

Photocatalytic and Conductive MWCNT/TiO₂ Nanocomposite Thin Films

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SUPPORTING INFORMATION

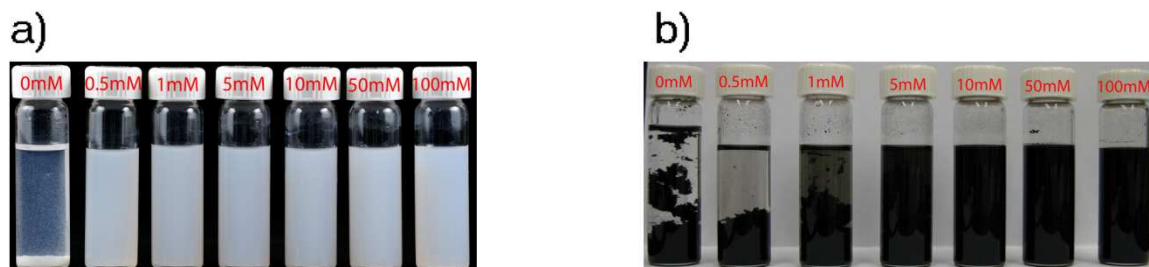


Figure S1. (a) TiO_2 and (b) MWCNTs dispersed in toluene containing different AOT concentrations shown in red text.

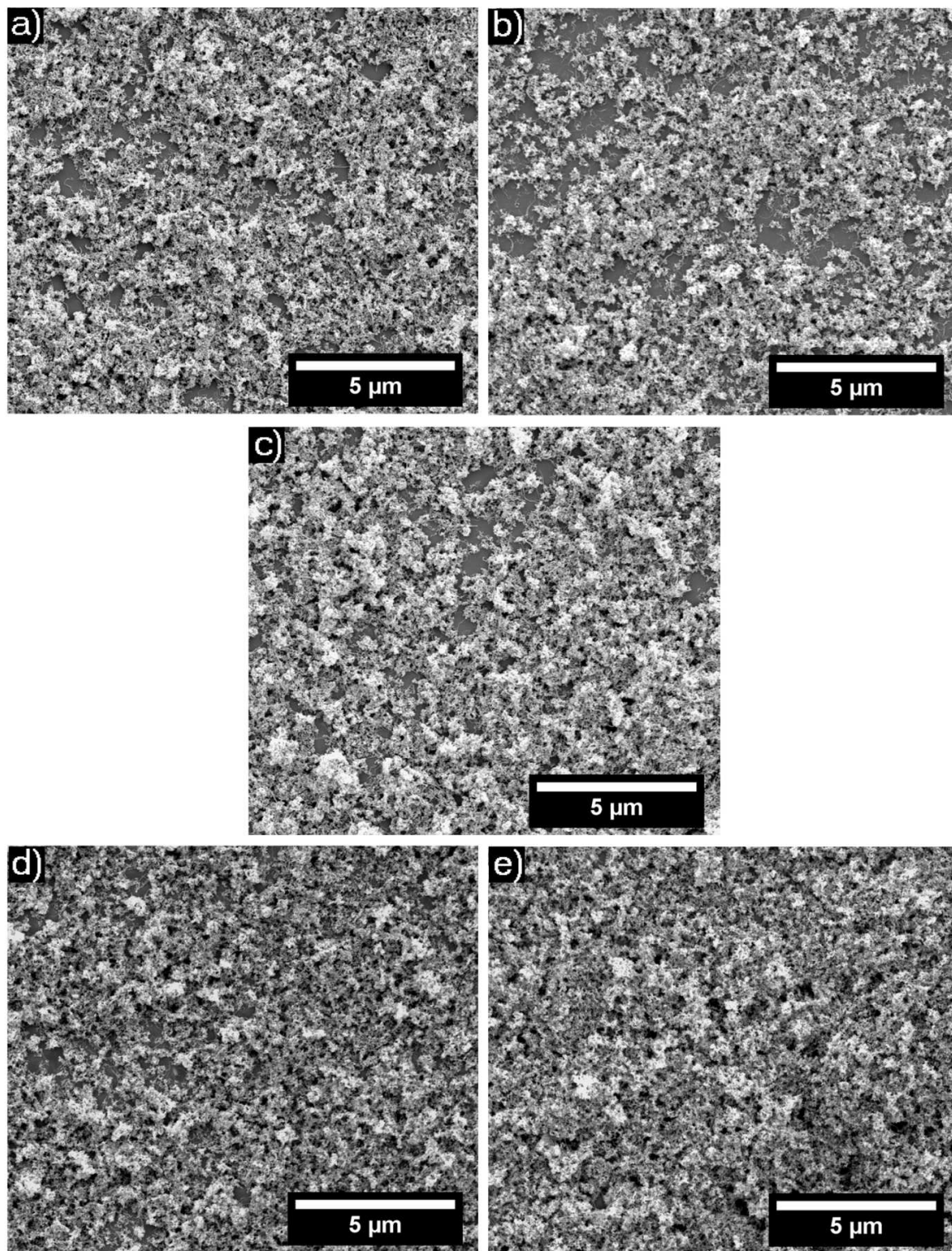


Figure S2. SEM images for 20-bilayer MWCNT/TiO₂ films composed with (a) 5 mM, (b) 10 mM, (c) 50 mM, (d) 100 mM and (e) 200 mM AOT.

