

Supplementary Materials

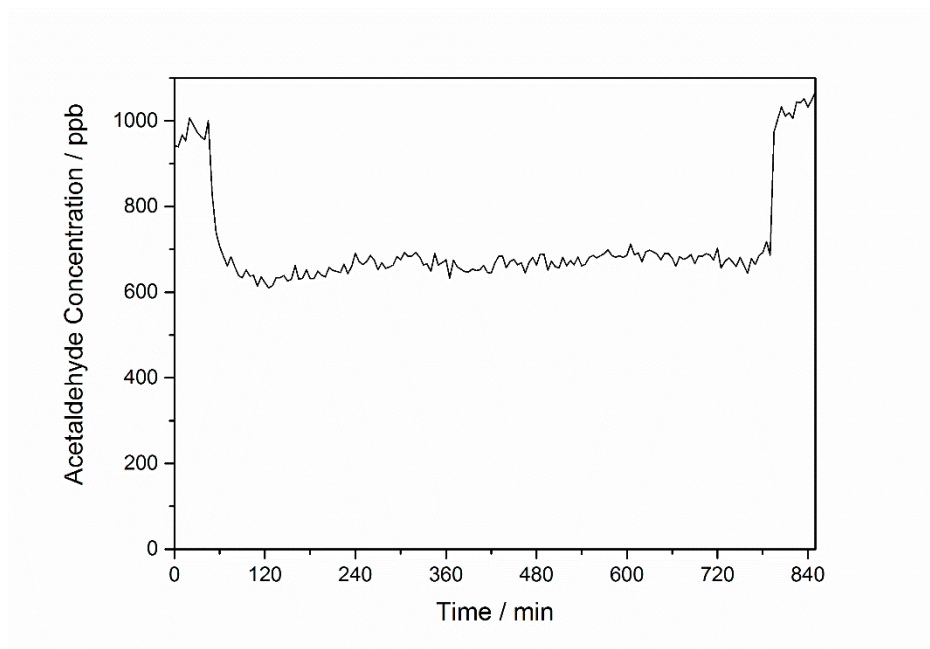


Figure S1: Acetaldehyde concentration as a function of time in the O₂ atmosphere, in the dark.

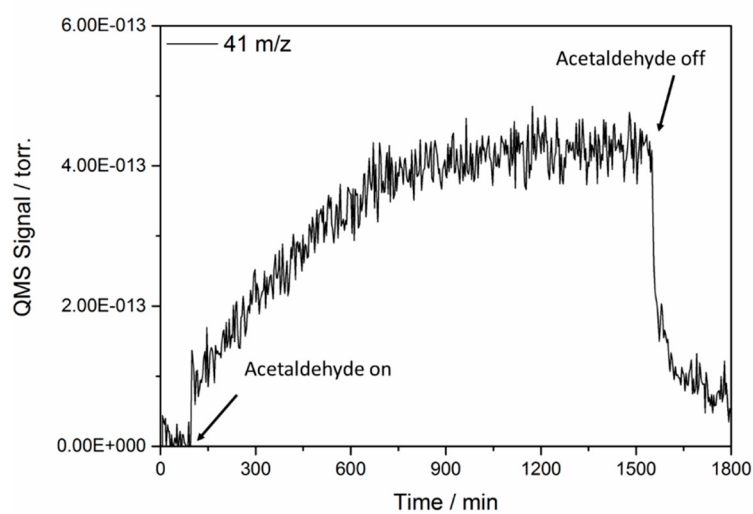


Figure S2: Time evolution of the QMS (quadrupole mass spectrometer) signal of mass 41 m/z corresponding to the crotonaldehyde.

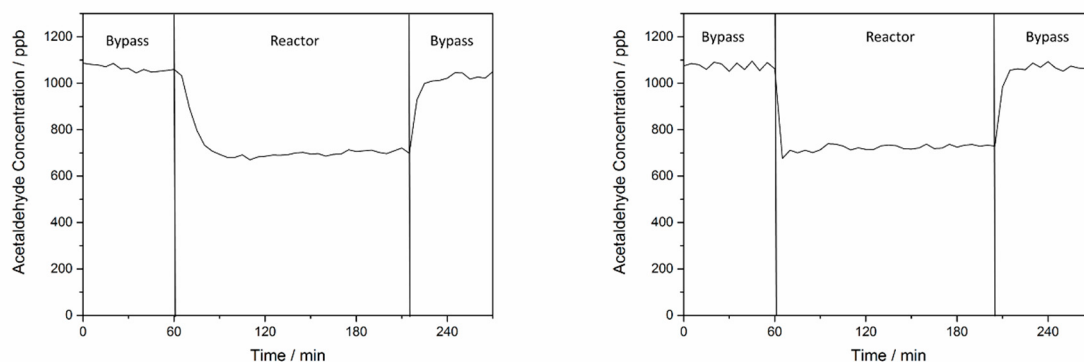


Figure S3: Comparison between the acetaldehyde concentration as a function of time, in the O₂ (left) and in the N₂ (right) atmosphere, in the dark.

