

## Supporting Information:

### The Enhanced Ferromagnetism of Single-Layer CrX<sub>3</sub> (X=Br and I) by Van der Waals Engineering

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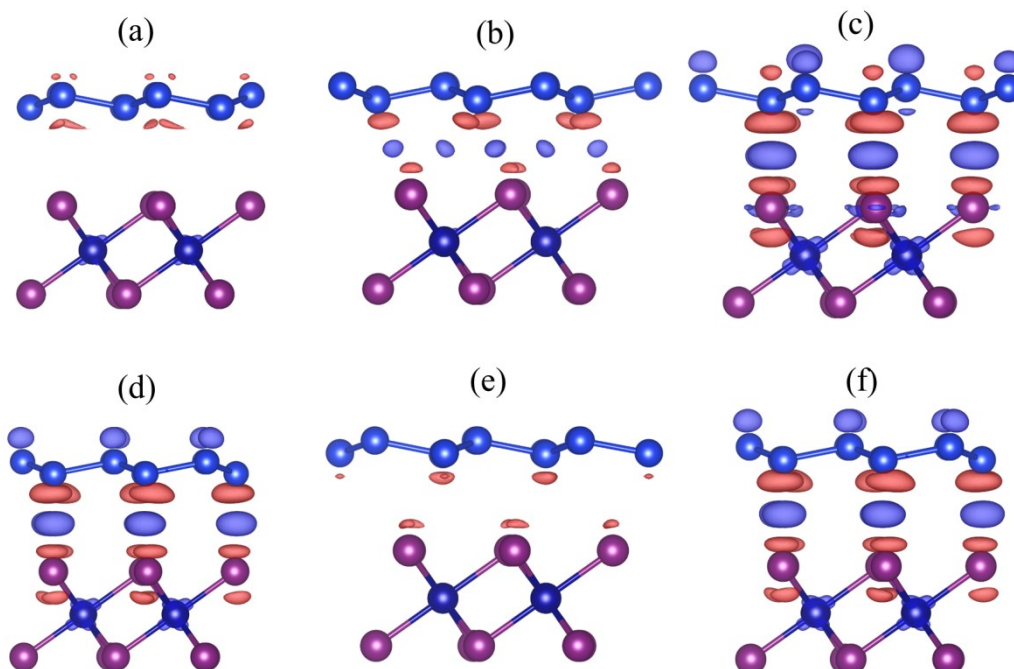


Fig. S1 Charge difference density of Si/CrI<sub>3</sub> for difference configuration (a)(d) TX<sub>up/dn</sub>, (b)(e) TbX<sub>up/dn</sub>, (c)(f) TuX<sub>up/dn</sub>. The blue and red represent the charge accumulation and depletion, the isosurface is set as 0.0005 eV·Å<sup>3</sup>

