

Supplementary Material

Au supported on bovine bone catalyzes CO₂ photochemical reduction towards methanol and carboxylic acids

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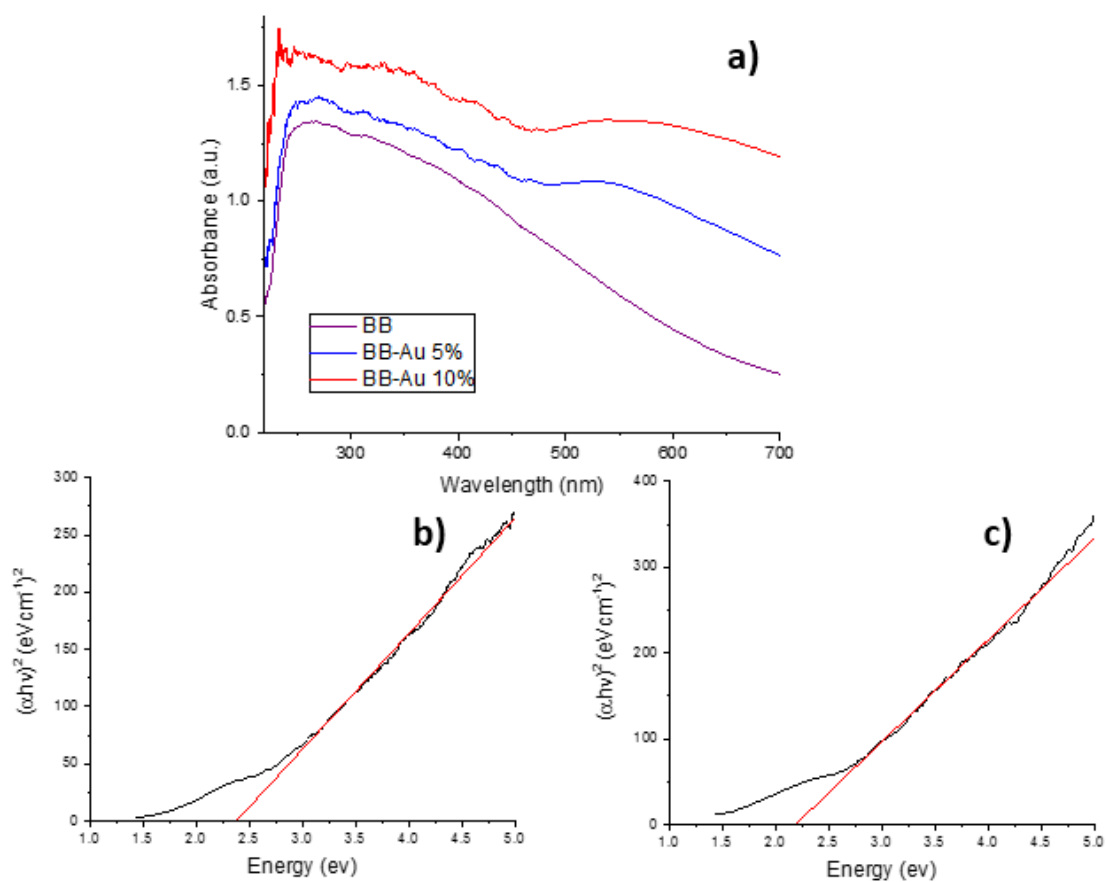


Figure S1. **(a)** UV-Vis DRS spectra of Au-NPs supported on BB (5 % blue and 10 % red) sample as well as the bare BB (violet). Tauc plot of **(b)** Au-NPs 5 % and **(c)** Au-NPs 10 % supported on BB samples for band gap value determination.