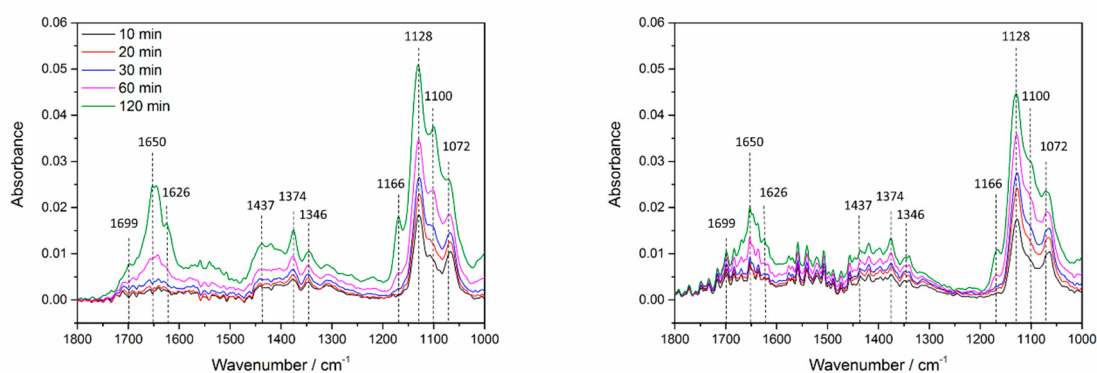


Figure S4: ATR-FTIR (Attenuated Total Reflection – Fourier Transform Infrared) spectra recorded during the gaseous treatment of acetaldehyde over an anatase film, in the O₂ (left) and the N₂ (right) atmosphere, for two hours in the dark.

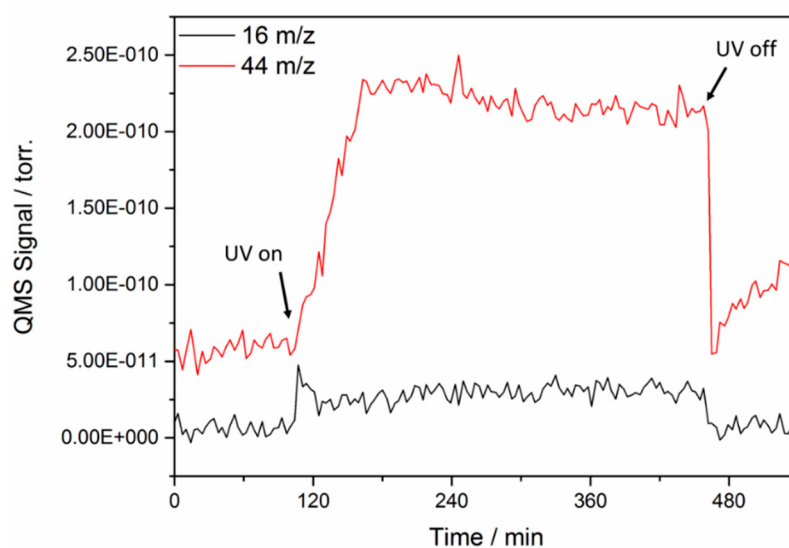


Figure S5: QMS signal as a function of the time of the masses 16 m/z and 44 m/z corresponding to CH₄ and CO₂.

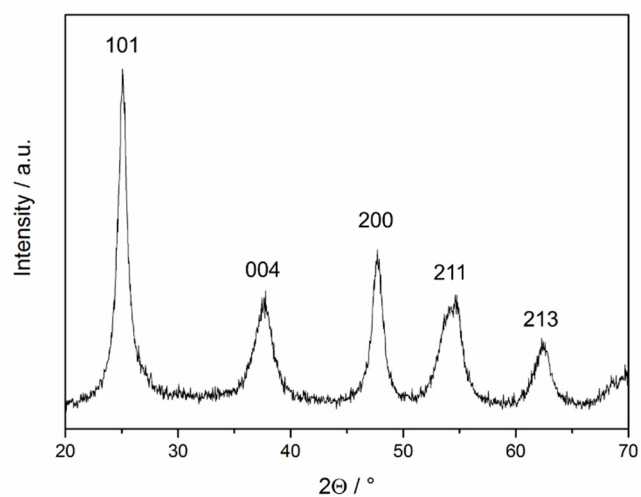


Figure S6: XRD (X-ray diffraction) pattern of UV-100.

