

Electronic Supplementary Information for
Straintronics in Two-Dimensional in-Plane Heterostructures of Transition-Metal
Dichalcogenides

Wei Wei, Ying Dai,* and Baibiao Huang

School of Physics, State Key Laboratory of Crystal Materials, Shandong University,

Jinan 250100, China

*Corresponding Author: daiy60@sdu.edu.cn (Y. Dai)

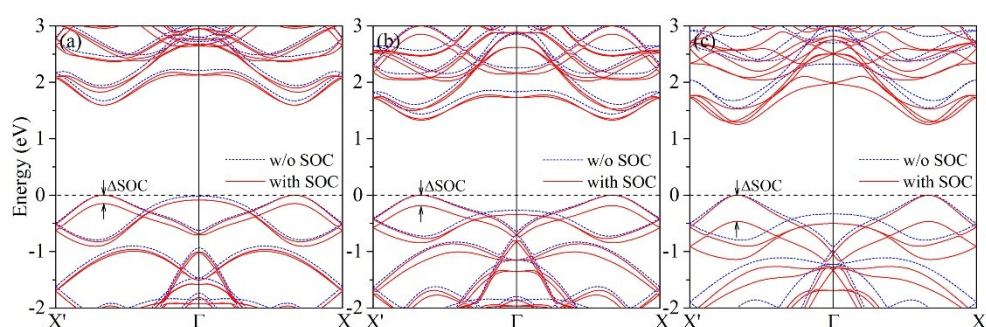


Figure S1: Band structures for MoS₂, MoSe₂ and WSe₂ with SOC effects taken into account, the Fermi level is set to zero.

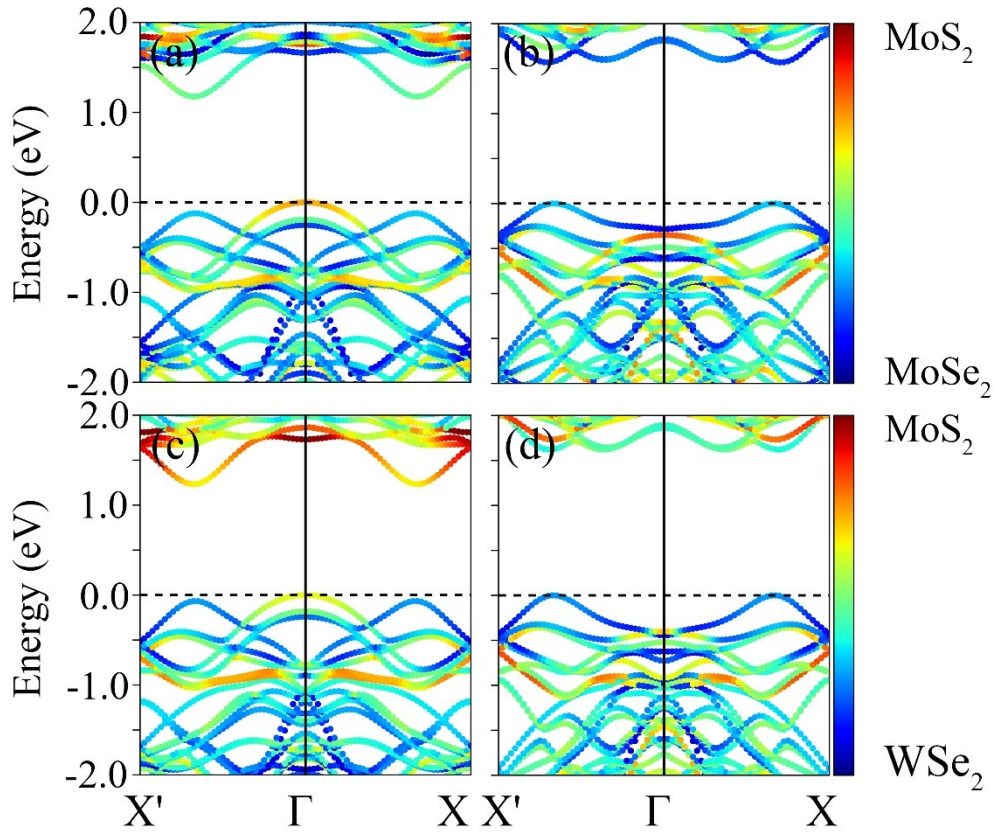


Figure S2 Band structures for $\text{MoSe}_2/\text{MoS}_2$, $\text{MoS}_2/\text{MoSe}_2$, $\text{WSe}_2/\text{MoS}_2$ and $\text{MoS}_2/\text{WSe}_2$ with superlattice models and without local structure relaxation, the Fermi level is set to zero.

