

Electronic Supplementary Materials (ESI) for Journal of Materials Chemistry A
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Supporting Information for “Self-assembled photoactive heterojunction phase gradient”

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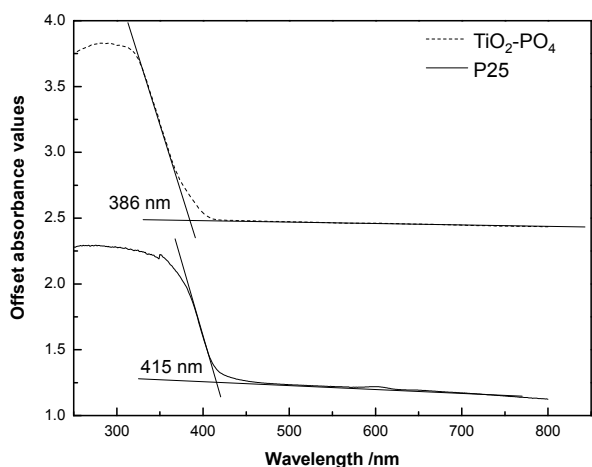


Figure S1: Comparison of diffuse reflectance spectra of 88:1 TiO₂-PO₄ sample and P25

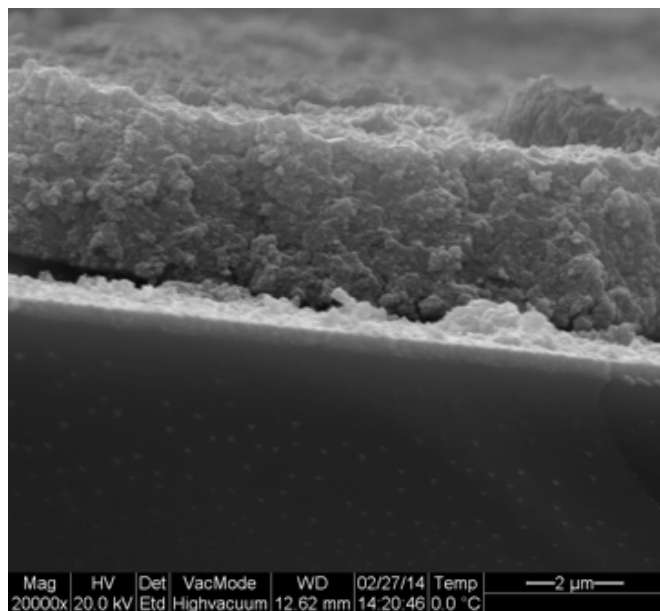


Figure S2: Scanning electron micrograph of a cross section of the P25 film after heat treatment.

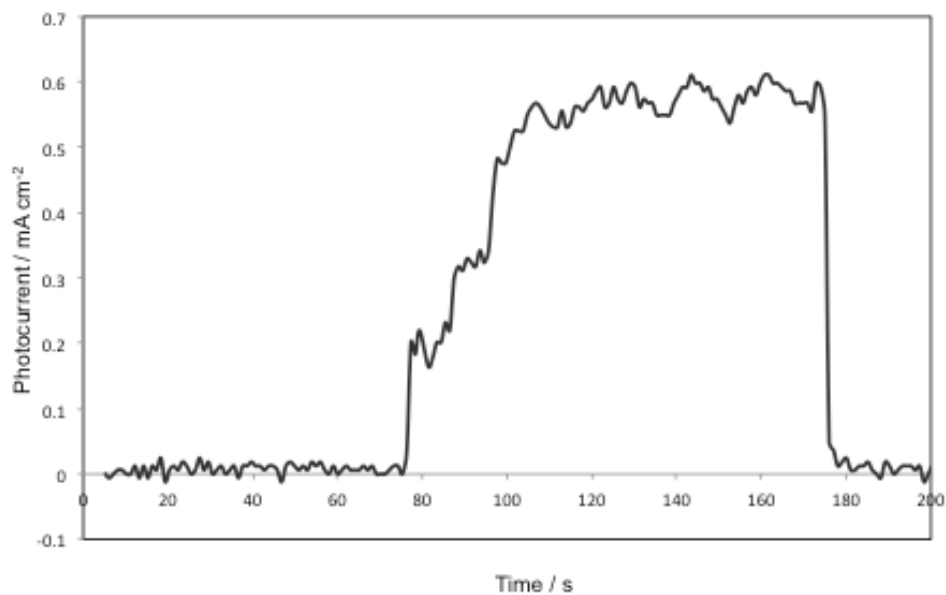


Figure S3. Current density–time characteristics curve measured upon illumination and in the dark of the as-prepared photo-anodes at 250 seconds with phase pure anatase.

