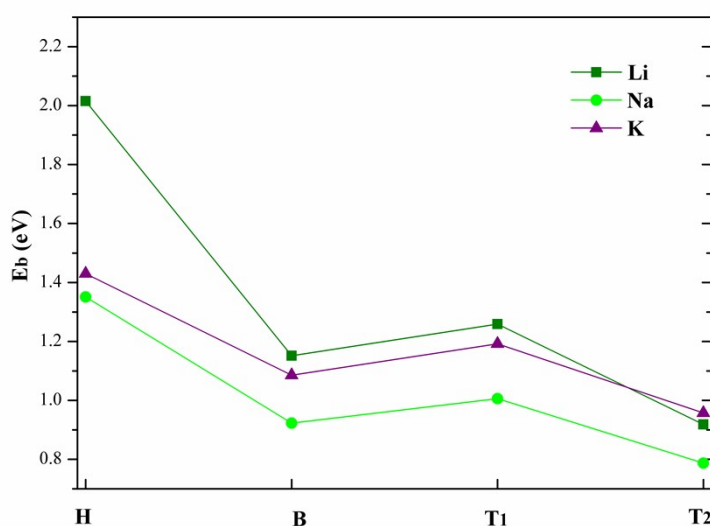


Figure S1. The binding energy profile for AM atom adsorbed germanium sulfide nanosheet (GSNS) on four possible adsorption sites.

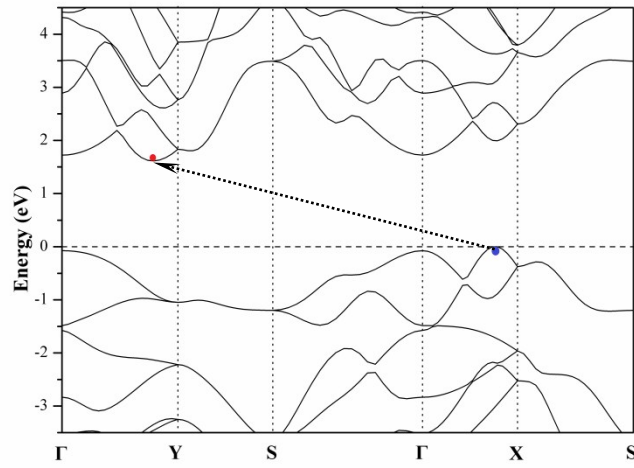


Figure S2. The calculated band structure of the primitive GSNS. The valance band maximum is set to zero, The VBM and CBM are marked by blue and red circles, respectively.

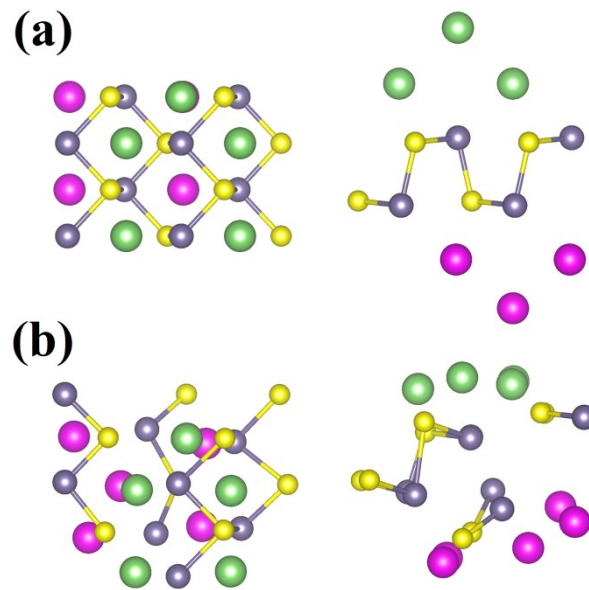


Figure S3. (a) and (b) are initial and relaxed geometries of 10Li atoms adsorbed on the GSNS (2×2), respectively. Left panel: top view; Right panel: side view. Li atoms above and below the GSNS are shown as light green and pink, respectively.