

A systematic investigation of chromium and vanadium impurities in Janus Ga_2SO monolayer towards spintronic applications

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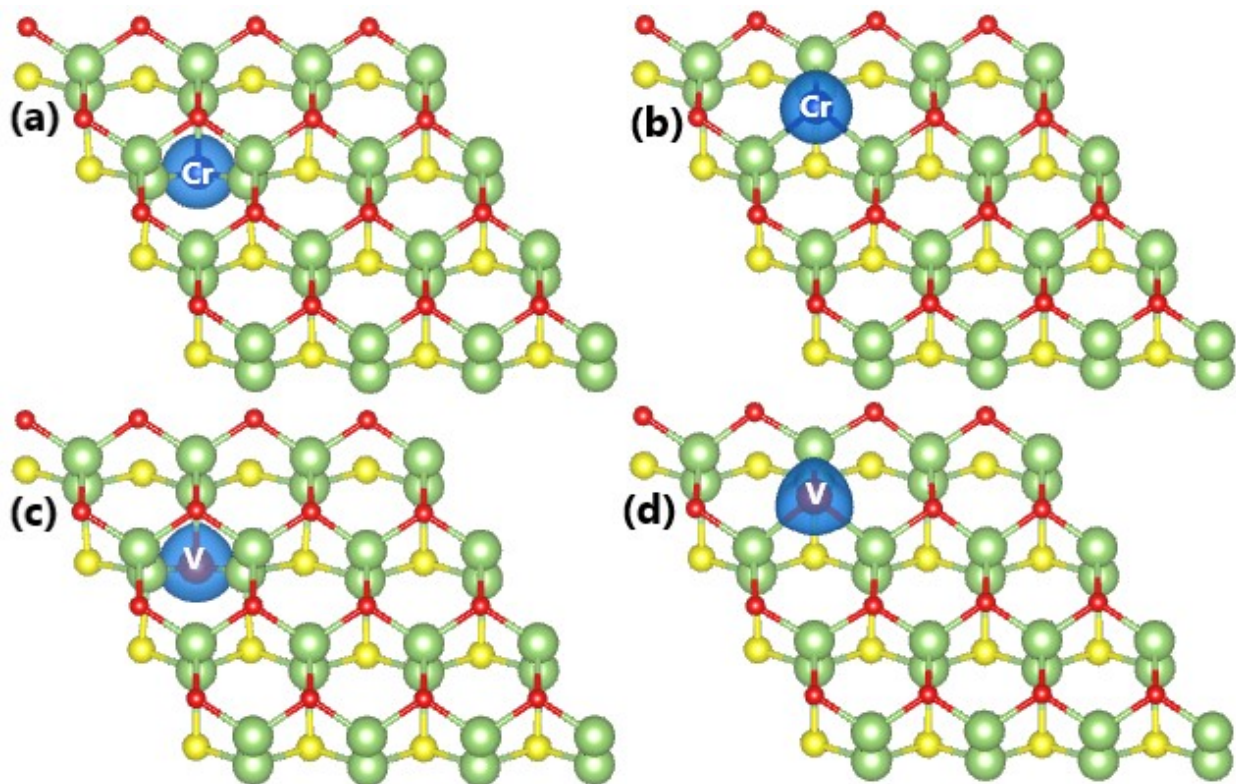


Figure S1: Spin density (Iso-surface value: $0.02 e/\text{\AA}^3$) in (a) Cr_S , (b) Cr_O , (c) V_S , and (d) V_O system.

