

Electronic Supplementary Information

Porphyrin ~~Cofacial~~, ~~Coherent~~ Aggregates Decorated MWCNT Film for Solar Light Harvesting: Influence of J- and H- Aggregation on the Charge recombination resistance, Photocatalysis, and Photoinduced Charge Transfer Kinetics

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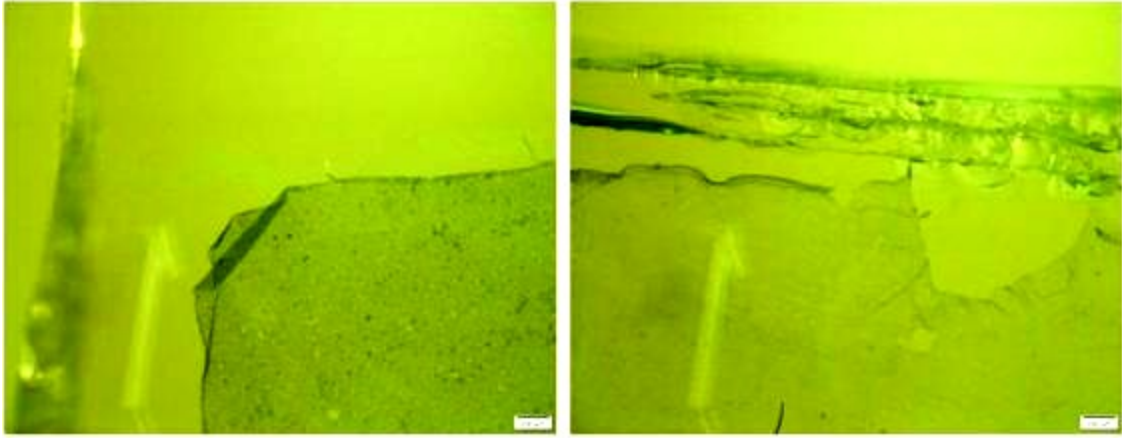


Fig. S1 Optical microscope images obtained for the different thickness CNTF on the ITO.

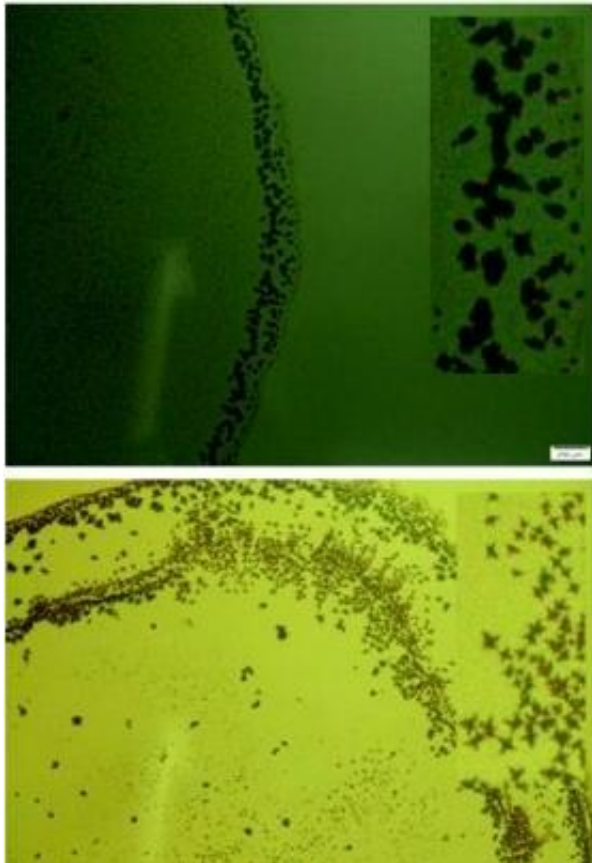


Fig. S2 Optical microscope images of the J- and H- aggregates top and bottom respectively. Insets show the enhanced images of the corresponding aggregate.