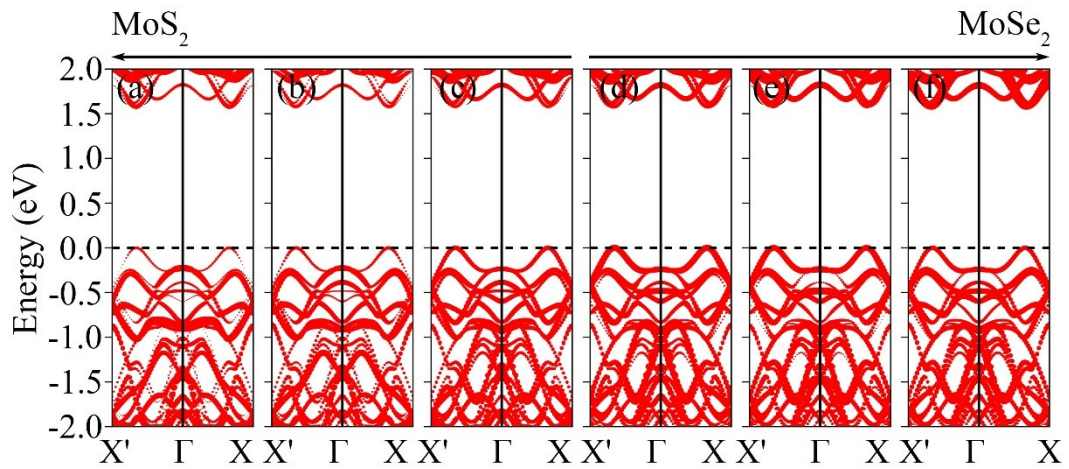


Figure S3 Projected band structure for $\text{MoS}_2/\text{MoSe}_2$, the Fermi level is set to zero.

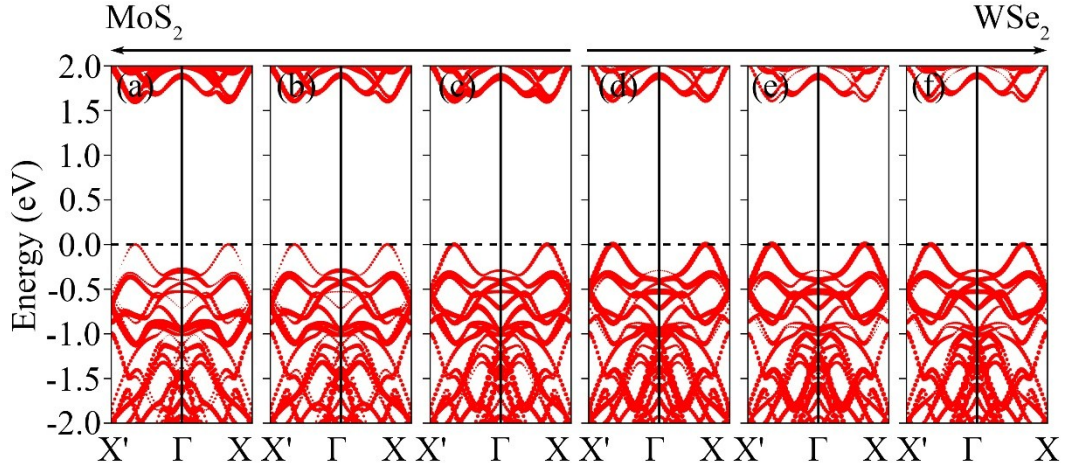


Figure S4 Projected band structure for MoS₂/WSe₂, the Fermi level is set to zero.

