

SUPPORTING INFORMATION FOR THE MANUSCRIPT

**Engineering structure and functionalities of chemical vapor deposited photocatalytic
titanium dioxide films through different types of precursors**

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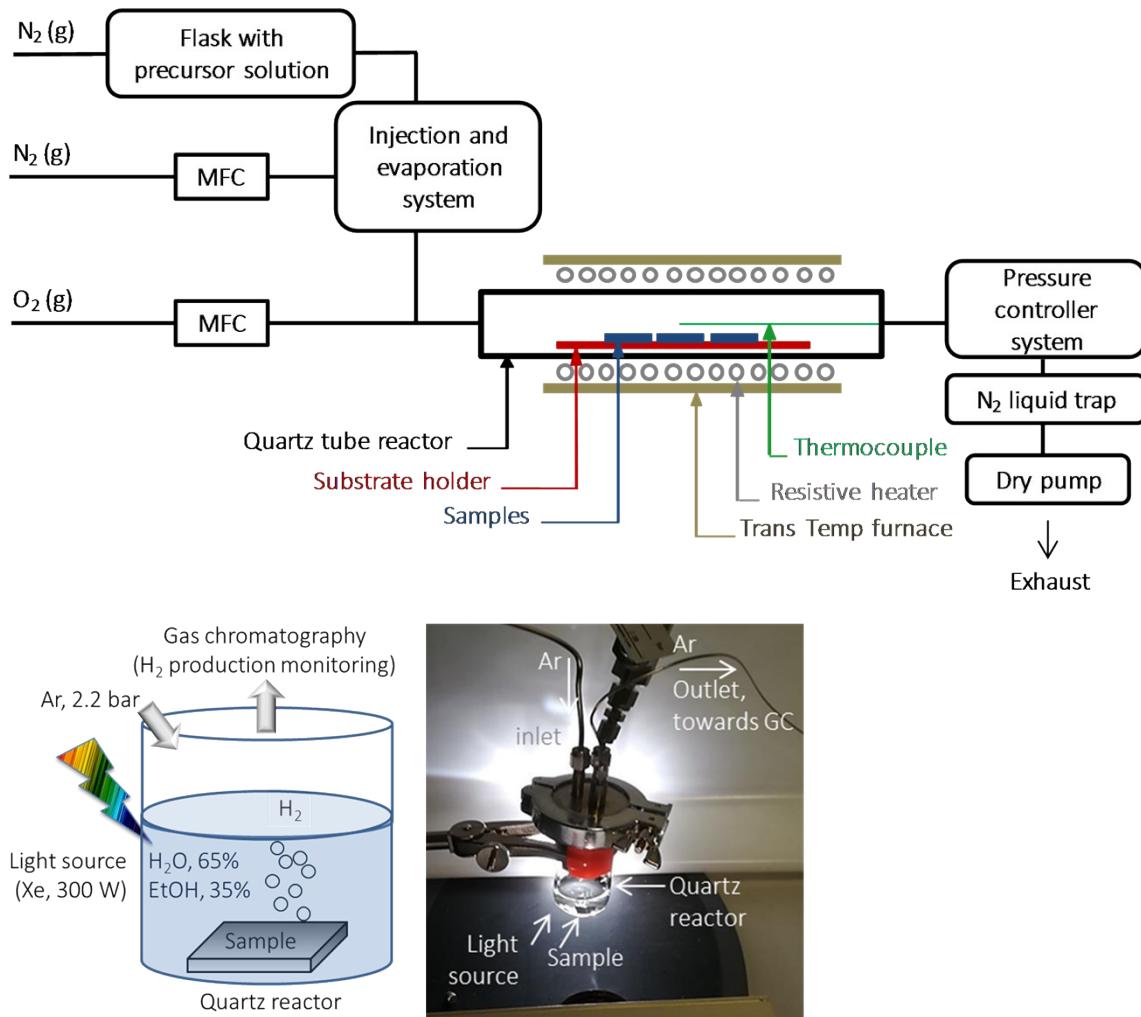


Figure S1. Schematic view of the CVD reactor (top) and schematic and a photograph of the photocatalytic setup used for dihydrogen production (bottom).

