

Supplementary Information

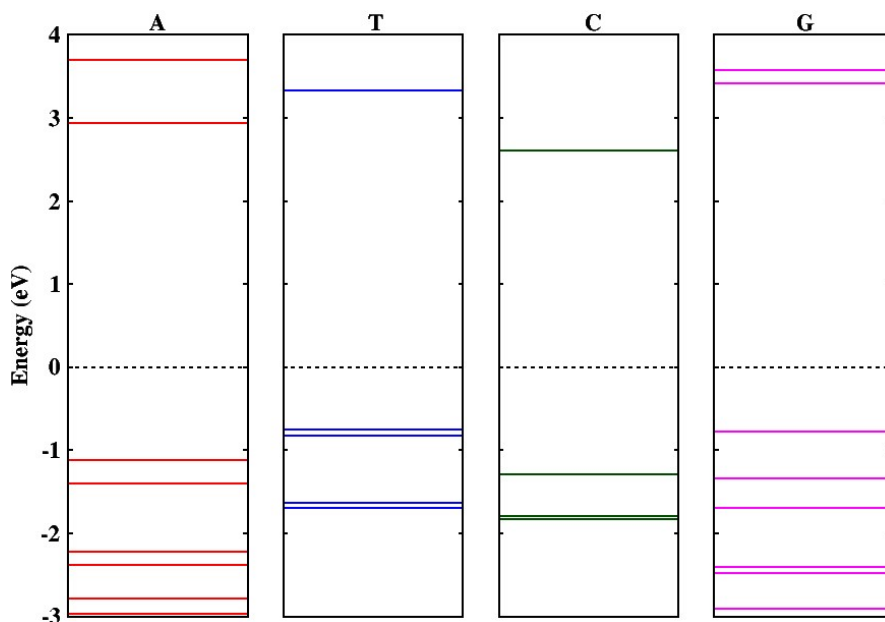


Figure S1: Molecular energy levels for isolated nucleobase (A, T, C and G) of DNA. Fermi level is set at 0 eV.

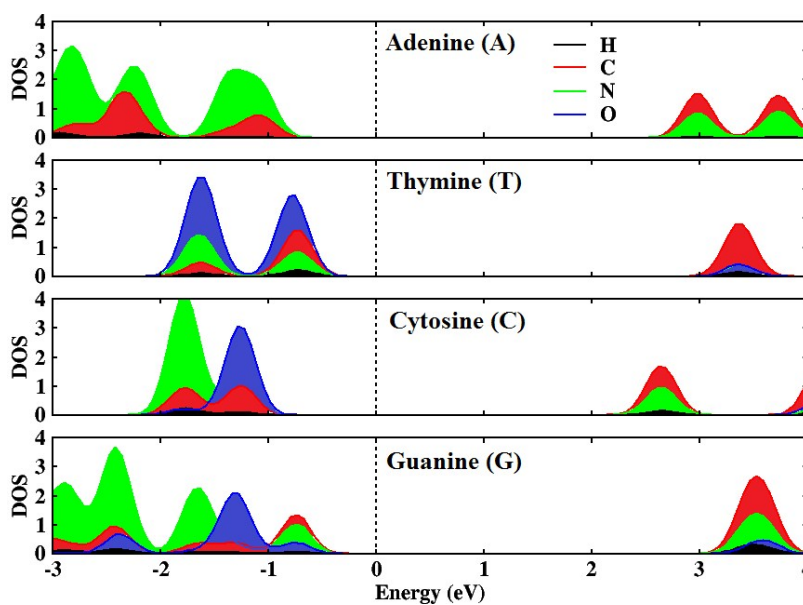


Figure S2: Molecular electron density of states (DOS) for isolated nucleobase (A, T, C and G) of DNA. Fermi level is set at 0 eV.

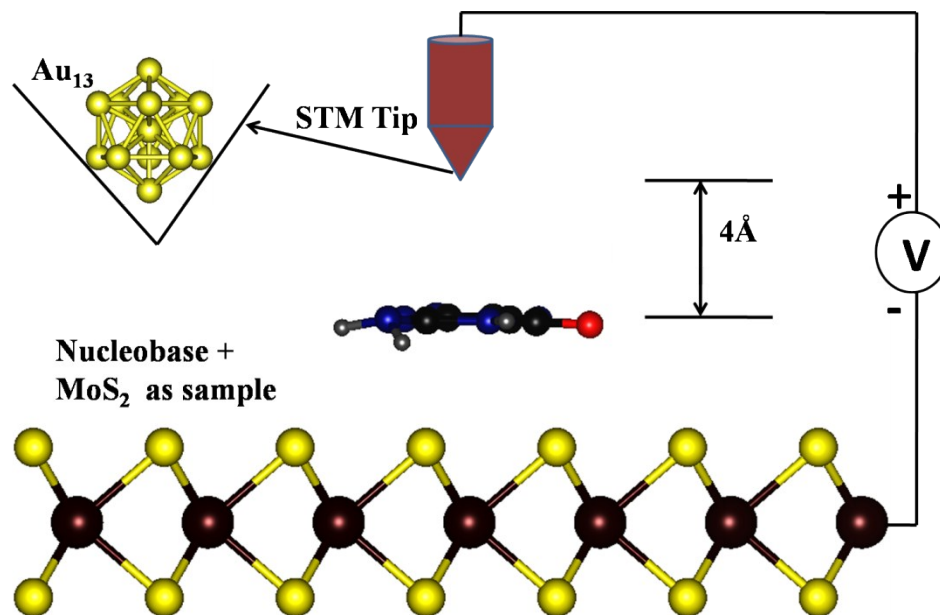


Figure S3. A schematic of the STM like setup for Guanine + MoS₂.

