

## Electronic Supplementary Information

### A first-principles study on the magnetic properties of Sc, V, Cr and Mn-doped monolayer $\text{TiS}_3$

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#### ***MD movies of $\text{Ti}_{29}\text{XS}_{60}$ ( $X = \text{Sc, V, Cr, and Mn}$ ) at 300K.***

- Sc-doped-300K.wmv represents the  $\text{Ti}_{29}\text{ScS}_{60}$  at T=300K.
- V-doped-300K.wmv represents the  $\text{Ti}_{29}\text{VS}_{60}$  at T=300K.
- Cr-doped-300K.wmv represents the  $\text{Ti}_{29}\text{CrS}_{60}$  at T=300K.
- Mn-doped-300K.wmv represents the  $\text{Ti}_{29}\text{MnS}_{60}$  at T=300K.

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