

Adsorption of Dibenzothiophene and Fluorene on TiO₂(110) and Supported Ag clusters

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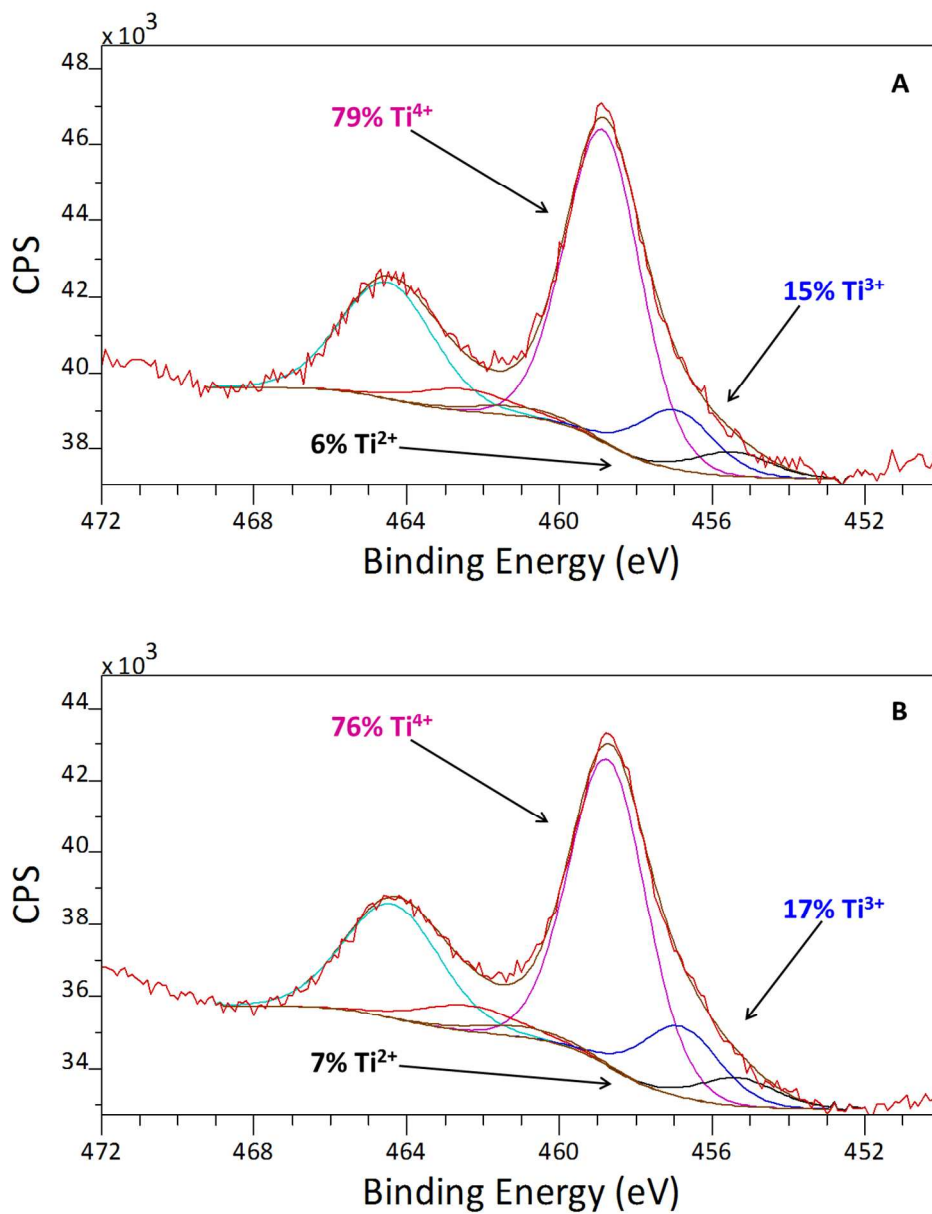


Figure S1: Ti 2p XPS spectra of (A) a clean bombarded and annealed TiO₂(110) surface with relative percentages of Ti⁴⁺ (79%), Ti³⁺ (15%), and Ti²⁺ (6%) and (B) the same region on a DBT/TiO₂(110) surface following exposure to 6 ML DBT. The differences seen in the distribution of ionic Ti are within the error of the XPS fitting procedure (no strong interaction indicated here between DBT and Ti surface species).