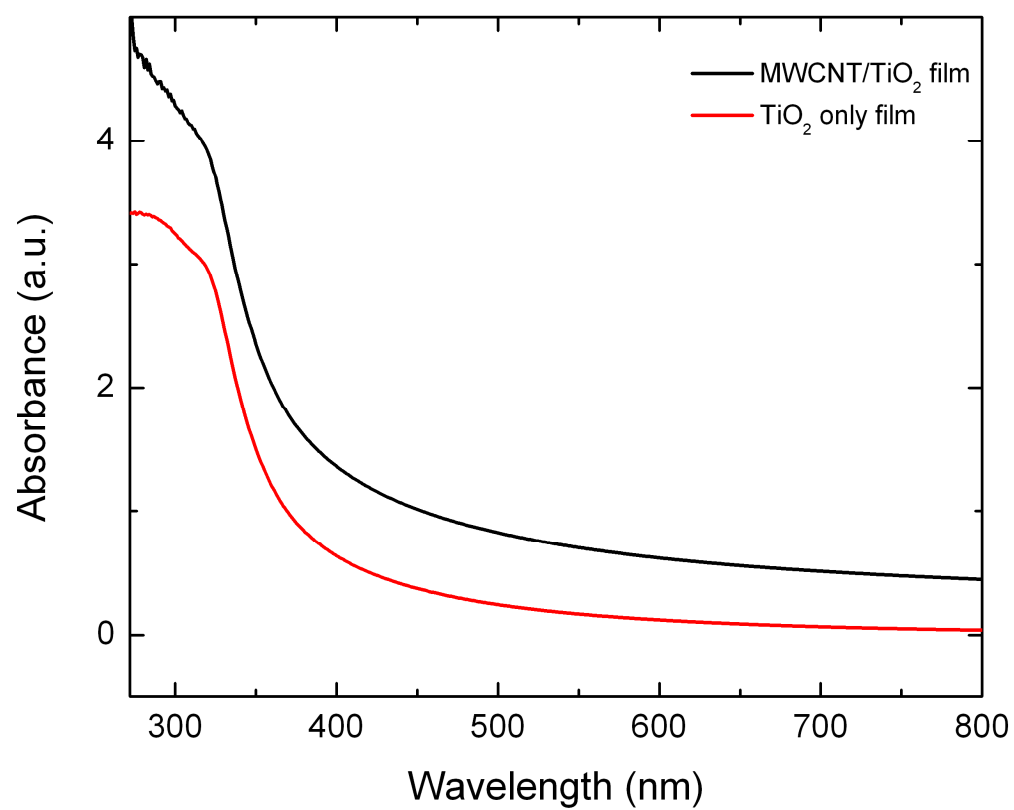


Figure S3. UV–Vis absorbance spectra for MWCNT/TiO₂ film (black line) and TiO₂ only film (red line).

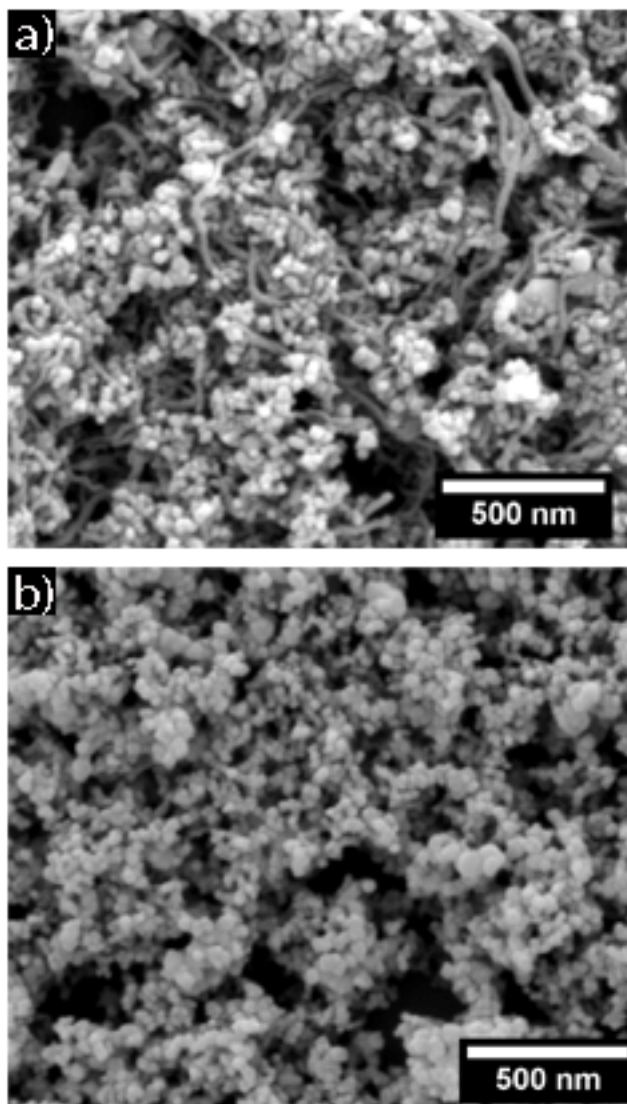


Figure S4. SEM images showing topography of (a) MWCNT/TiO₂ and (b) TiO₂ films.

