

Electronic supplementary information (ESI)

Simultaneous H₂ production and water purification with surface modified nanostructured TiO₂ photoelectrodes

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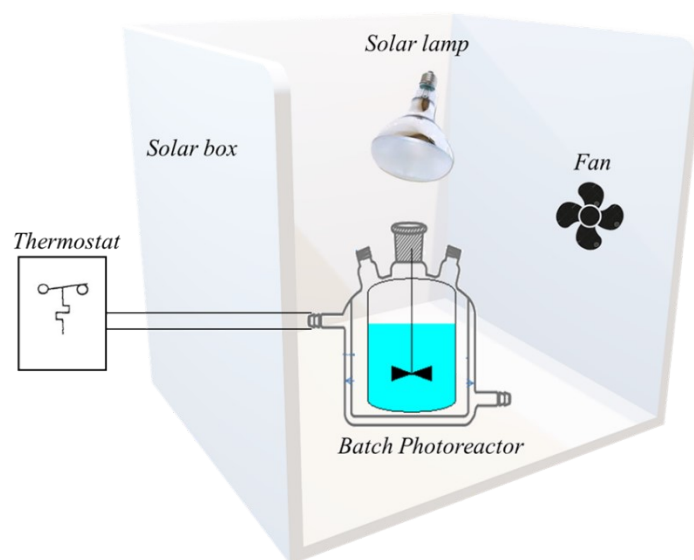


Fig. S1: Experimental setup used for the photocatalytic tests.

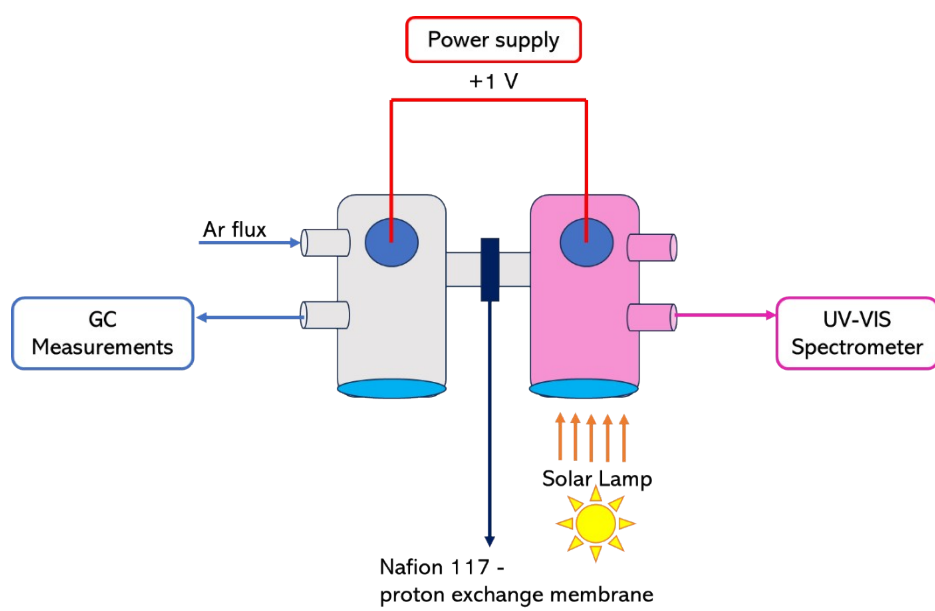


Fig. S2: Experimental setup used for the photoelectron-catalytic tests.

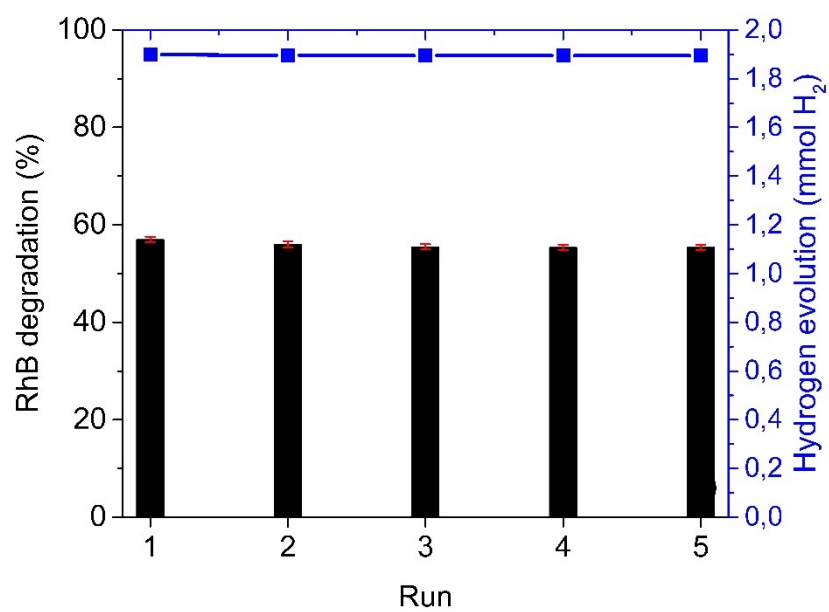


Fig. S3: Stability tests of simultaneous electro-assisted photocatalytic RhB degradation and H₂ production with TiO₂-PZr film. For the H₂ evolution curve the experimental errors are included in the symbol.