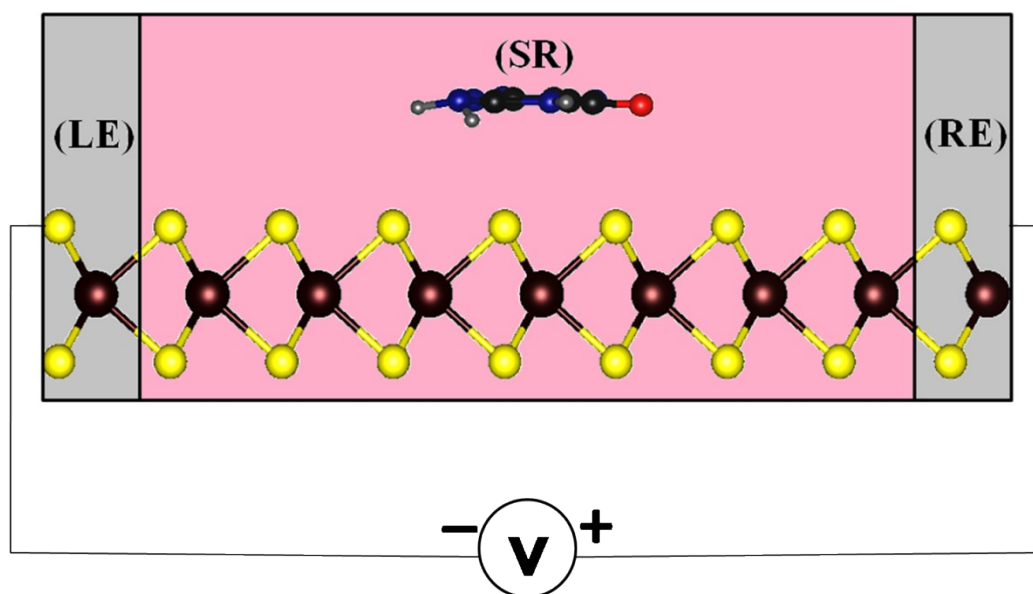


Figure S4. A two terminal configuration of the transport model for G + MoS₂ conjugate system.

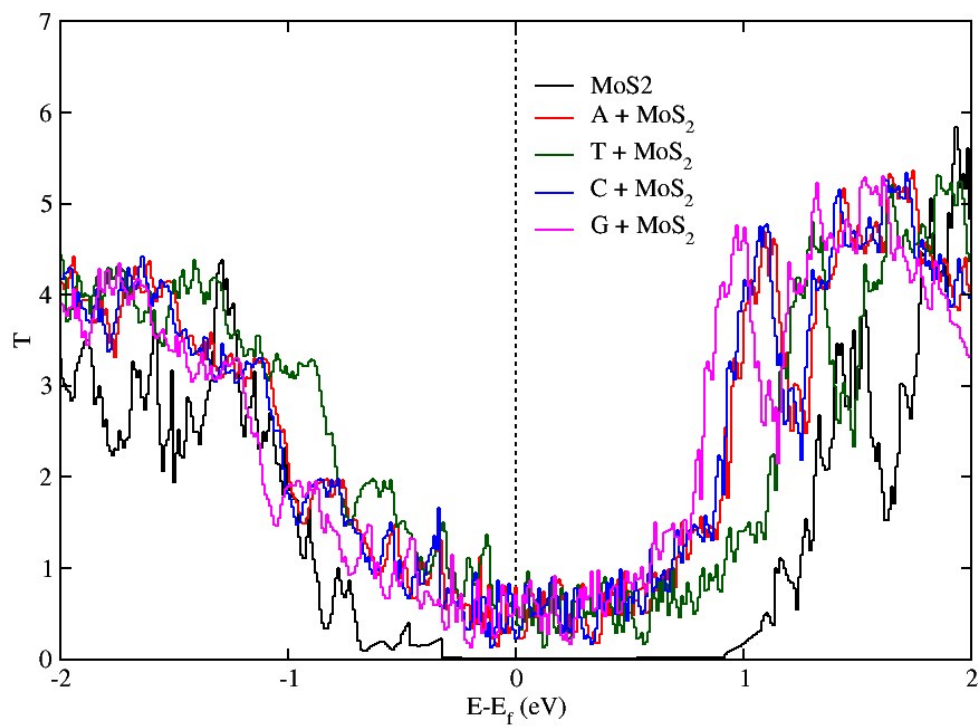


Figure S5. Transmission coefficients as a function of energy for pristine and nucleobase adsorbed MoS₂.