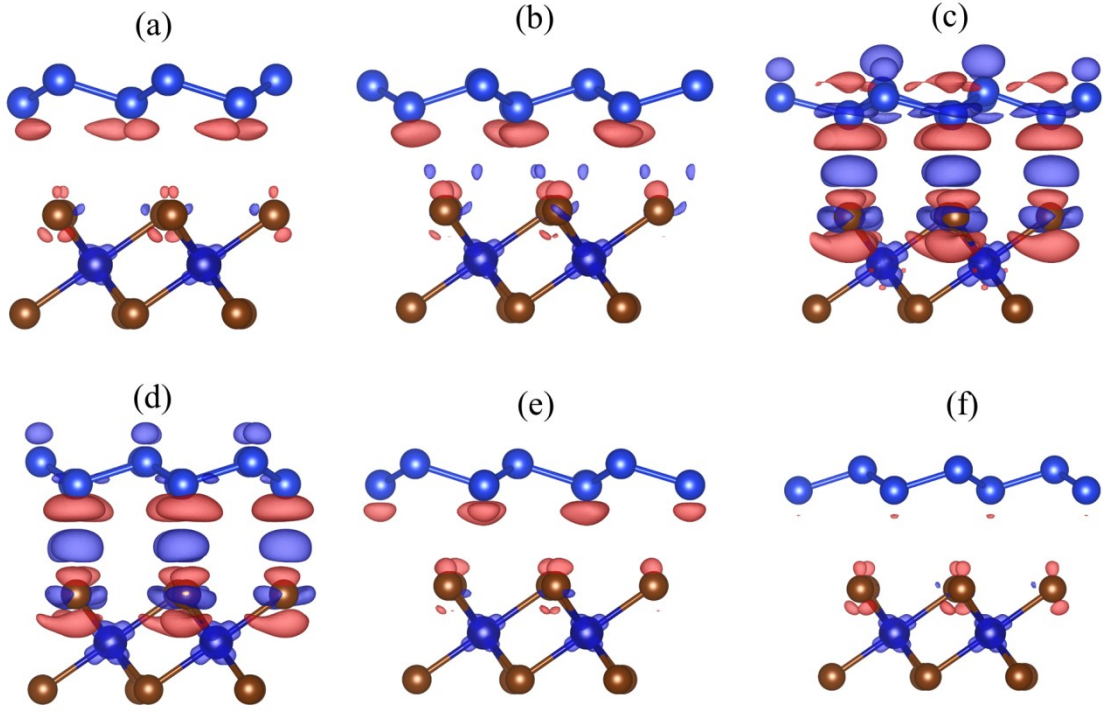


Fig. S2 Charge difference density of Si/CrBr<sub>3</sub> for difference configuration (a)(d) TX<sub>up/dn</sub>, (b)(e) TbX<sub>up/dn</sub>, (c)(f) TuX<sub>up/dn</sub>. The blue and red represent the charge accumulation and depletion, the isosurface is set as 0.0005 eV·Å<sup>3</sup>

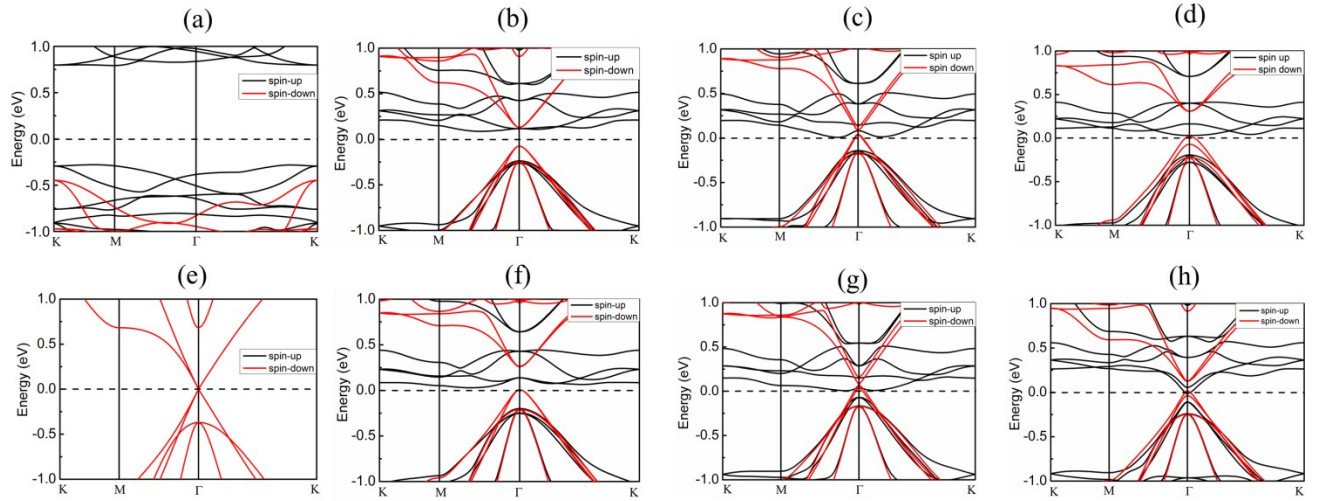


Fig. S3 The spin-polarized band structure of Ge/CrI<sub>3</sub> at different configurations. (b)(f) TX<sub>up/dn</sub>, (c)(g) TbX<sub>up/dn</sub>, (d)(h) TuX<sub>up/dn</sub>. (a)(e) the band of single-layer CrI<sub>3</sub> and germanene

