



Supplementary Materials

# Electrospun Donor/Acceptor Nanofibers for Efficient Photo-catalytic Hydrogen Evolution

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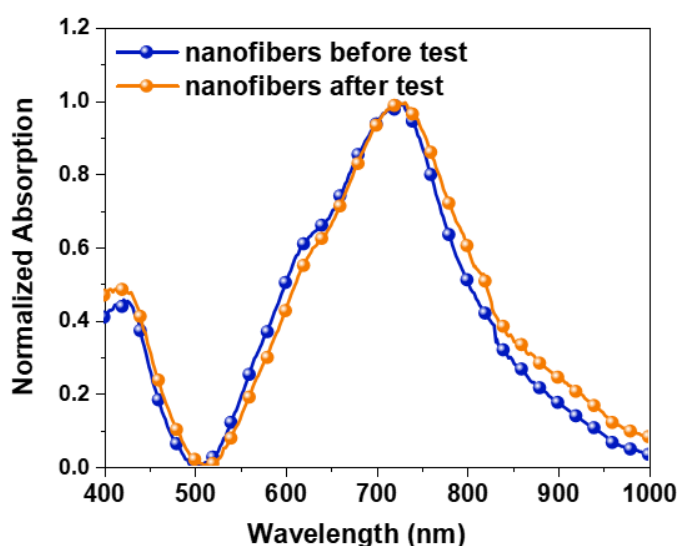
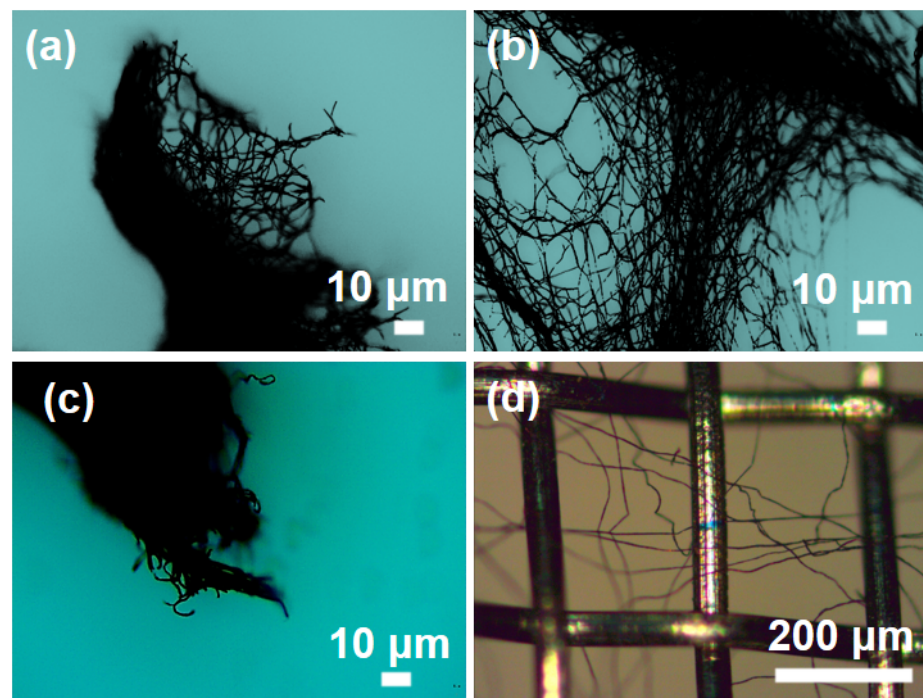
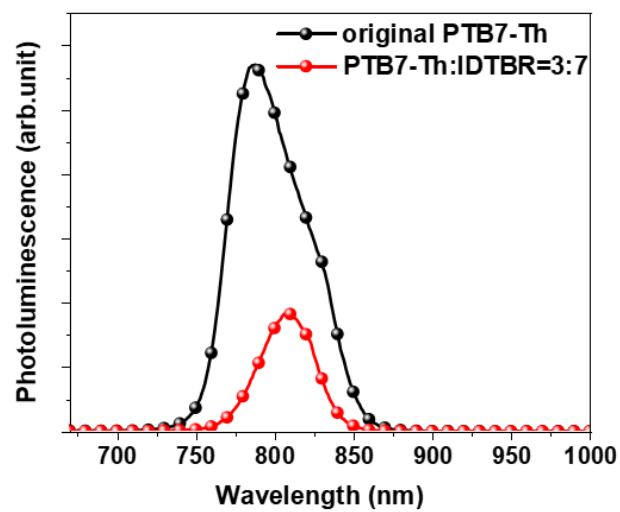


