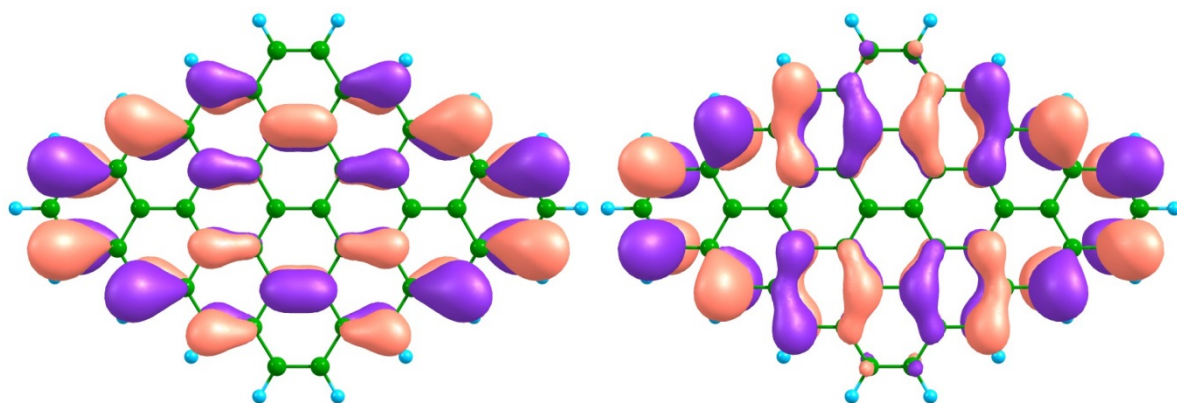
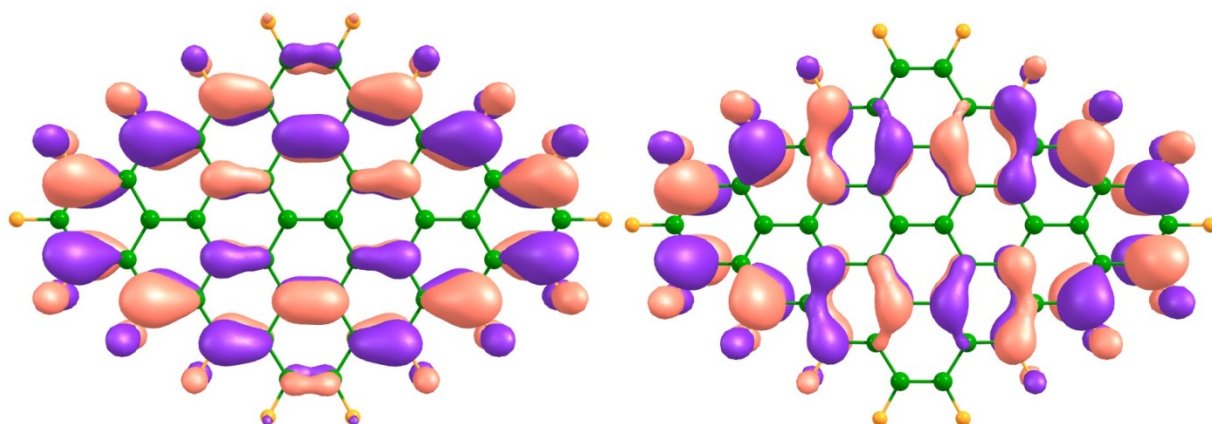


