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Figure 1S- Cyclic voltammetry curves for a TiO_2 (P25) in: (1) 0.01 M NaHCO₃ at pH 7.2 ; (2) 0.01 M NaHCO₃ bubbled with CO₂ until pH 5.5. Scan rate: 50 mV/s



Figure 2S. Emission intensity of 7-hydroxycoumarin measured at 455 nm obtained upon illumination (15 min) of deaerated suspensions of TiO₂-P25 containing coumarin (1 x 10^{-4} M). Compare with data of Figure 3 in the text.



Figure 3S. Emission intensity of 7-hydroxycoumarin measured at 455 nm obtained upon illumination (15 min) of deaerated suspensions of TiO2-P25 containing coumarin (1 x 10^{-4} M), at pH 7.2 in the absence of NaHCO₃(1); at pH 10 in the absence of NaHCO₃(2); at pH 10 in the presence of NaHCO₃/Na₂CO₃(3).



Figure 4S. EPR spectrum of the paramagnetic adducts obtained on illumination ($\lambda > 360$ nm) of deaerated aqueous suspensions of Ru-TiO₂ in the presence of pbn (0.1 M) and of NaHCO₃ (0,01 M) at pH 7.2 ÷ 7.5.