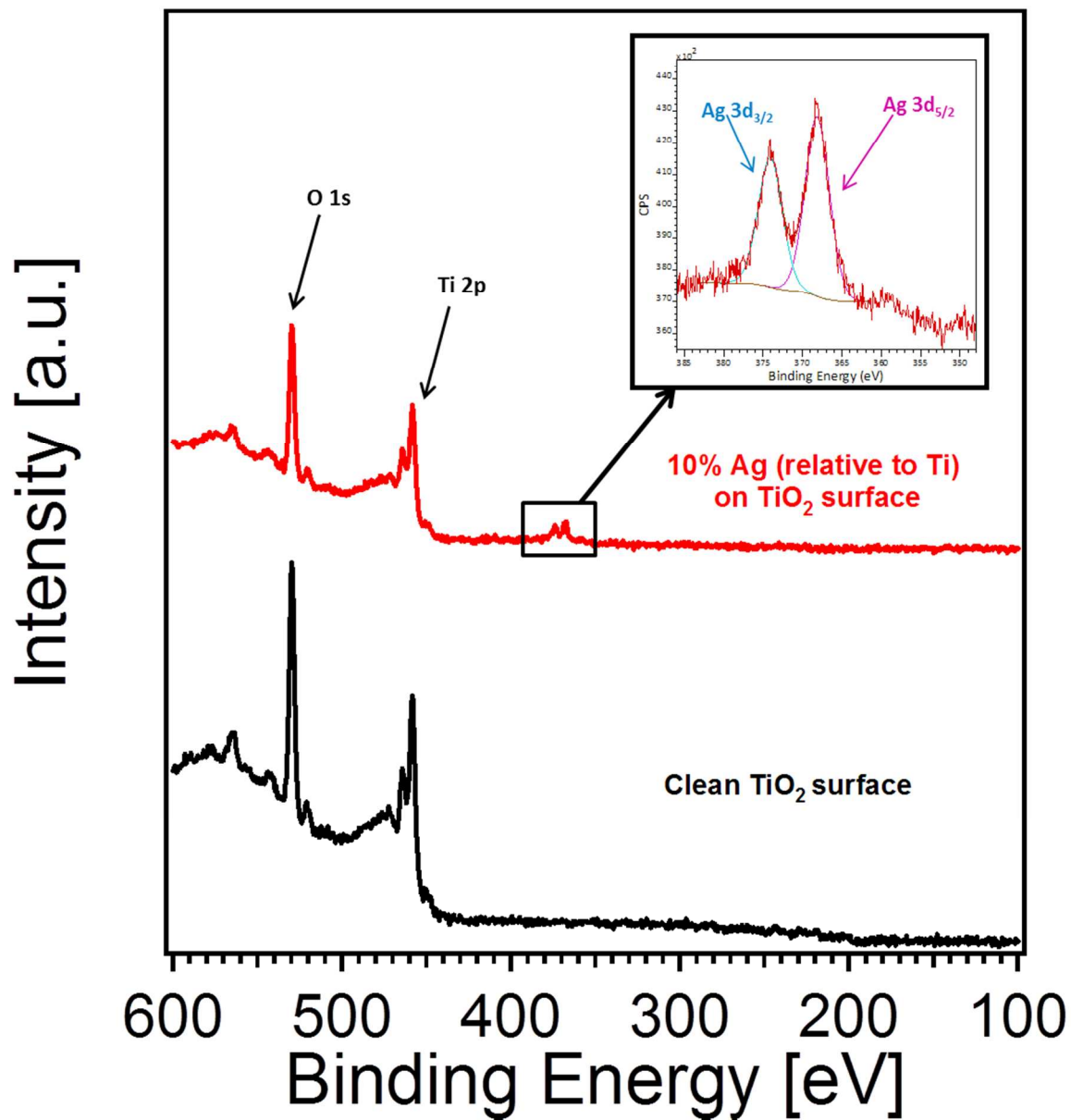


Figure S2: XPS spectrum of a clean TiO₂ surface (in black), and a spectrum following deposition of Ag (10% relative to Ti, red). The Ag 3d_{3/2} and Ag 3d_{5/2} peaks appeared at 374 eV and 368 eV, respectively.