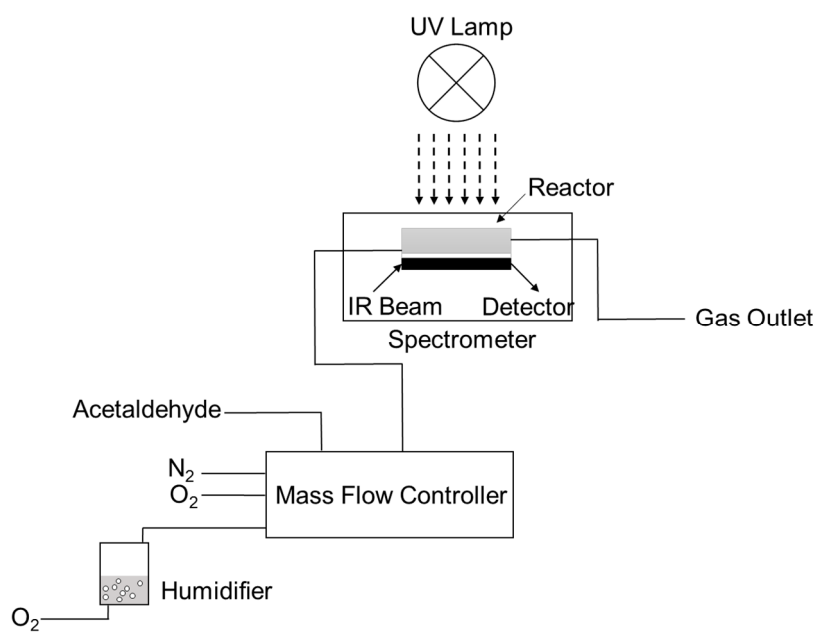


Figure S7: Experimental setup for the ATR-FTIR measurement.

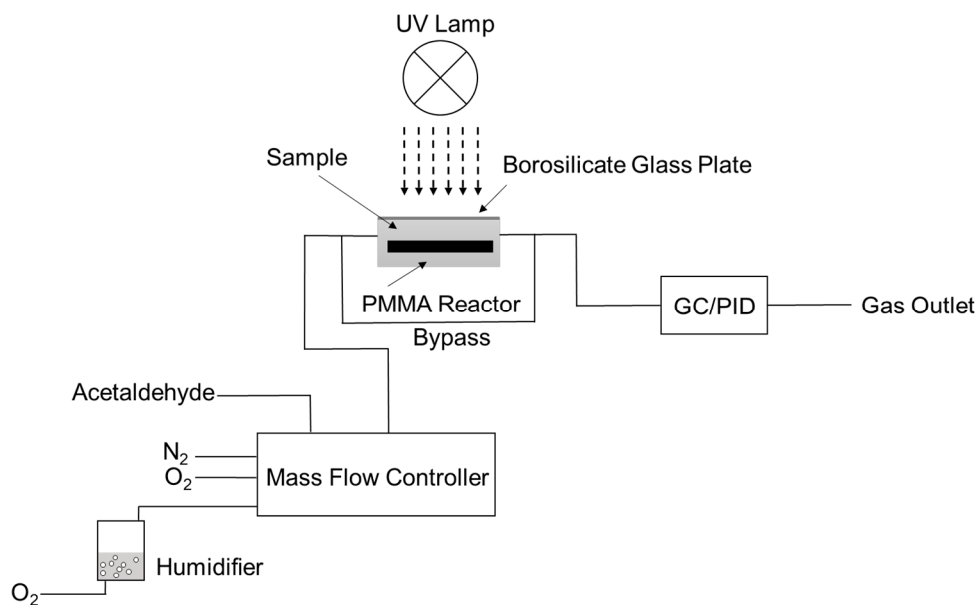


Figure S8: Experimental set up to monitor the concentration of acetaldehyde, as a function of time.

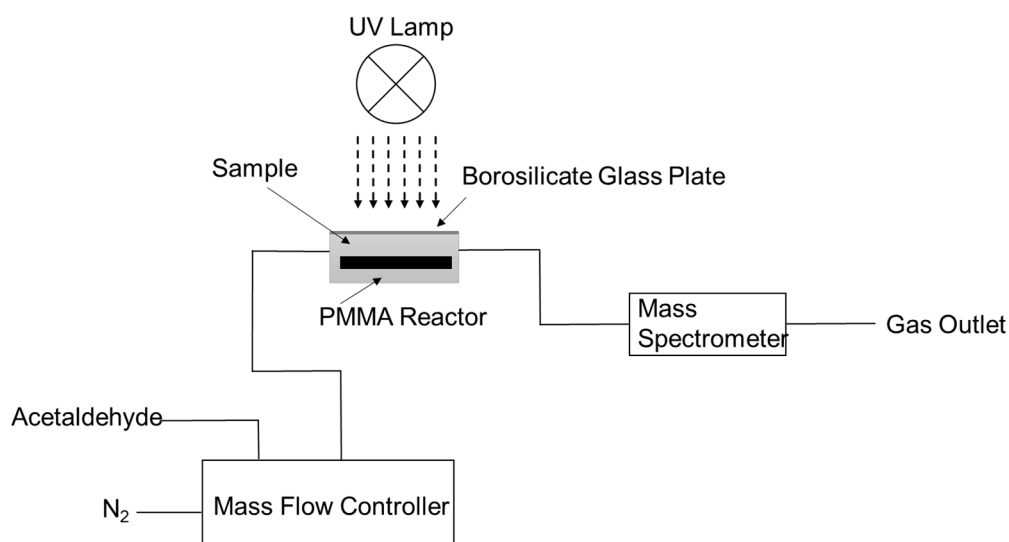


Figure S9: Experimental set-up for the detection of gaseous products generated during the acetaldehyde treatment of an UV-100 film, in the dark and upon UV illumination.