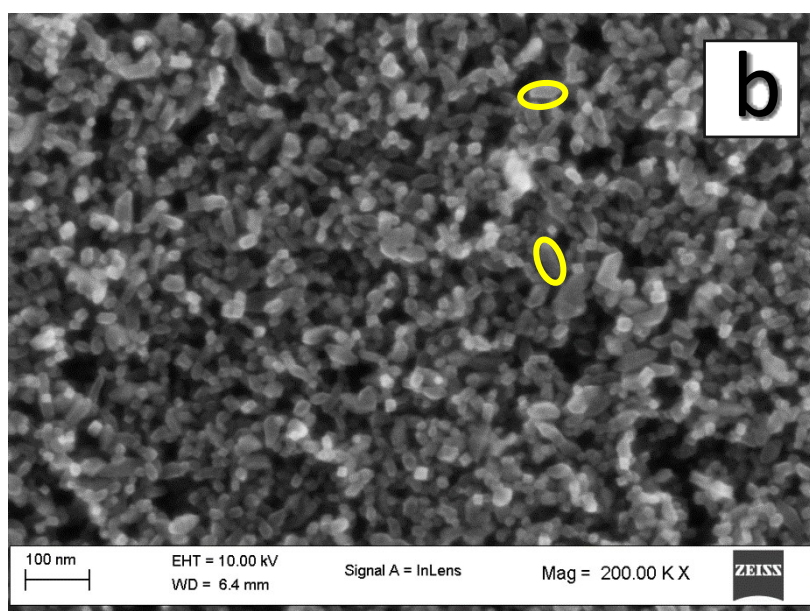
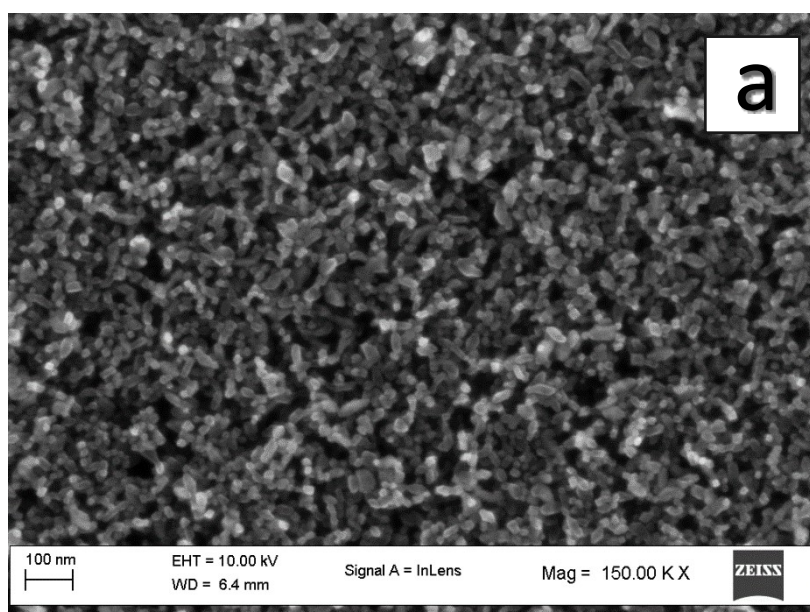


Fig. S4: SEM images of $\text{TiO}_2\text{-PZr}$: (a) 150 KX (b) 200 KX.

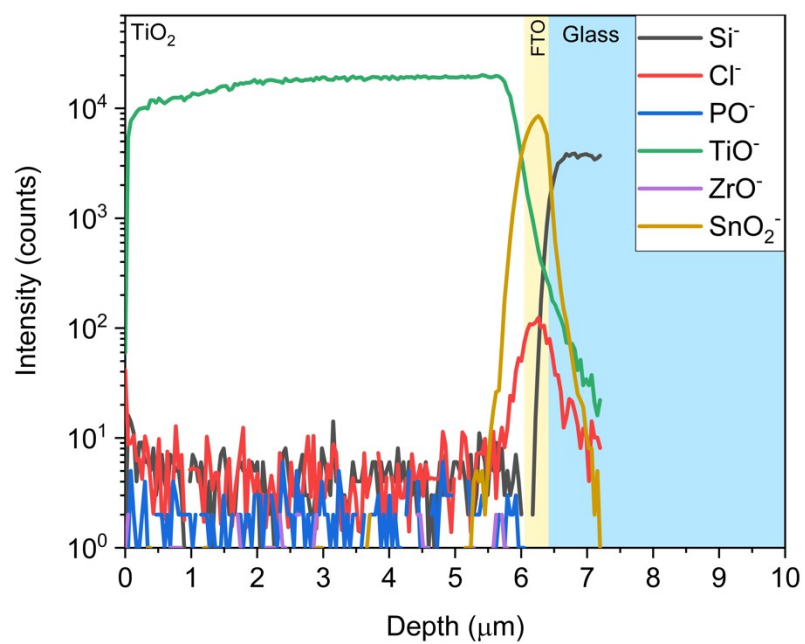


Fig. S5: ToF-SIMS depth profile of a bare mesoporous TiO_2 layer (no ZP-functionalization) deposited on a FTO-coated glass.