

Supporting Information

**PM-RAIRS Study of Water Adsorption Isotherm on CH<sub>3</sub>, OH, and COOH-terminated  
Organic Self-Assembled Monolayer on Au**

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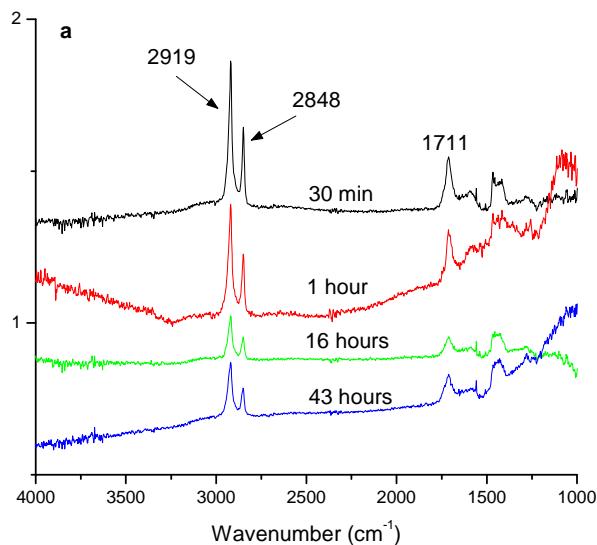


Figure S-1: PM-RAIRS of the COOH-terminated SAM deposited on Au after varying amounts of immersion time in a 20mM 12-mercaptododecanoic acid in ethanol.

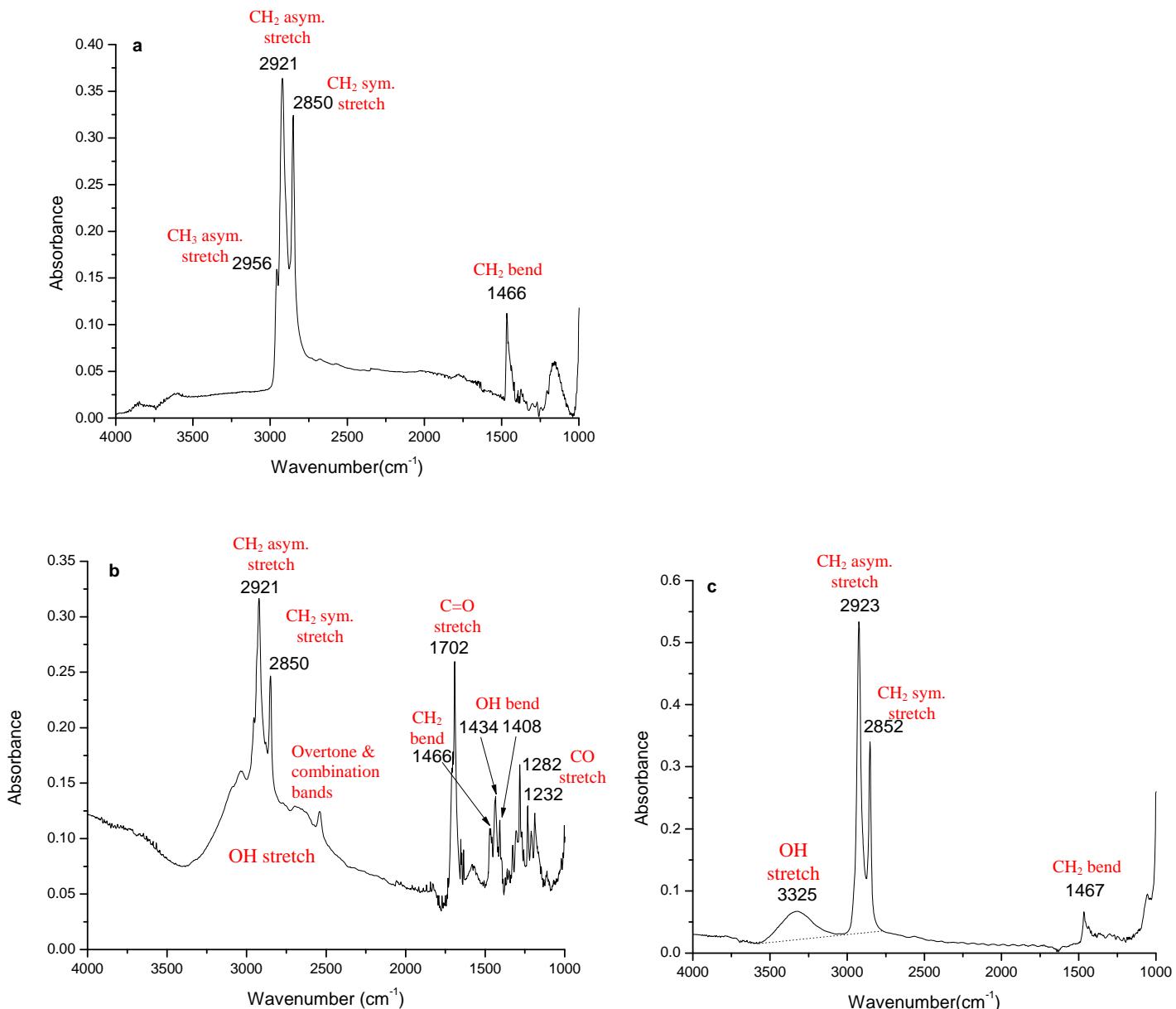


Figure S-2: Transmission spectra of (a) 1-hexadecanethiol, (b) 12-mercaptopododecanoic acid, and (c) 11-mercaptop-1-undecanol.

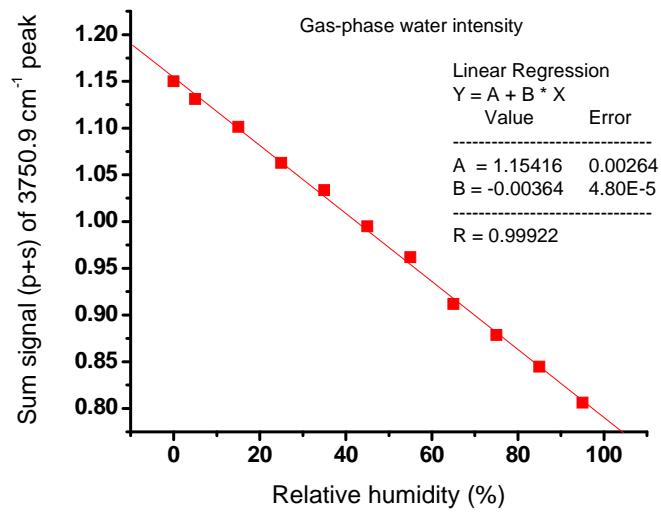


Figure S3. Gas phase water signal as a function of relative humidity.