SUPPORTING INFORMATION FIGURES

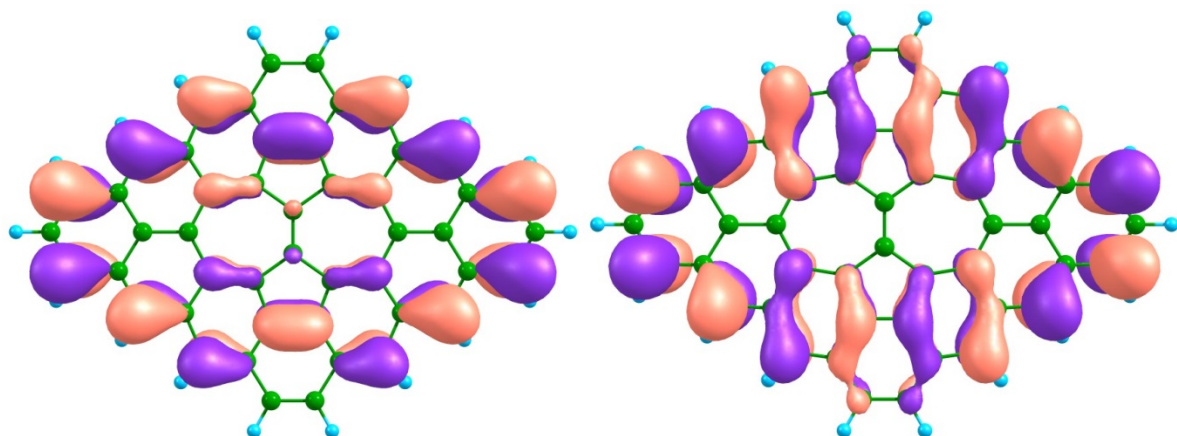
BARE SHEET



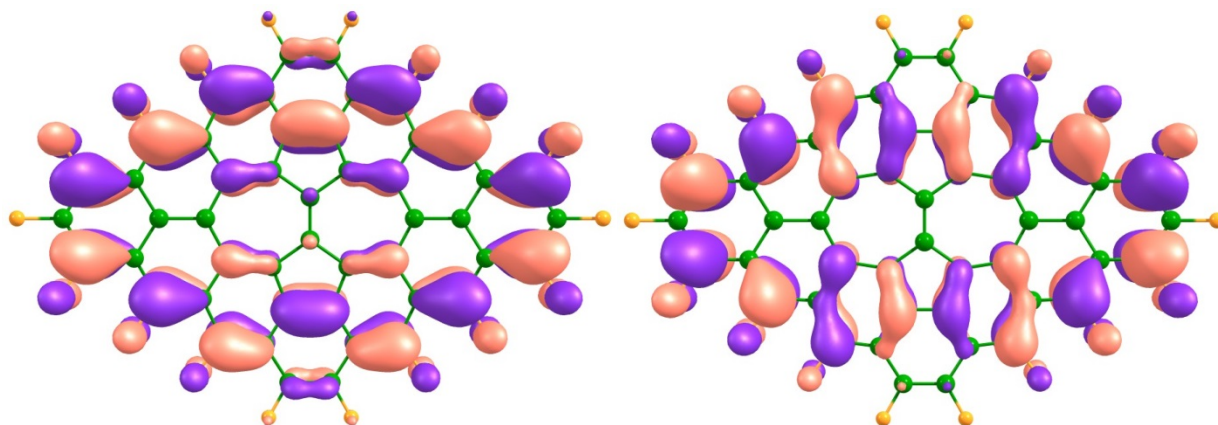
HOMO AND LUMO OF P-Gr/H



HOMO AND LUMO OF P-Gr/F



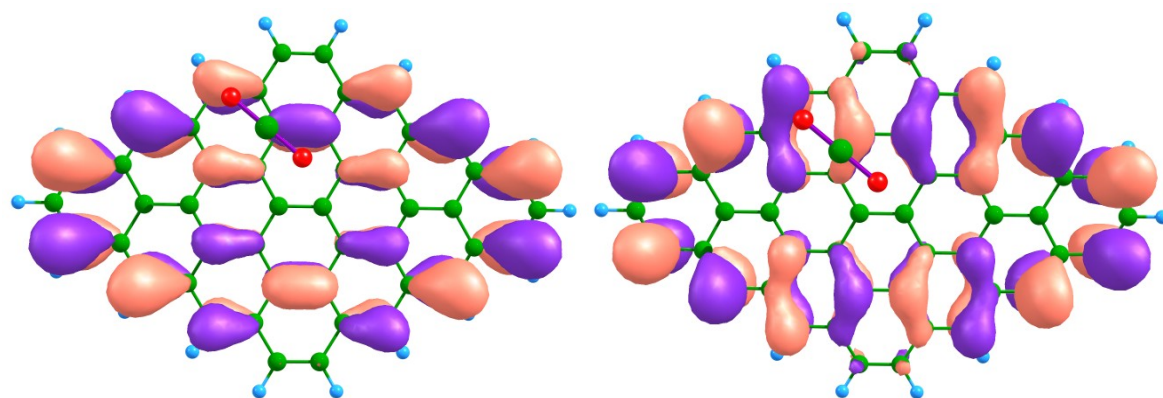
HOMO AND LUMO OF SW-Gr/H



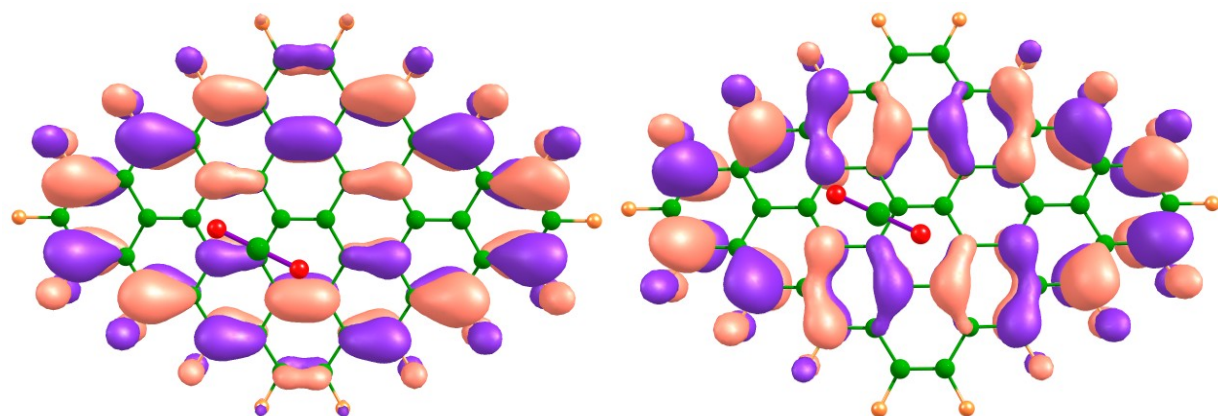
HOMO AND LUMO OF SW-Gr/F

Figure S1. Frontier Molecular Orbital distribution of Bare sheets.

