

Supplementary material (ESI) for Journal of Materials Chemistry

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Supporting Information

Patterned Forest-Assembly of Single-Wall Carbon Nanotubes on Gold Using a Non-Thiol Functionalization Technique

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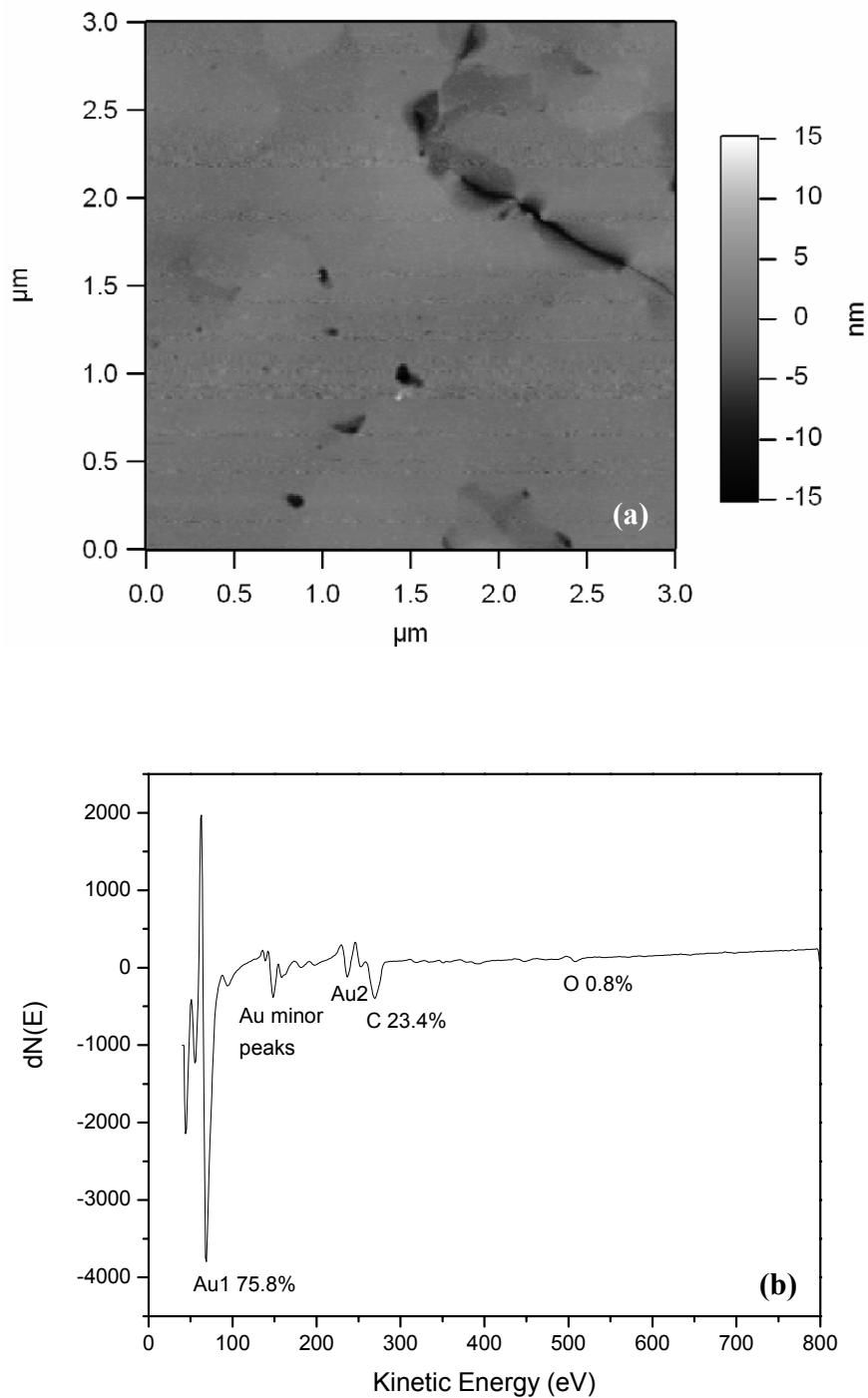


Fig. S1 a) AFM micrograph of surface topology and b) Auger spectrum of Pico Au (111) substrate after immersion into $\text{Fe}_2(\text{SO}_4)_3$ solution for 15 min followed by a brief H_2SO_4 and DMF wash.