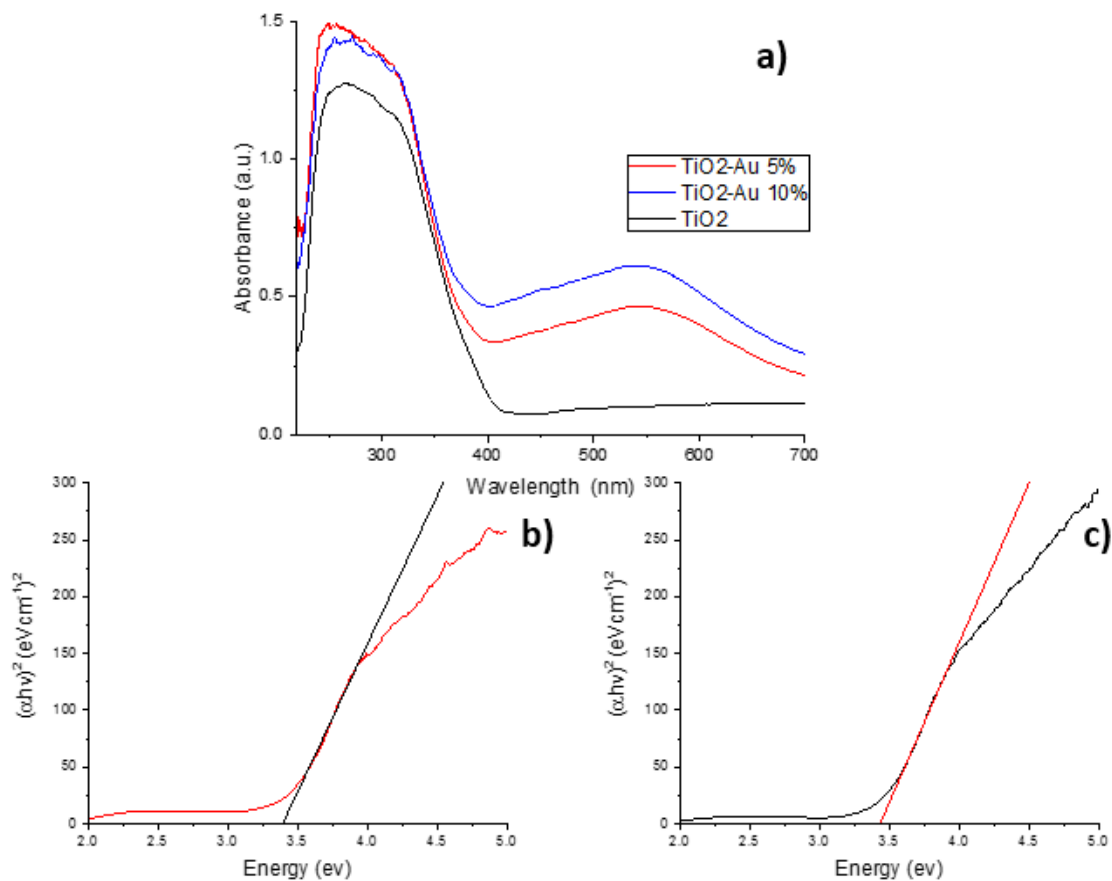


Figure S2. **(a)** Absorption UV-vis spectra of Au-NPs supported on TiO₂ (5 % red and 10 % blue) sample as well as the bare BB (black). Tauc plot of **(b)** Au-NPs 5 % and **(c)** Au-NPs 10 % supported on TiO₂ samples for band gap value determination.

