

Supporting Information (SI)

Monolayer group IVA monochalcogenides as potential and efficient catalysts for oxygen reduction reaction from the first-principles calculations

*Yujin Ji^a, Mingye Yang^a, Huilong Dong^{*a}, Lu Wang^a, Tingjun Hou^a and Youyong Li^{*1a}*

*[†]Institute of Functional Nano & Soft Materials (FUNSOM), Jiangsu Key Laboratory
for Carbon-Based Functional Materials & Devices, Soochow University, Suzhou,
Jiangsu 215123, China*

* Corresponding author. E-mail: yyli@suda.edu.cn (Youyong Li),
huilong_dong@126.com (Huilong Dong)

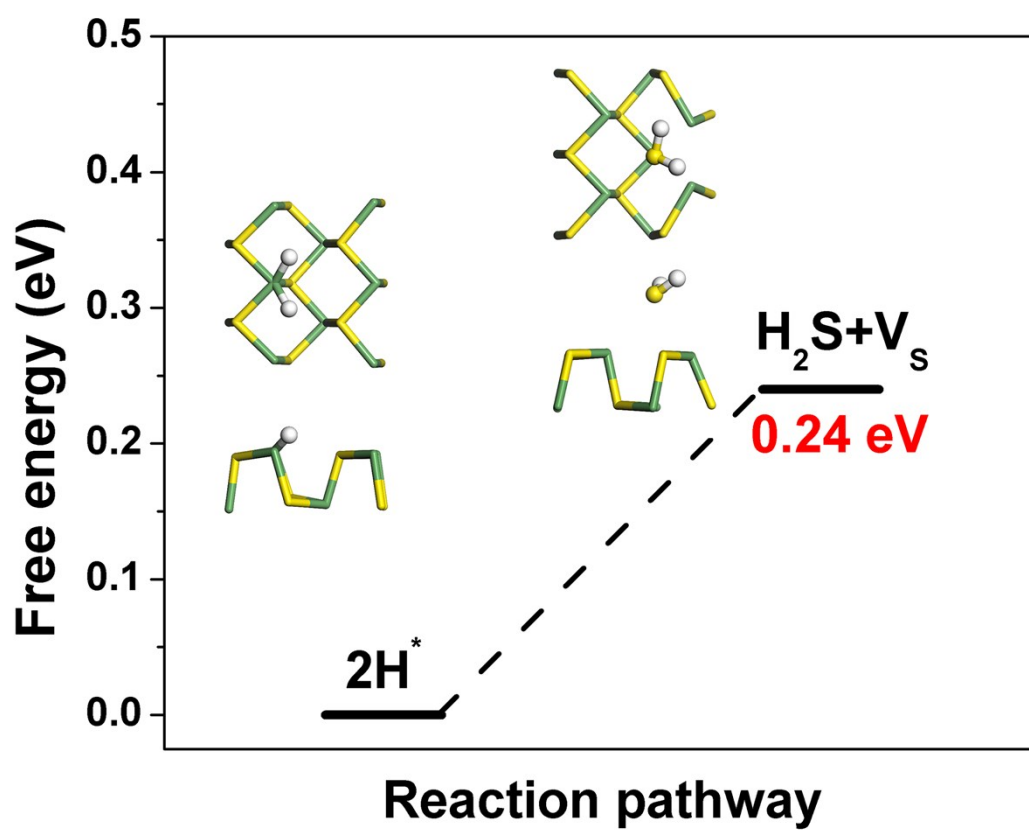


Figure S1. The free energy change in the chemical reaction $2H^* \rightarrow V_S + H_2S$. The total energy of two protons adsorbing on the GeS monolayer is set to zero.