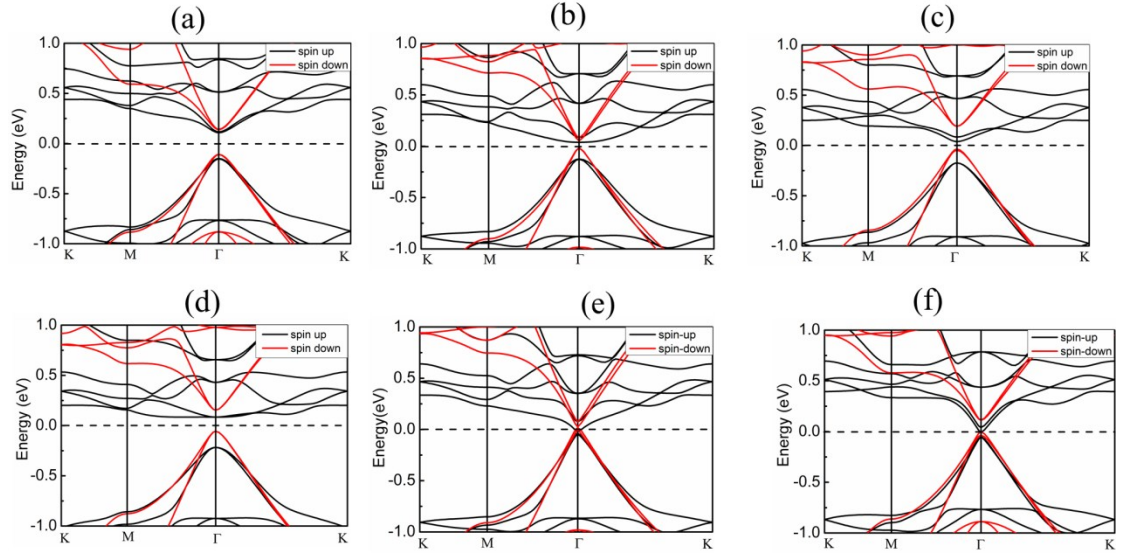


Fig. S4 The spin-polarized band structure of Si/CrI<sub>3</sub> at different configurations. (a)(d) TX\_up/dn, (b)(e) TbX\_up/dn, (c)(f) TuX\_up/dn

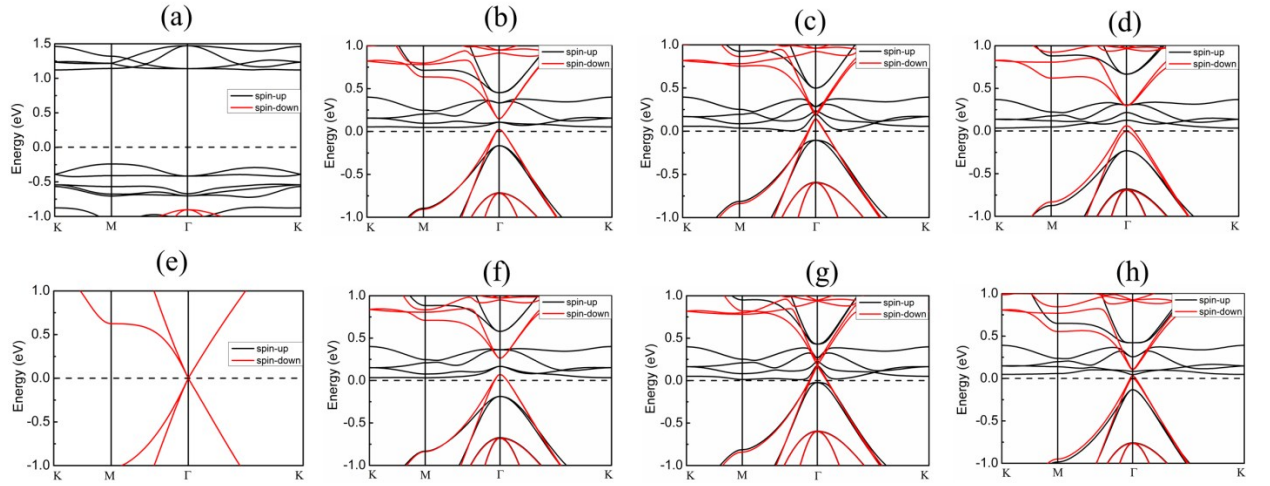


Fig. S5 The spin-polarized band structure of Si/CrBr<sub>3</sub> at different configurations. (b)(f) TX\_up/dn, (c)(g) TbX\_up/dn, (d)(h) TuX\_up/dn. (a)(e) the band of single-layer CrBr<sub>3</sub> and silicene.