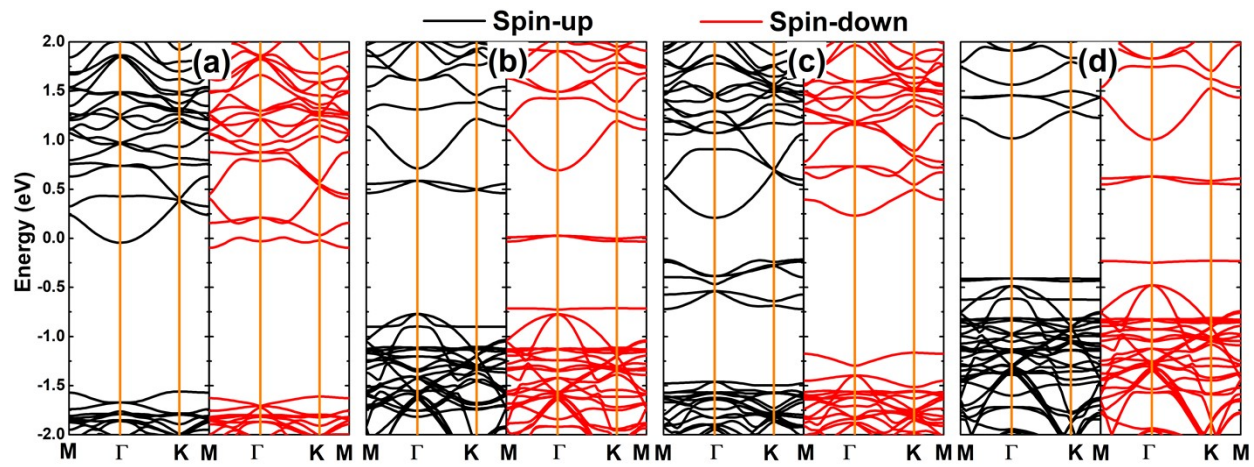


Figure S2: Spin-polarized band structure (The Fermi level is set to 0 eV) of (a) Cr_S, (b) Cr_O, (c) V_S, and (d) V_O system.

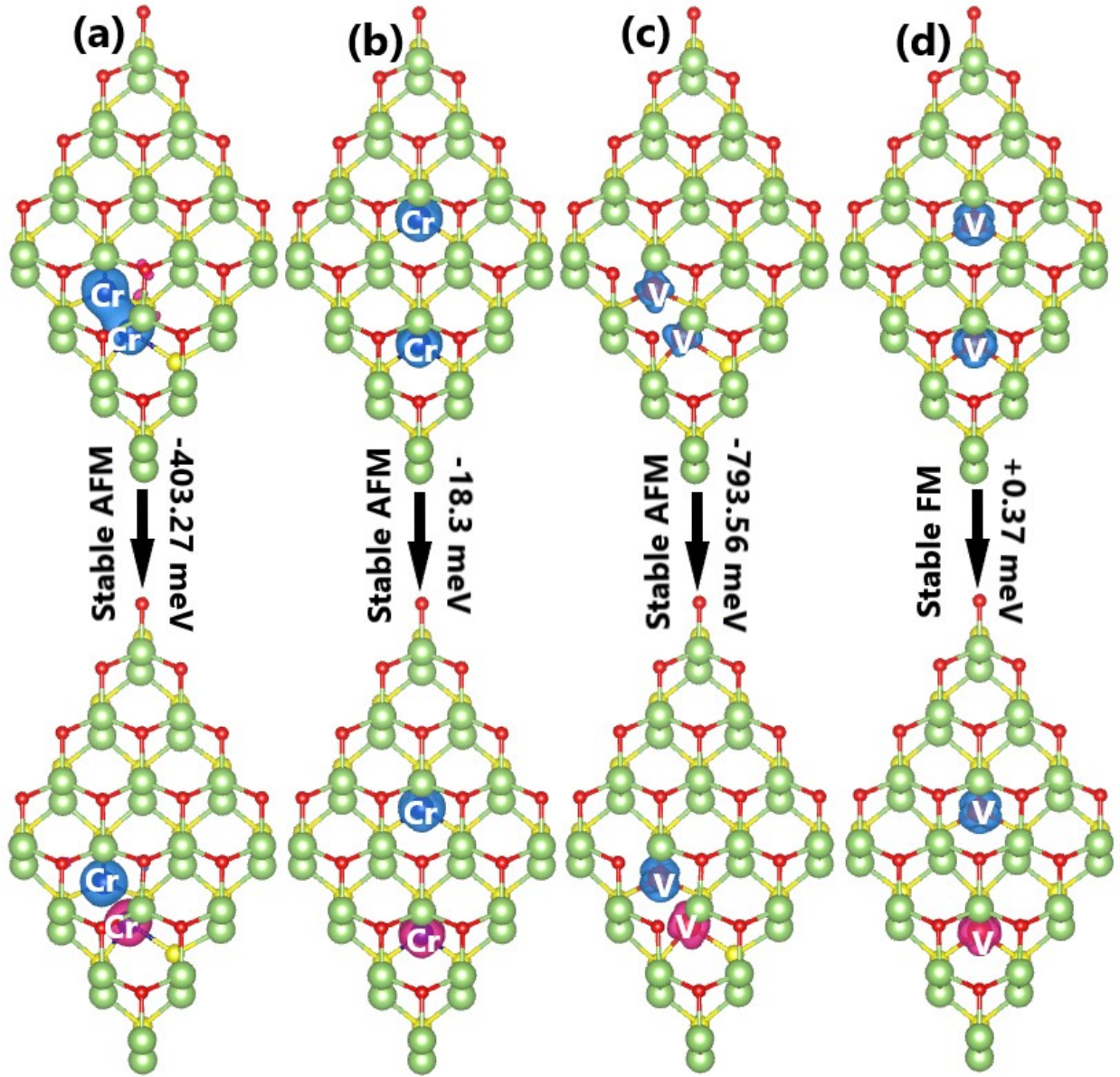


Figure S3: Energy of magnetic state transition in Ga_2SO monolayer doped with (a-b) Cr atoms and (c-d) V atoms at Ga_1 sublattice.