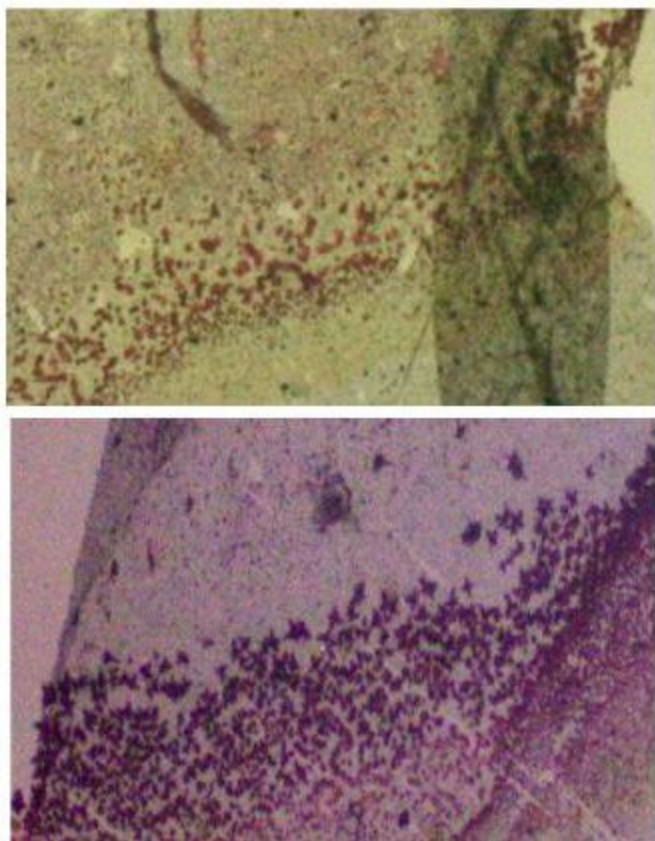


Fig. S3 Optical microscope images of the J- (top) and H- (bottom) aggregates obtained on the ITO/CNTF.

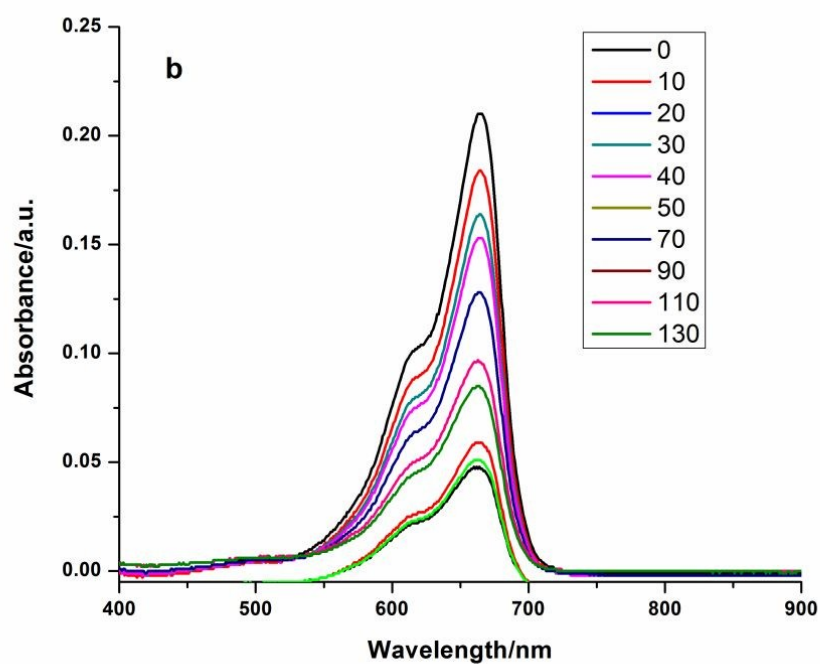
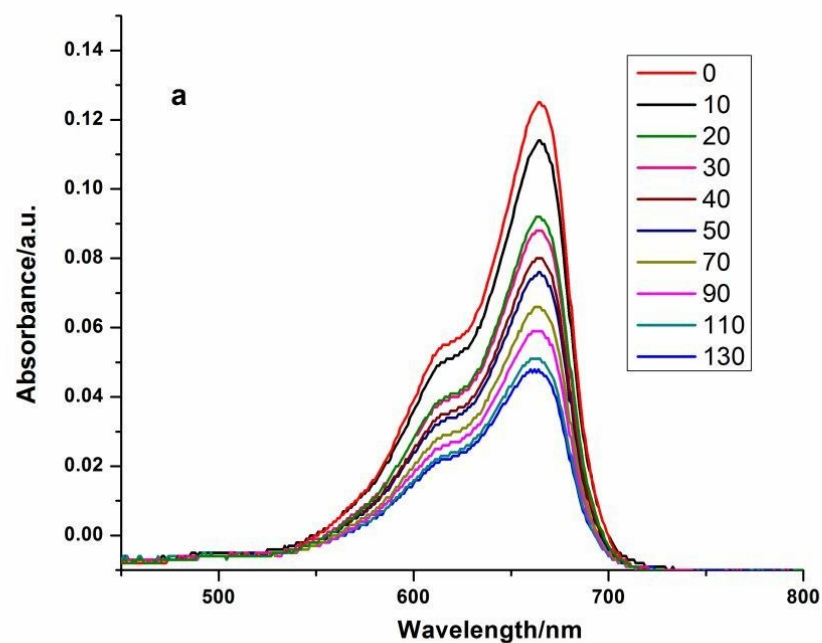


