Supplementary Information (SI)

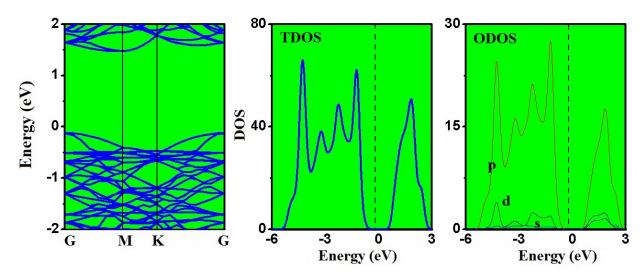


Figure S1: Computed GGA/PBE based electronic band structure and density of states for 5x5 supercell pristine arsenene

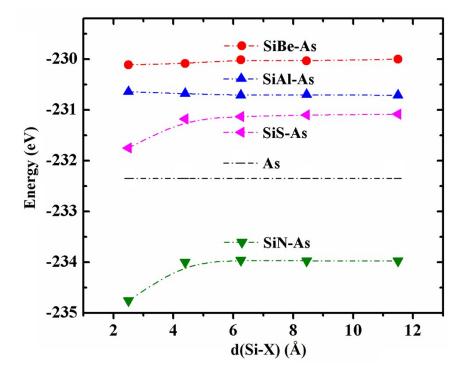


Figure S2: Total energy comparison in various doping systems

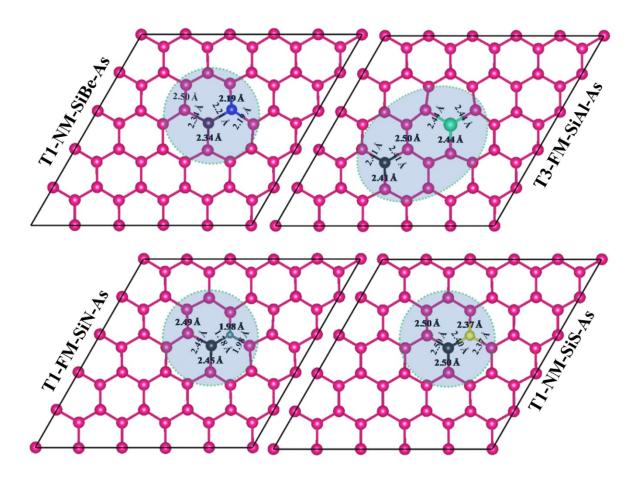


Figure S3: Bond lengths around the doped sites

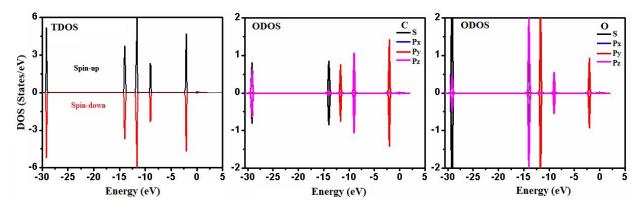


Figure S4: Spin-polarized total and orbital resolved density of states for isolated CO molecule