



Supplemental Figure C(1s) X-ray photoemission spectra for the series of Au surfaces modified with the partially fluorinated alkanethiols in Figure 5. Two distinct forms of carbon are observed, one from the alkyl portion of the chain, the other from the fluorinated regions. The insets show plots of the absolute signal intensity for both C(1s) peaks (upper), and the ratio CF_x/CH_x C(1s) signals (lower) as a function of number of fluorinated positions. Open squares represent CF_x signals and closed squares represent CH_x signals in the top plot. In the bottom plot the open squares represent the CF_x/CH_x ratio from XPS, and the closed squares represent the ratio expected from molecular formulas.