Fig. S4 Absorption spectra recorded for the MB aliquots taken out at the regular intervals from the ITO/CNTF/H-aggregates and ITO/CNTF/J-aggregates photocatalytic dye decoloration systems.

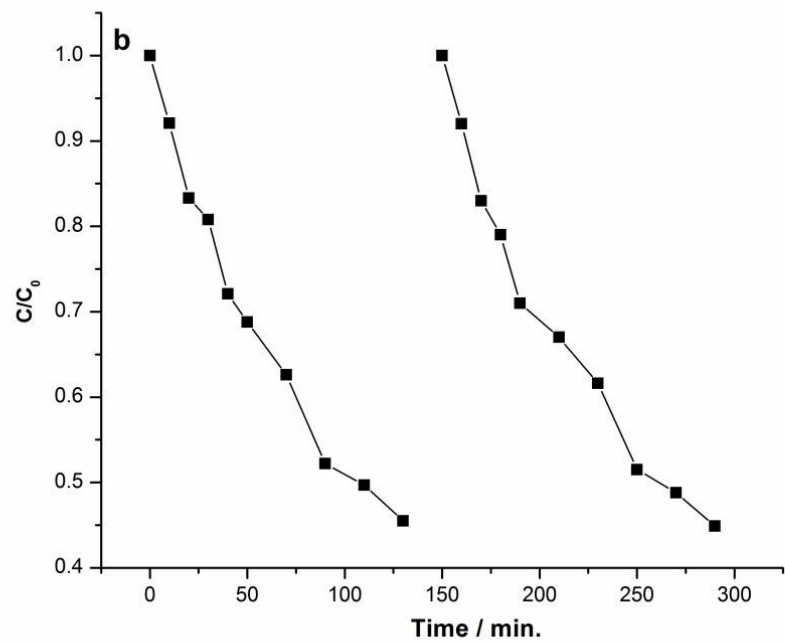
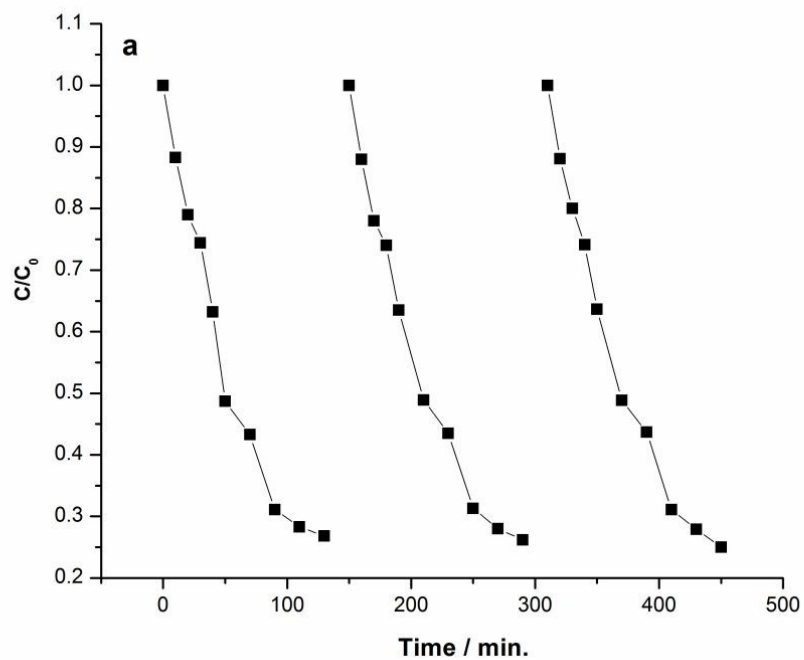


