

### Supplementary materials

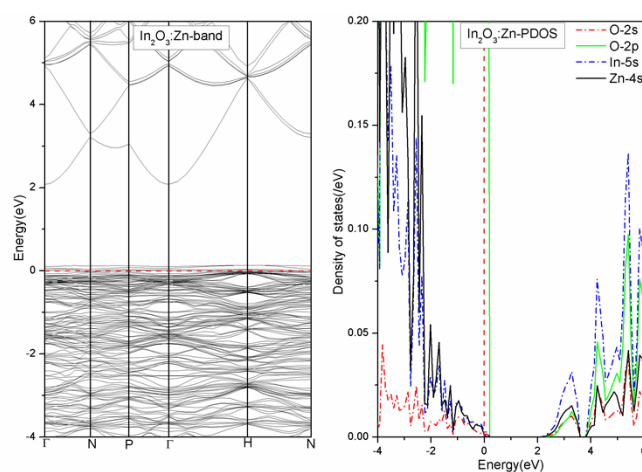


Fig.S1.(a) The bandstructure and (b) PDOS of  $\text{In}_2\text{O}_3:\text{Zn}$ , respectively. The red dashed lines in these plots represent Fermi level.