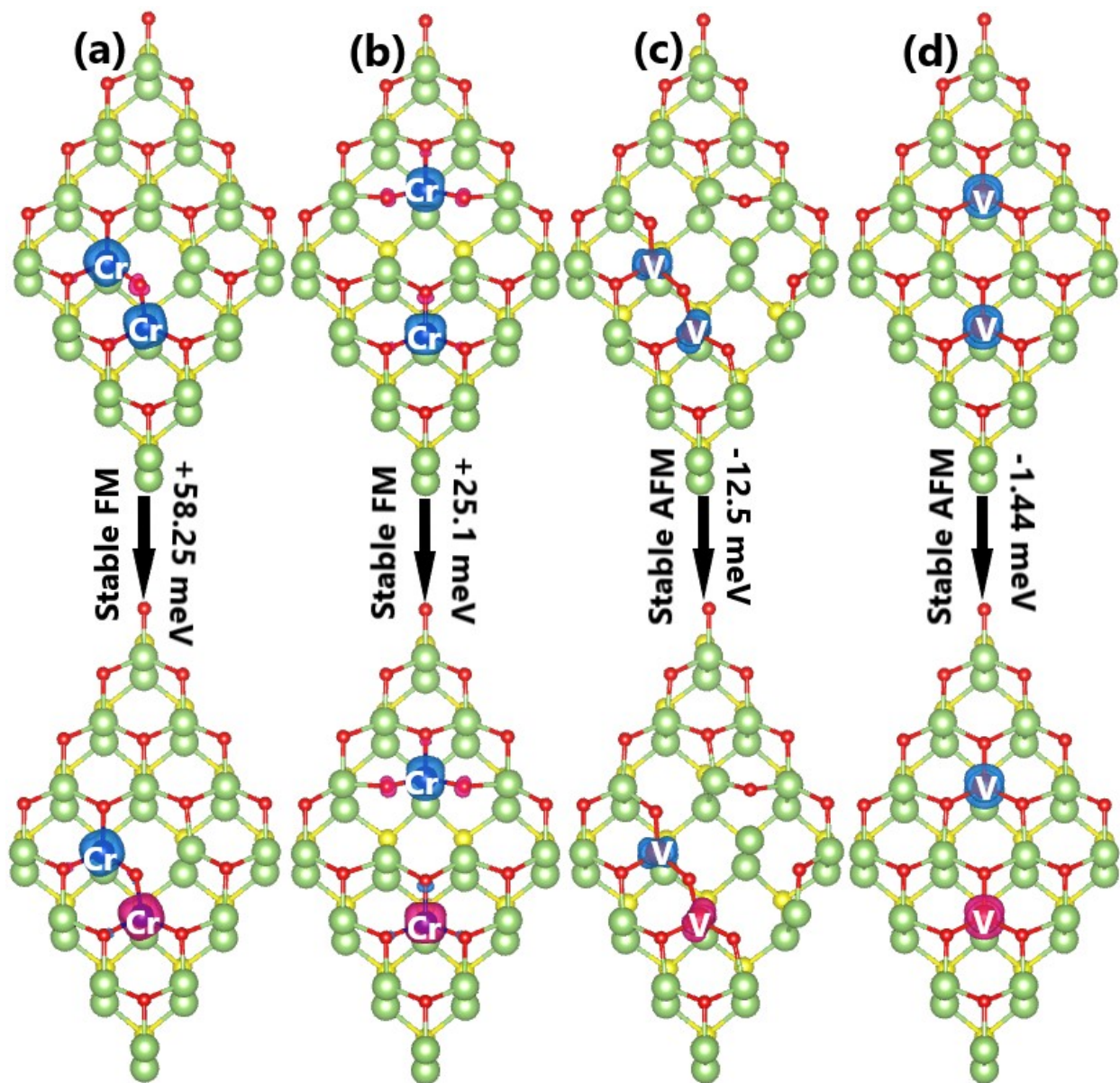


Figure S4: Energy of magnetic state transition in Ga₂SO monolayer doped with (a-b) Cr atoms and (c-d) V atoms at Ga₂ sublattice.