Fig. S5 Results obtained for the recyclability of ITO/CNTF/J-aggregates (a) and ITO/CNTF/H-aggregates (b) for the photocatalytic MB dye decoloration.

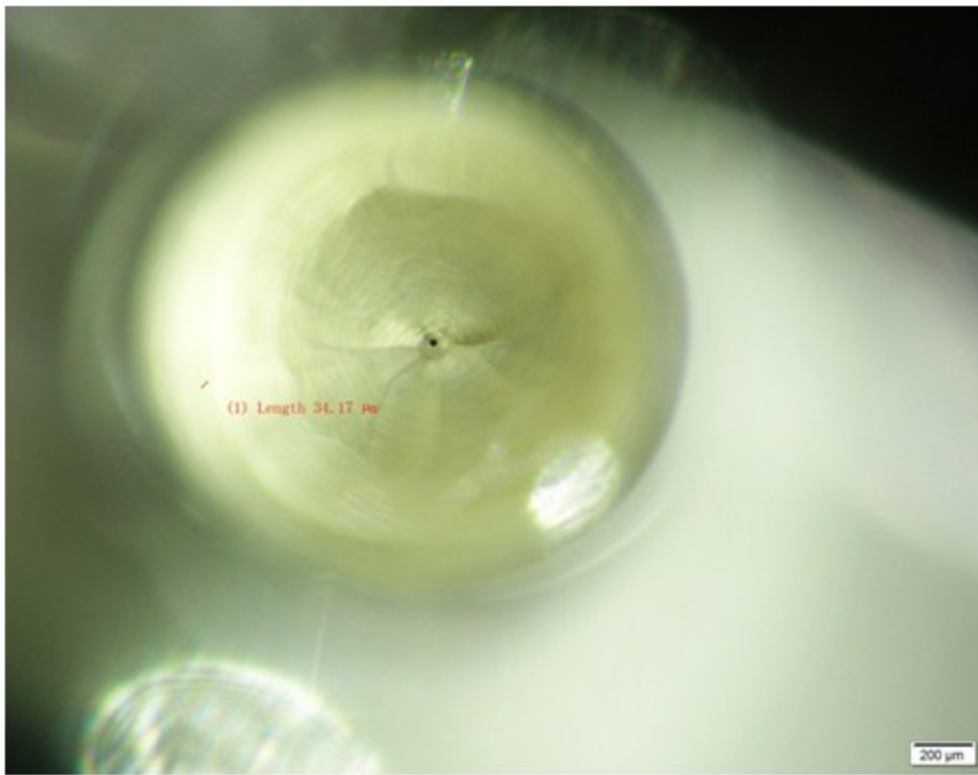


Fig. S6 Optical microscope image of the ultra micro electrode (tip) with an RG value about 3.