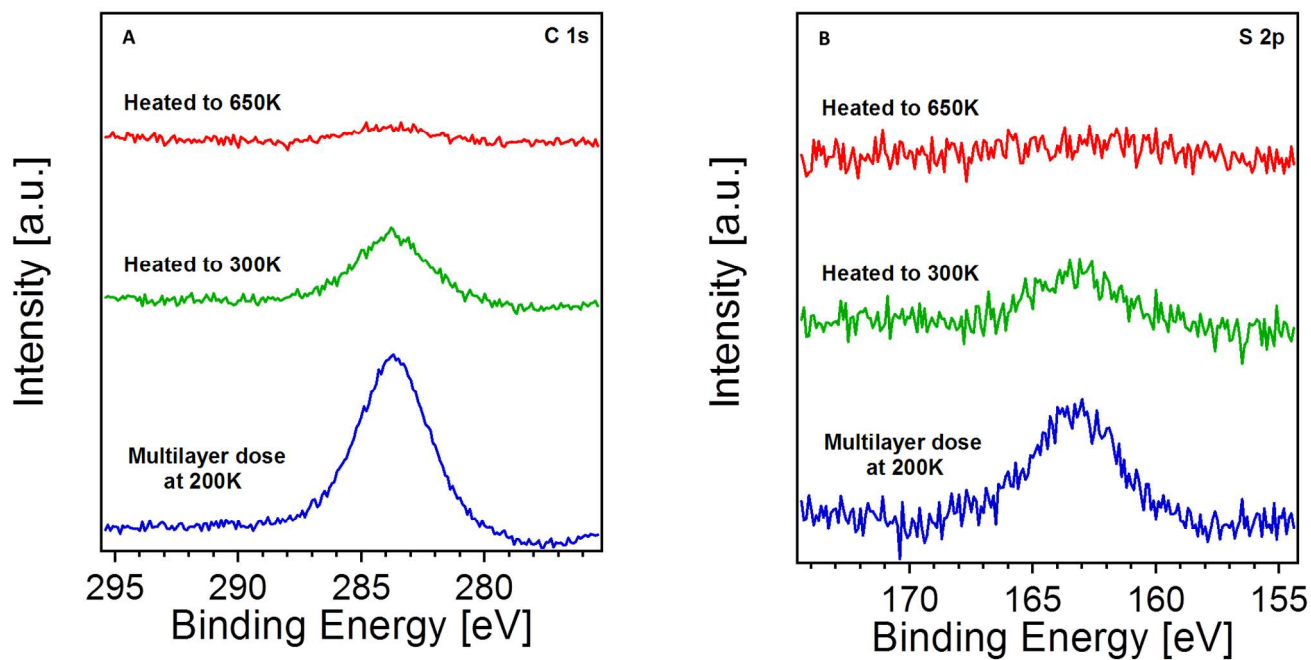


Figure S3: XPS spectra of (A) the C 1s region and (B) the S 2p region following deposition of 2.5 ML DBT on a Ag/TiO₂(110) surface. The C 1s peak is located at 284 eV, and the S 2p peak is at 164 eV, similar to that of the surface without Ag.

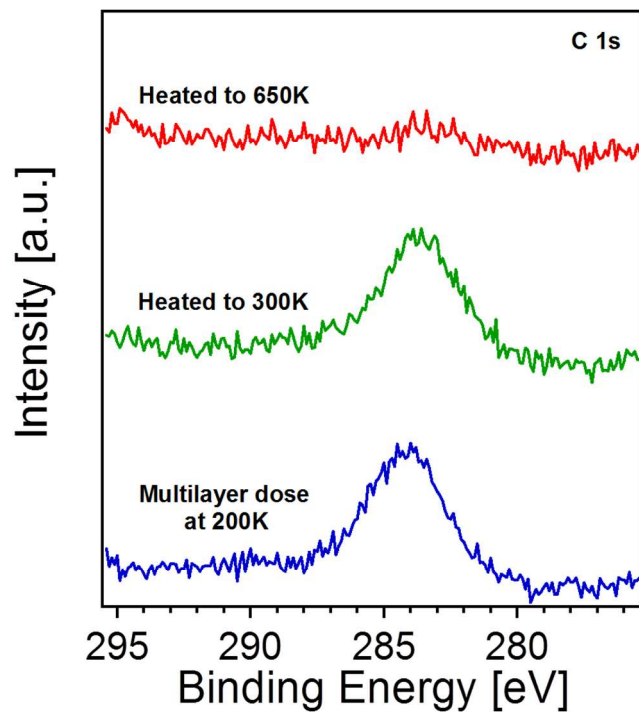


Figure S4: C 1s XPS spectra of the C 1s region following deposition of 1.5 ML fluorene on a Ag/TiO₂(110) surface. The C 1s peak is located at 284 eV, similar to that of the surface without Ag.