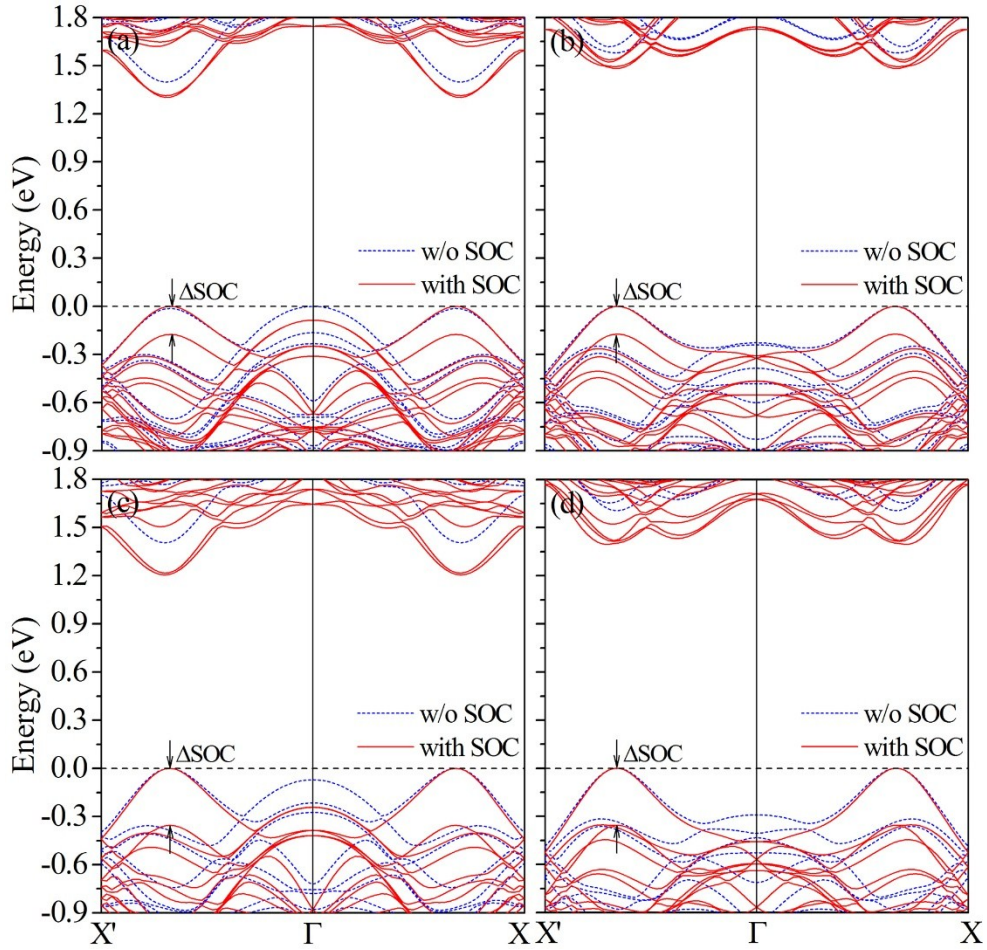


Figure S5 Band structures with the SOC effects taken into account for MoSe₂/MoS₂,

MoS₂/MoSe₂, WSe₂/MoS₂ and MoS₂/WSe₂, the Fermi level is set to zero.

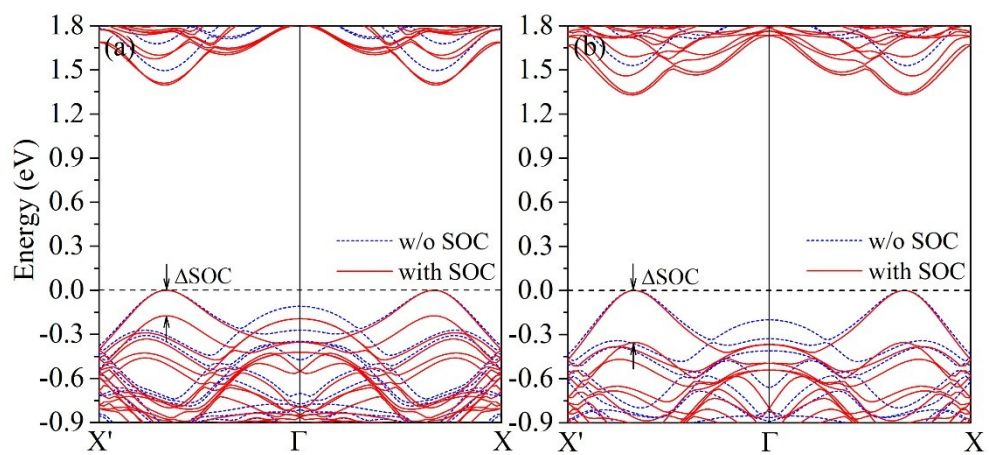


Figure S6 Band structures for MoSe₂/MoS₂-a and WSe₂/MoS₂-a with the SOC effects

taken into account, the Fermi level is set to zero.