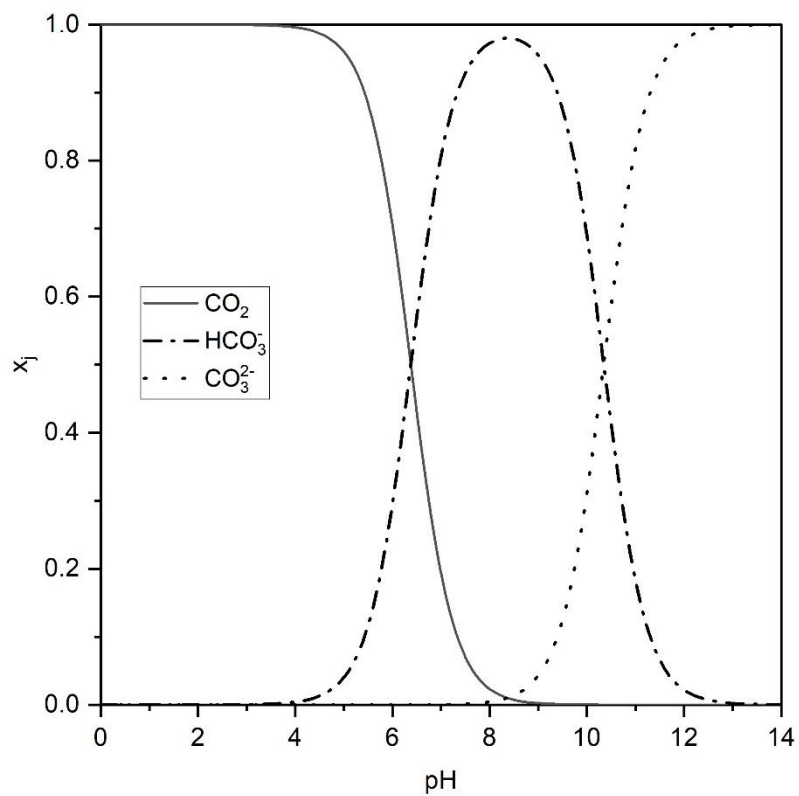


Figure S3. CO₂ species distribution diagram as function of pH at 295 K.

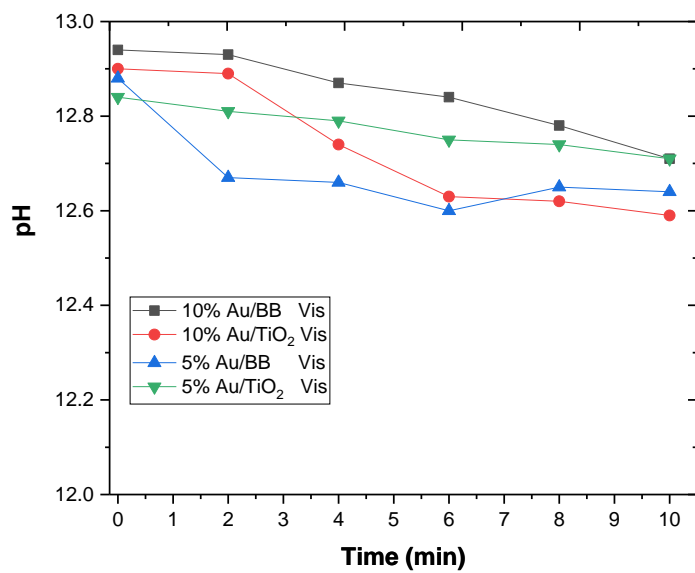
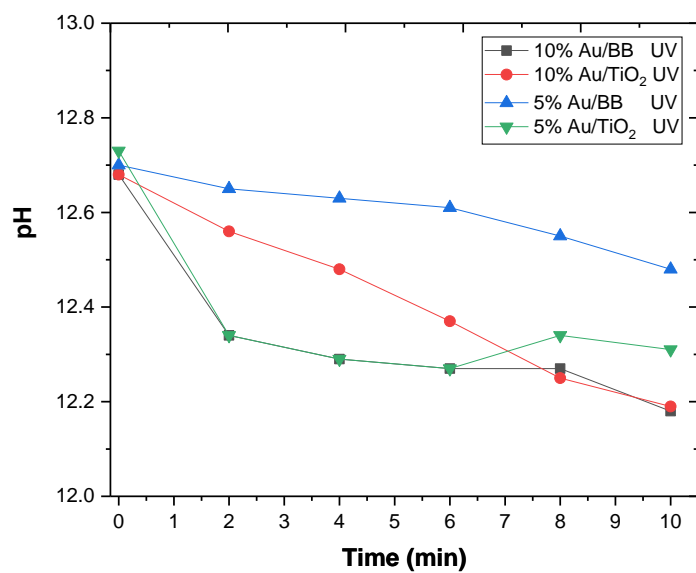


Figure S4. pH temporary profiles: effect of radiation wavelength, gold content and type of support.