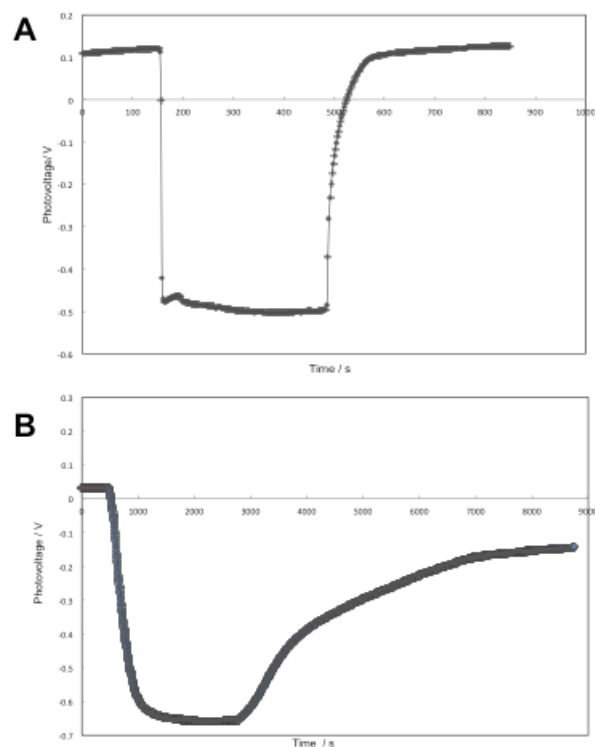


Figure S4. Photovoltage decay after illumination of the as-prepared photo-anodes with unsensitised A: P25 and B: $\text{TiO}_2\text{-PO}_4$ photoelectrodes

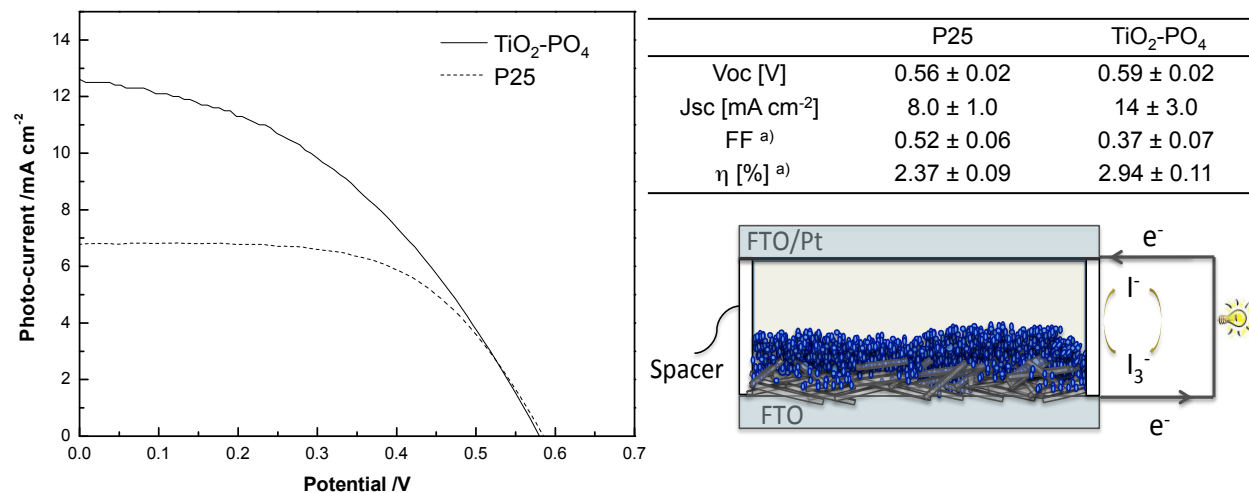


Figure S5: Current-voltage curves of the dye-sensitized solar cells based on the 88:1 $\text{TiO}_2\text{-PO}_4$ and pure P25 electrodes and mean of the solar cell parameters (N=3): Open Circuit Voltage, V_{oc} ,

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Short Circuit Current, J_{sc} , Fill Factor, FF and photovoltaic conversion efficiency, η . Schematic diagram illustrating configuration of DSSC.