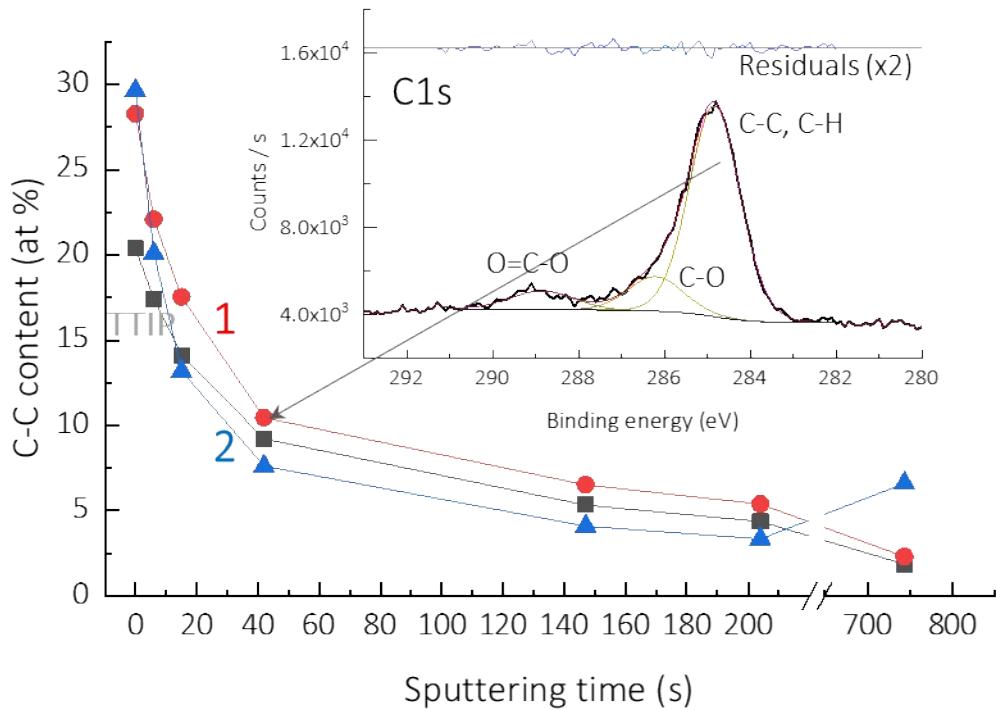


Figure S2. Evolution of the atomic concentration of the C-C component of the carbon content of the film as a function of sputtering time. The C-C/C-H component is obtained from the deconvolution of the C1s high resolution spectra, exemplified in the figure by the spectrum at 42 s of the film deposited from **1**.

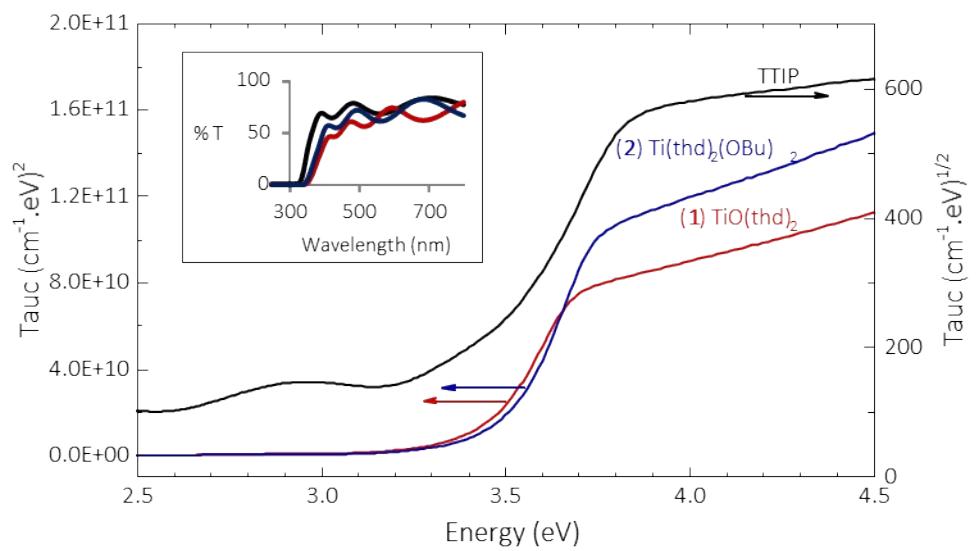


Figure S3. Tauc plots of the absorption coefficient determined by UV-Vis transmission spectroscopy for films deposited from the three precursors. Transmittance spectra of the films are in insert.