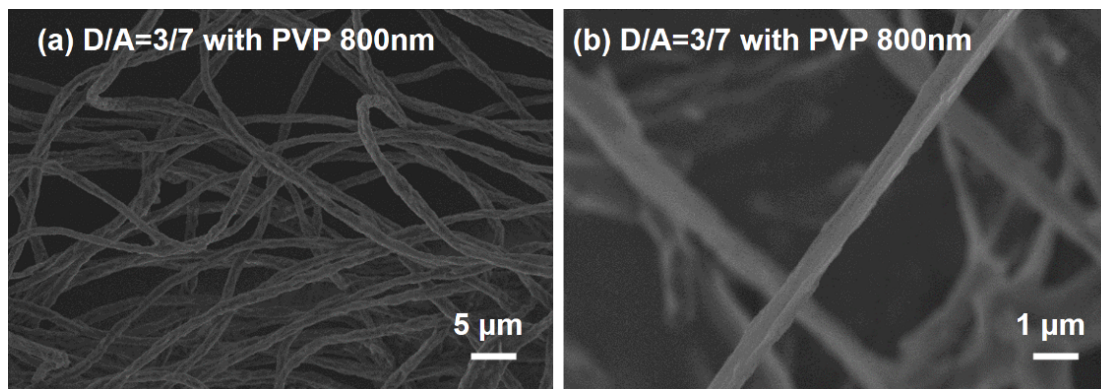
Figure S1. UV-Vis absorption spectra of nanofibers dispersions before and after photocatalysis.



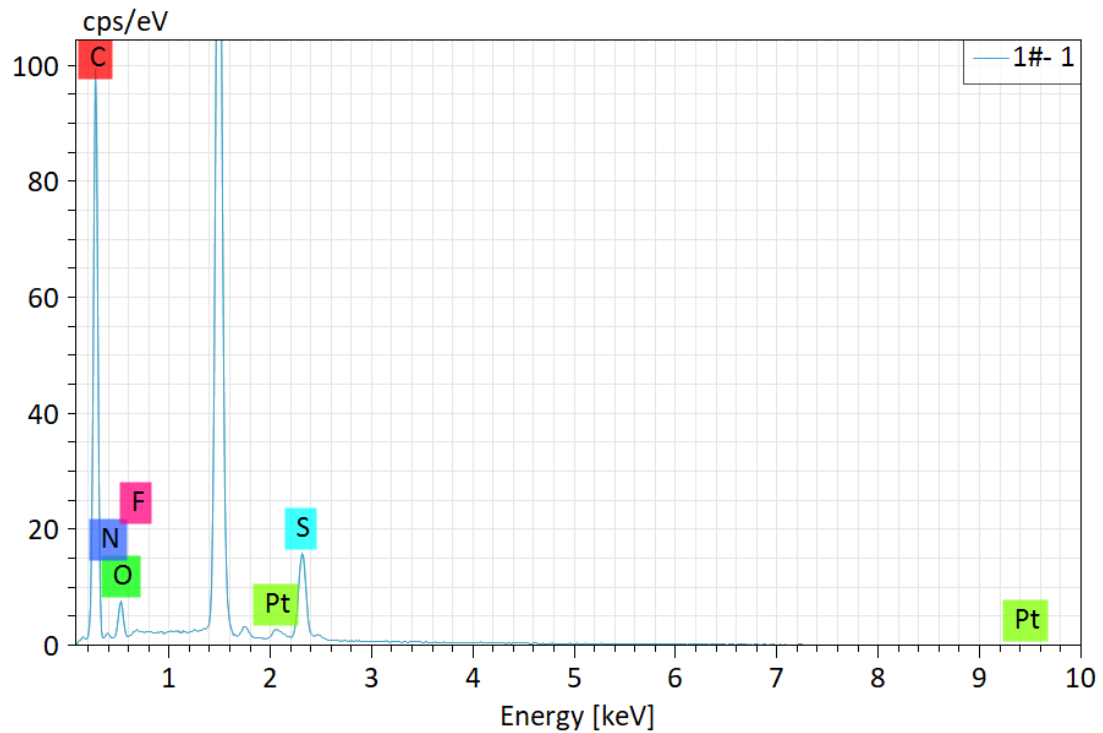
**Figure S2.** Optical microscope picture of nanofibers prepared at a feed rate of (a) 0.08 mm/min (b) 0.10 mm/min, and (c) 0.20 mm/min, (d) 80 mesh stainless steel wire mesh and the fibers prepared at a feed rate of 0.10 mm/min on it.