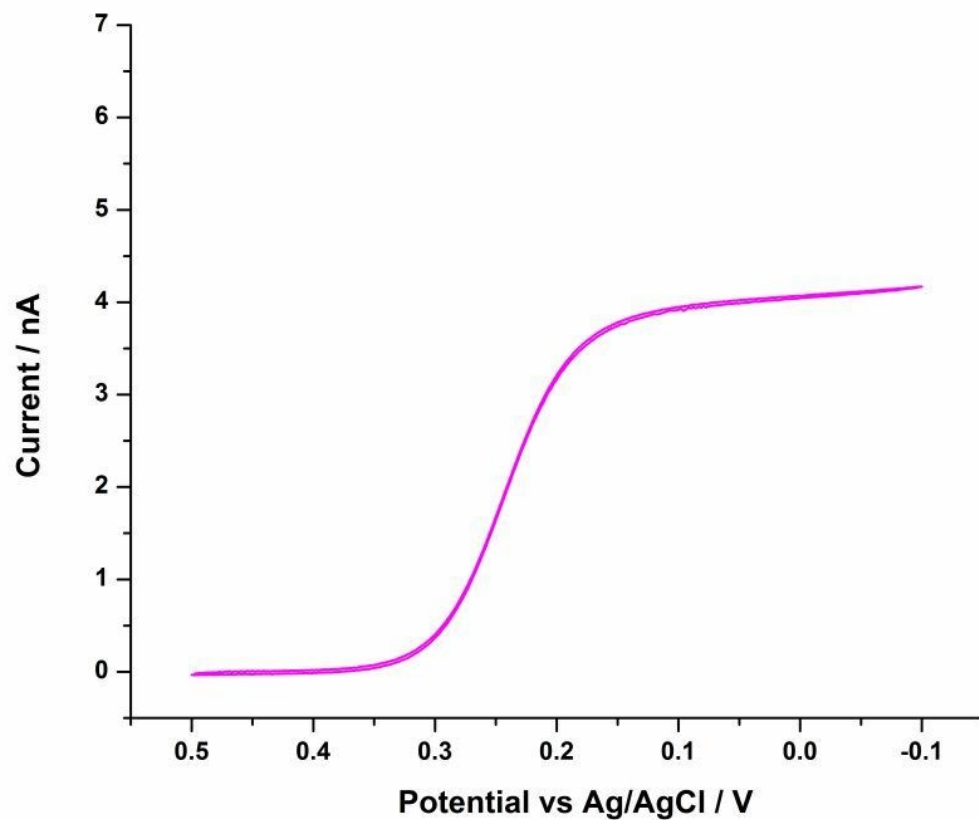


Fig. S7 Sigmoidal shaped CV obtained for the polished tip for an electrolyte 0.1 M KCl containing 1 mM $K_3[Fe(CN)_6]$.

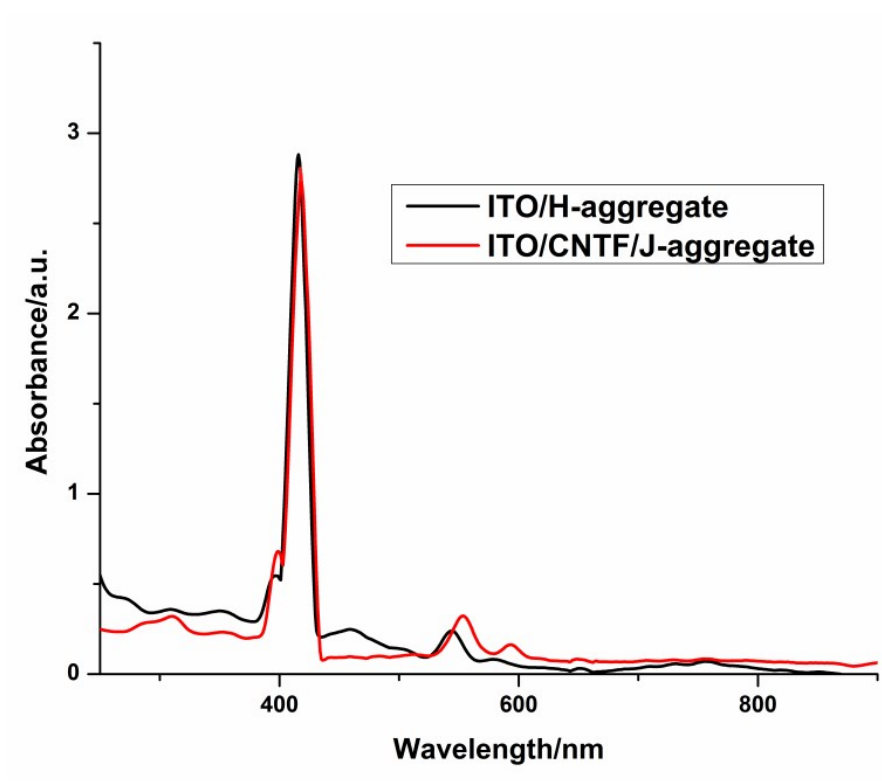


Fig. S8 Electronic spectra measured after dissolving the ZnTPP loaded on the ITO and ITO/CNTF substrates.