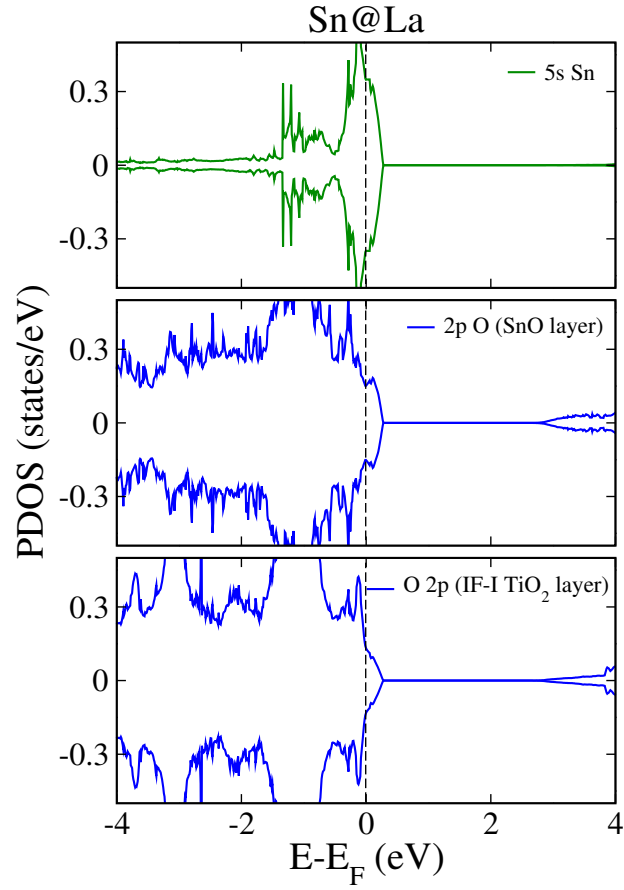


# **Interface Energetics and Charge Carrier Density Amplification by Sn-Doping in $\text{LaAlO}_3/\text{SrTiO}_3$ Heterostructure**

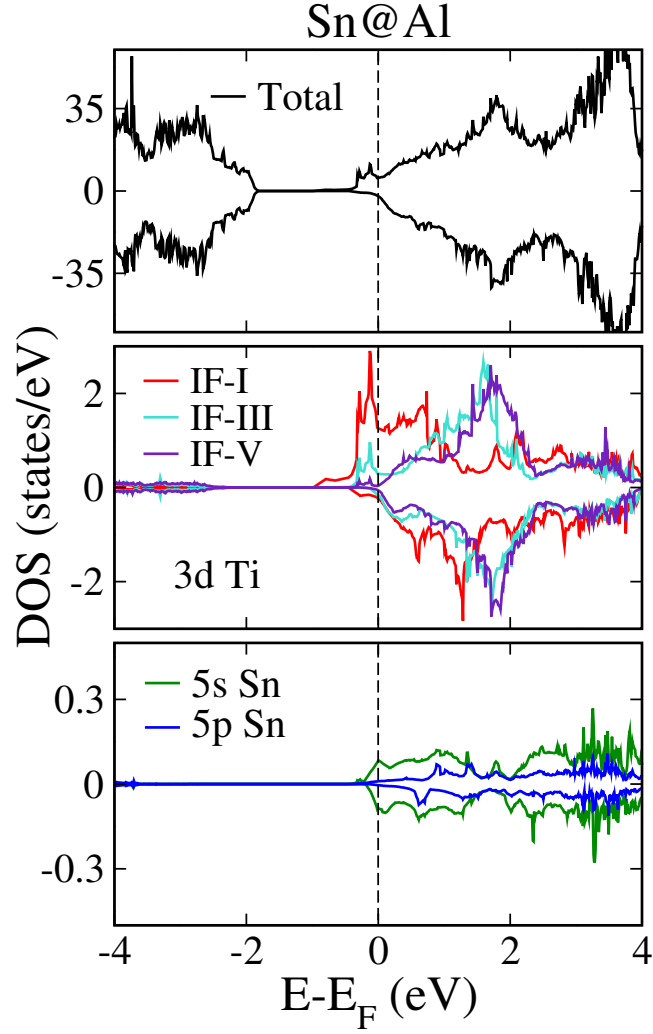
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**Figure 1S.** Calculated spin-polarized partial Sn 5s (at SnO layer) and O 2p (at SnO and IF-I TiO<sub>2</sub> layer) Density of States (DOS) for Sn@La doped (LAO)<sub>6</sub>/STO HS system.



**Figure 2S.** Calculated spin-polarized total, partial Ti  $3d$  and Sn  $5s/5p$  DOS for Sn@Al doped (LAO)<sub>6</sub>/STO HS system. Herein,  $U=0$  eV for Ti  $3d$  orbital and  $U=7.5$  eV for La  $4f$  orbital were used.