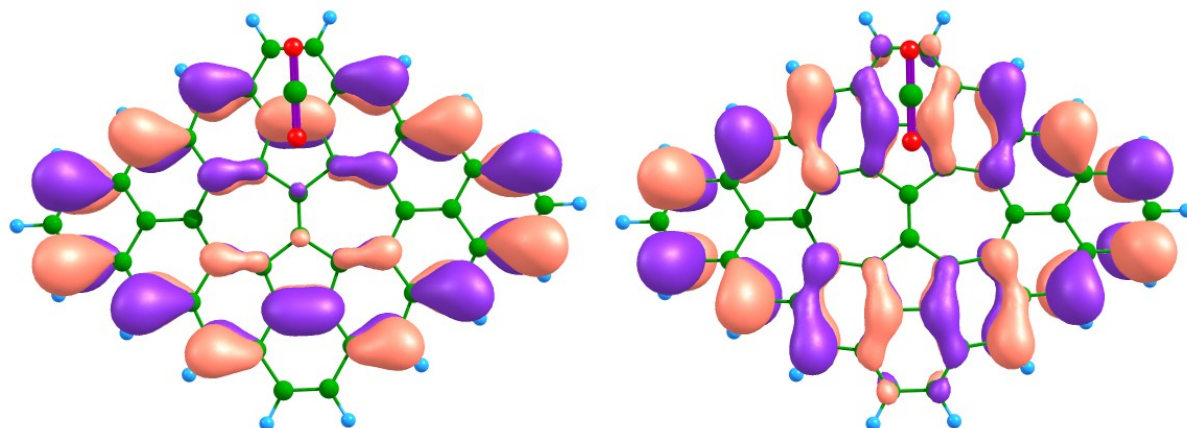
ADSORPTION OF CO₂



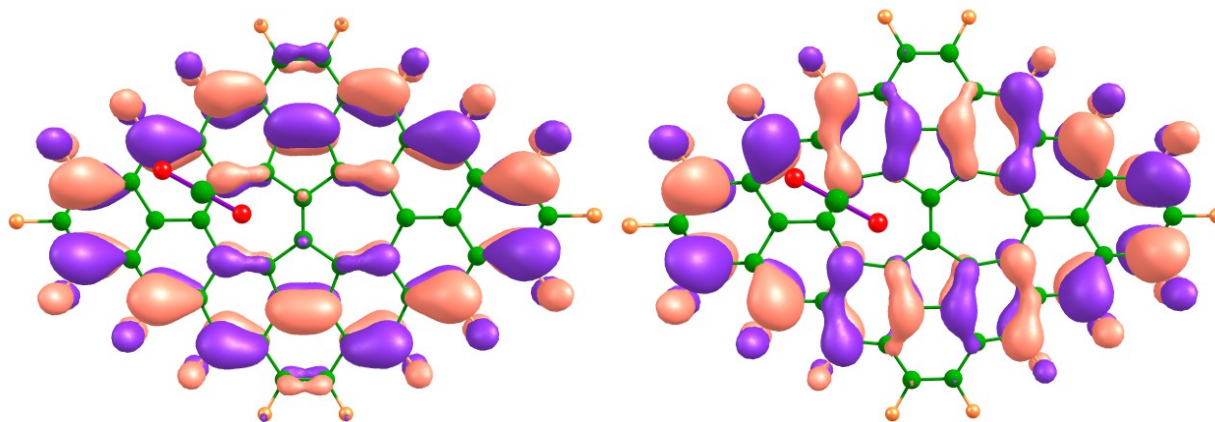
HOMO AND LUMO OF P-Gr/H with CO₂



HOMO AND LUMO OF P-Gr/F with CO₂



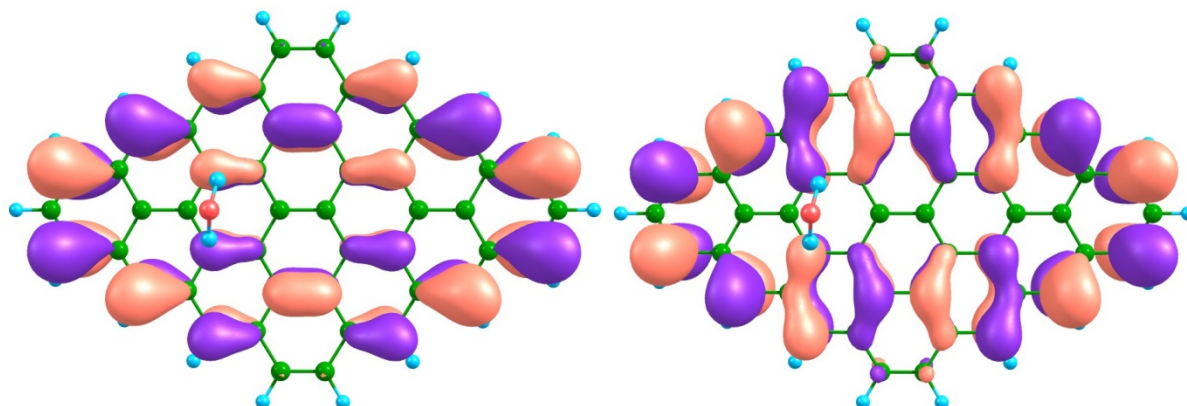
