

### Supporting information

## Immobilization of TiO<sub>2</sub>-PEDOT: PSS hybrid heterojunction photocatalyst for degradation of organic effluents

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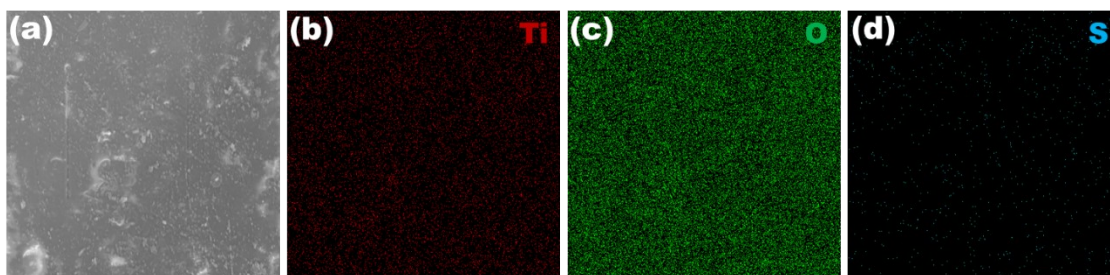


Figure S1: EDS mapping of a TiO<sub>2</sub>-PEDOT:PSS (PT) film showing a uniform distribution of Ti, O and S elements.

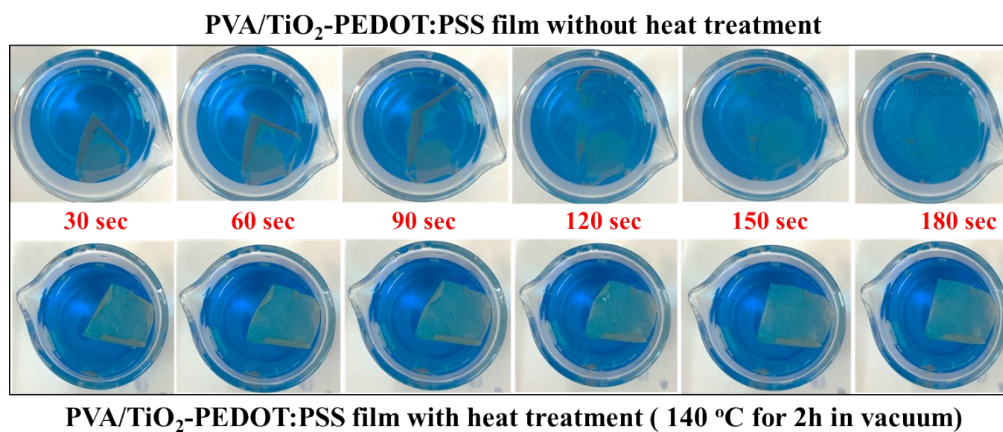


Figure S2: Images showing the stability of the film (with and without heat treatment) at various time intervals. The film without heat treatment disintegrated within three minutes after being in contact with an aqueous dye solution, while the heat-treated film was stable for more than 100 hrs.

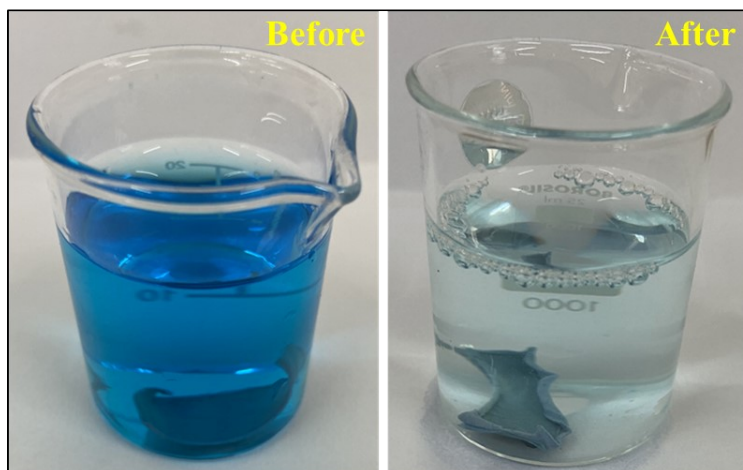


Figure S3: Stability of a PVA/TiO<sub>2</sub>-PEDOT:PSS membrane after 20 cycles (> 100 hrs).

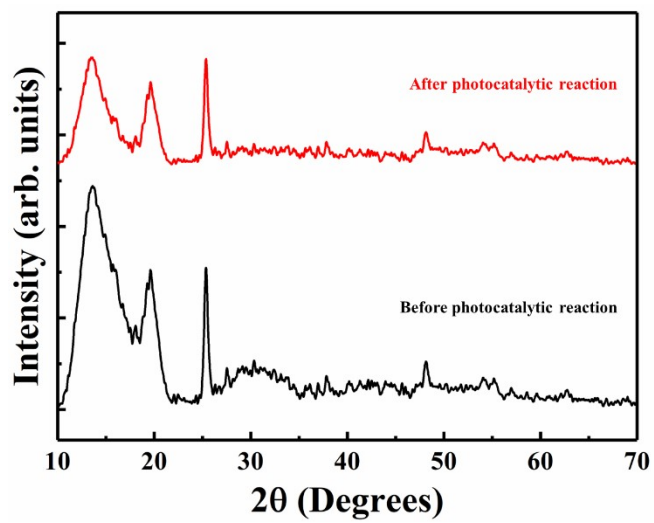


Figure S4: XRD patterns of PT-film, before and after the 20 cycles of photocatalytic degradation of MB.