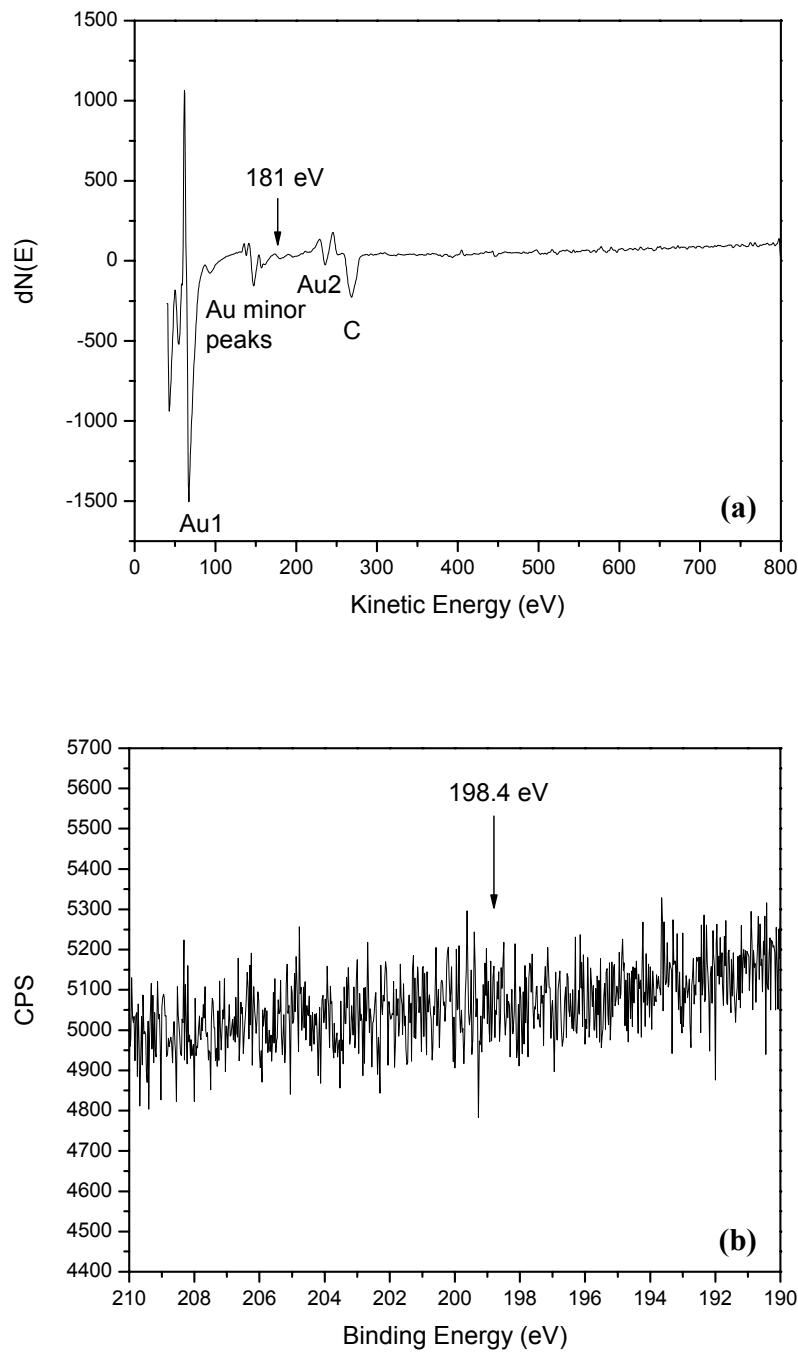


Fig. S2 a) Auger and b) XPS spectra of Pico Au (111) substrate after immersion into pH 2.2 HCl aqueous solution for 15 min. No evidence of chlorine adsorption on Au surface was found. The arrows in b) indicate the peak position where Cl is supposed to be.

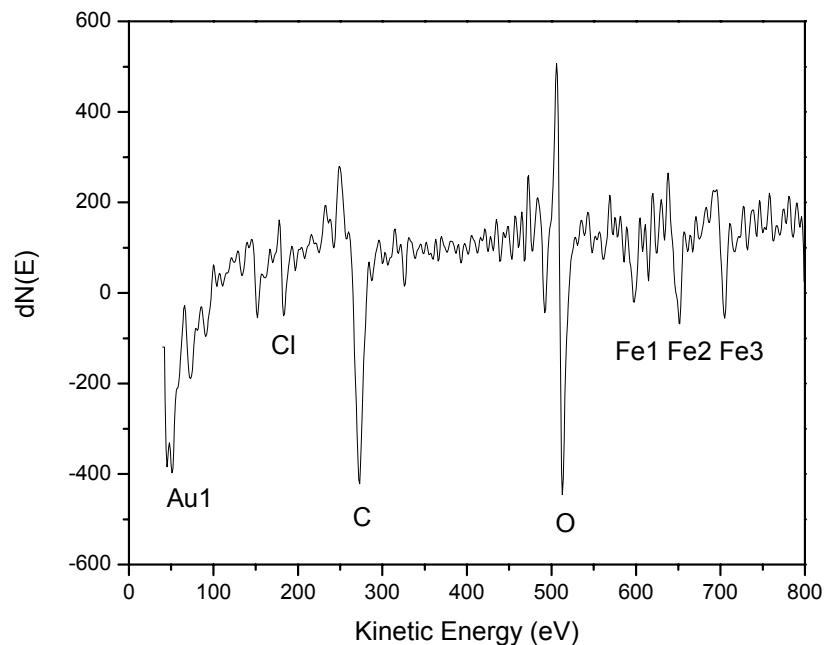


Fig. S3 Typical Auger survey taken in Au domains on FeO(OH)-FeOCl/Au strip patterns by photolithographic lift-off process. Higher carbon content was observed in comparison with the uniform FeO(OH)-FeOCl/Au samples (Fig. 2b).