HOMO AND LUMO OF SW-Gr/H with CO₂



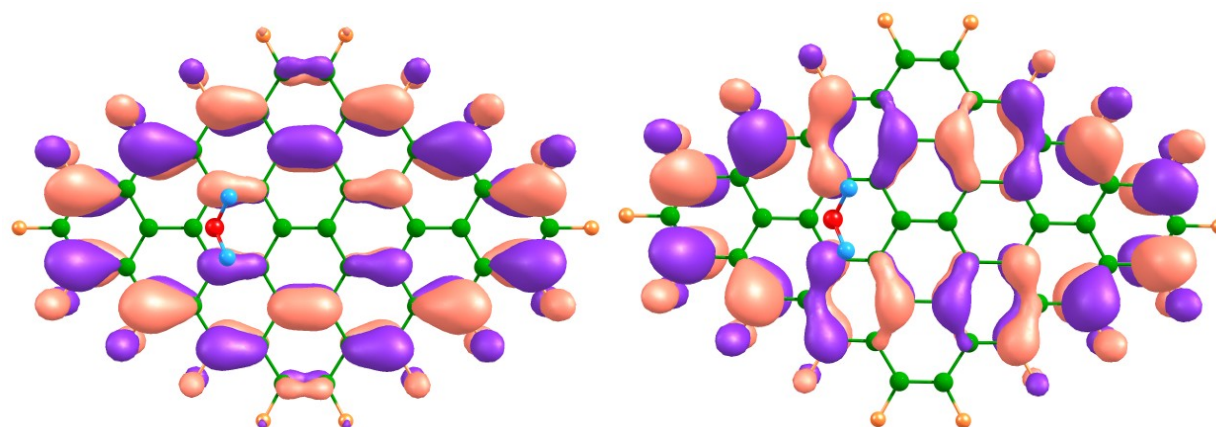
HOMO AND LUMO OF SW-Gr/F with CO₂

Figure S2. Frontier Molecular Orbital distribution of the most stable configurations of CO₂ adsorbed sheets.