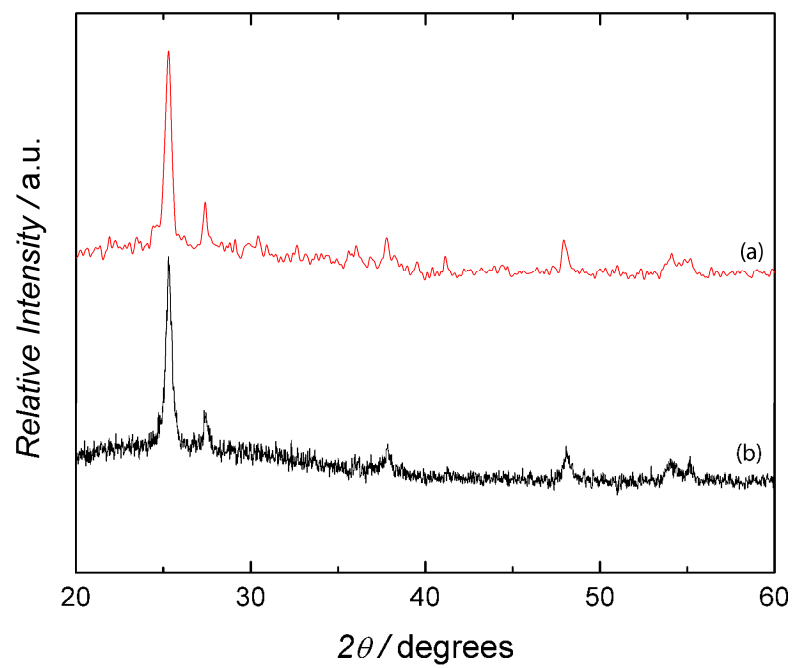


Figure S5. XRD pattern for (a) TiO₂-P25 calcined at 600°C for 1 hour and (b) untreated TiO₂-P25

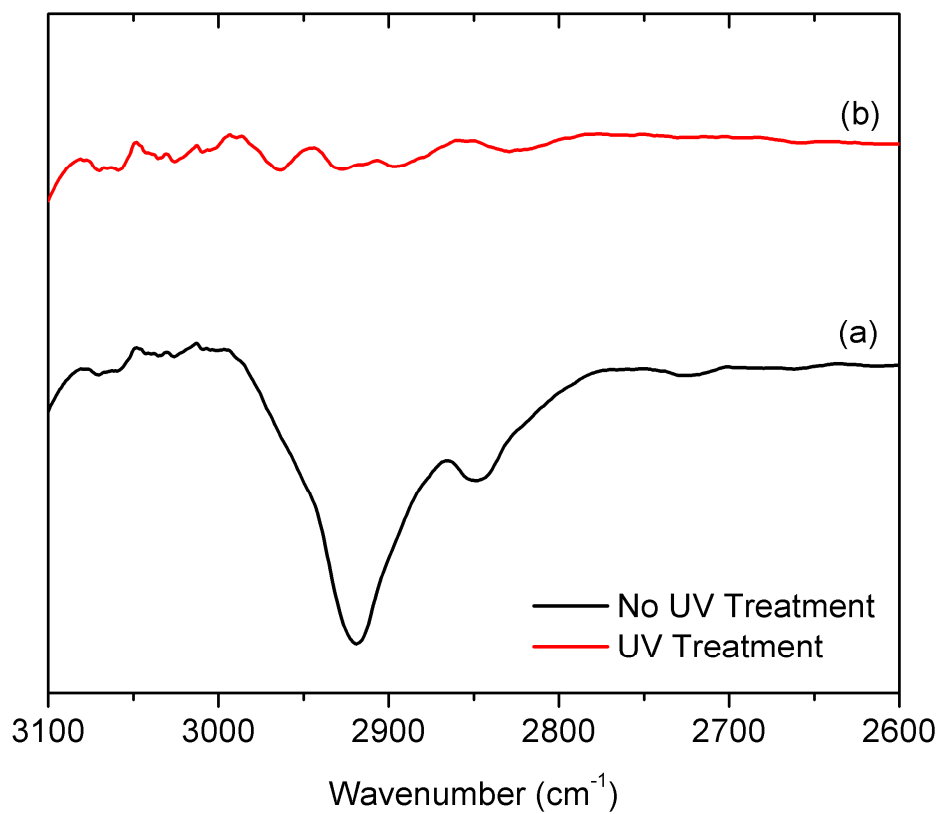


Figure S6. FTIR spectra for (a) MWCNT/TiO₂ nanocomposite before UV treatment (black) and (b) after UV treatment (red). Peaks between 3000 and 2800 cm⁻¹ represent alkane groups of AOT.