**Figure S3.** Photoluminescence spectra of original PTB7-Th and nanofibers with D/A=3/7 in water suspension.



**Figure S4.** Typical SEM images of (a) the calcined products of nanofibers prepared from PVP as support material under low magnifications, and (b) representative SEM images under high magnifications.



**Figure S5.** EDS pattern of D/A=3/7 nanofibers (800 nm).

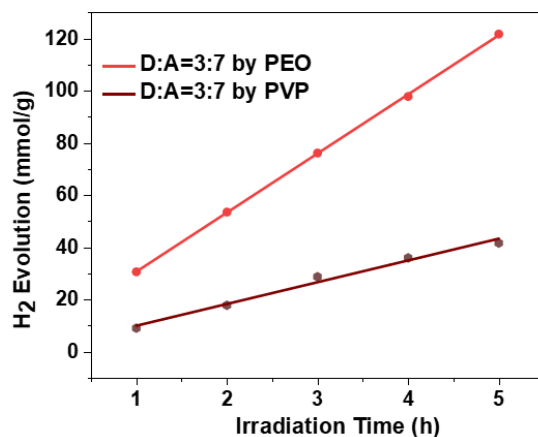


Figure S6. H<sub>2</sub> evolution versus irradiation time of samples with different support materials.

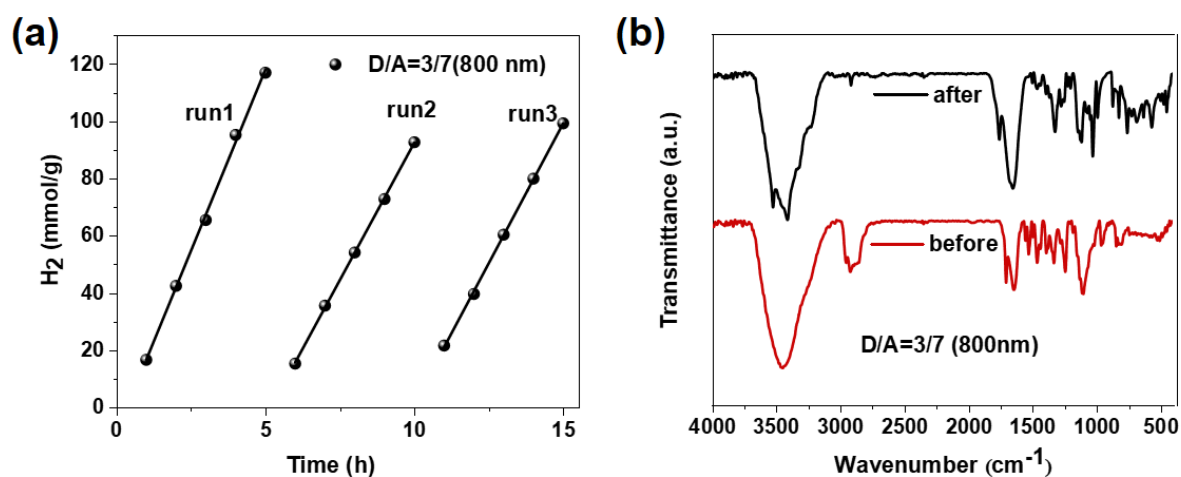
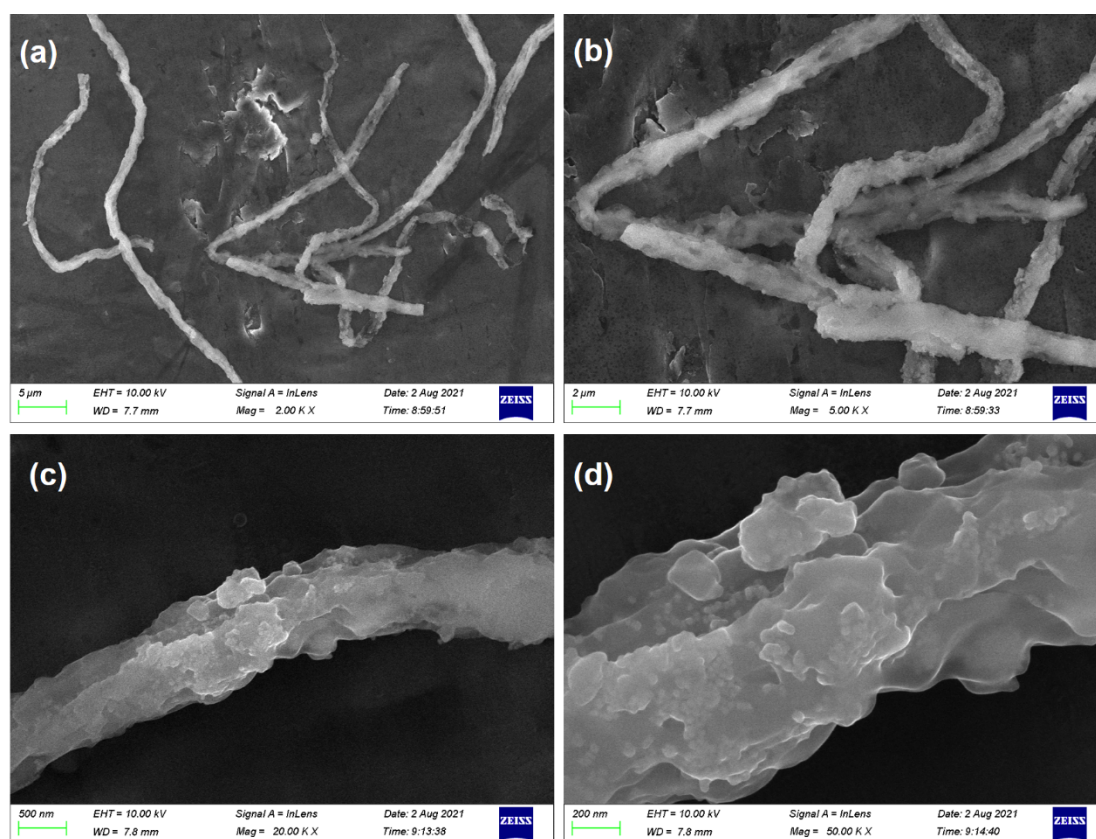


Figure S7. (a) Hydrogen evolution of D/A nanofibers with over long-time illumination. Average HERs of 23.42 mmol/(gh) for Run 1, 18.55 mmol/(gh) for Run 2, 19.88 mmol/(gh) for Run 3. (b) Transmission FT-IR spectra of nanofibers before and after photocatalysis.



**Figure S8.** SEM images of the fibers with an average diameter of about 800 nm and donor/acceptor = 3/7 after reaction.