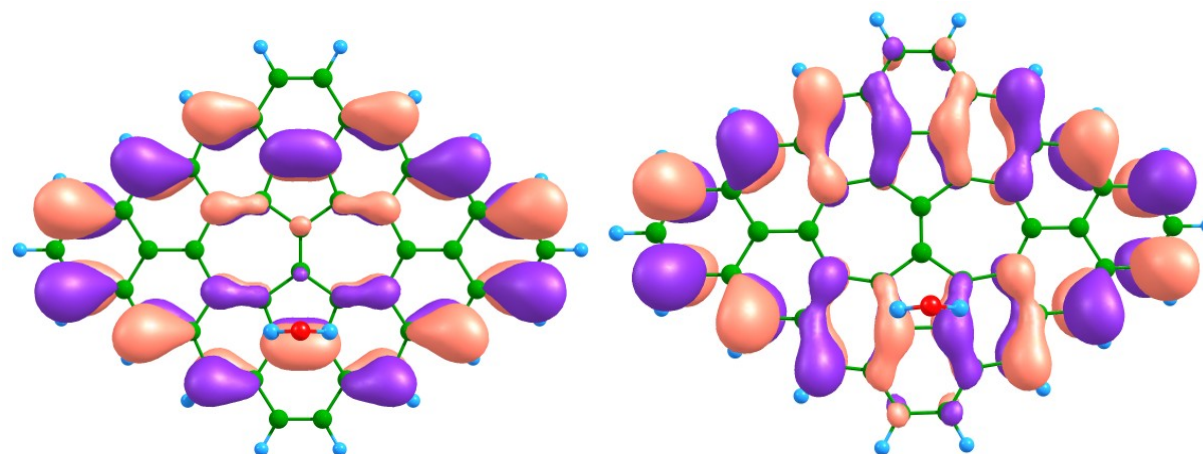
ADSORPTION OF H₂O



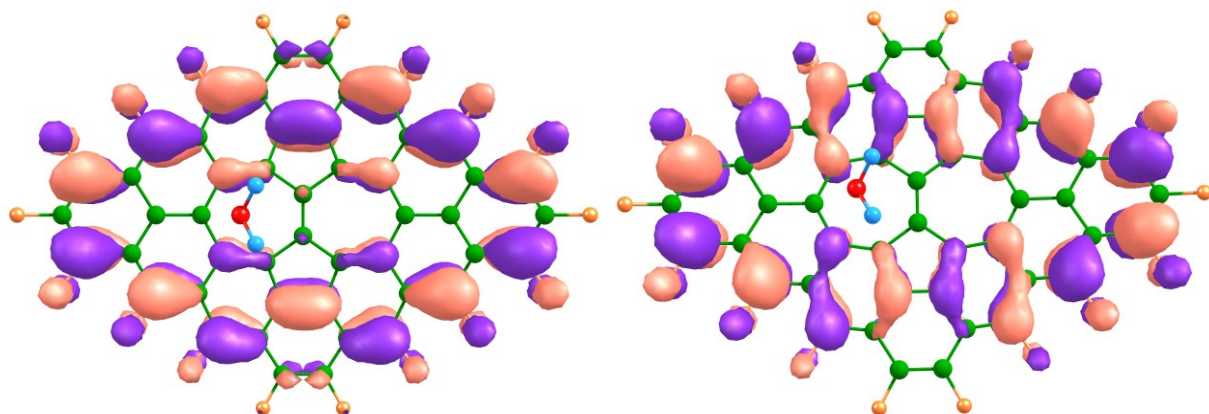
HOMO AND LUMO OF P-Gr/H with H₂O



HOMO AND LUMO OF P-Gr/F with H₂O



HOMO AND LUMO OF SW-Gr/H with H₂O



HOMO AND LUMO OF SW-Gr/F with H₂O

Figure S3. Frontier Molecular Orbital distribution of the most stable configurations of H₂O adsorbed sheets.