

**S16 Fig. QCM-D - Conjugation of FSFG<sub>6</sub> and SSSG<sub>6</sub> to silica sensors.**

The changes in frequency ( $\Delta F$ ) and energy dissipation ( $\Delta D$ ) for several overtones were recorded in real time during (A) FSFG<sub>6</sub> and (B) SSSG<sub>6</sub> conjugations. The overlapping of the different harmonics is indicative of the rigid nature of these layers. (C-D) Sauerbrey model was used to calculate the layer thickness, for different layer densities (1,100, 1,200 and 1,300 kg/m<sup>3</sup>).

