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Supporting Information

Self-constructed Side-by-Side Nanofiber Photocatalyst via Opposite Charged Electrospinning and its Photocatalytic Degradation of Rhodamine B

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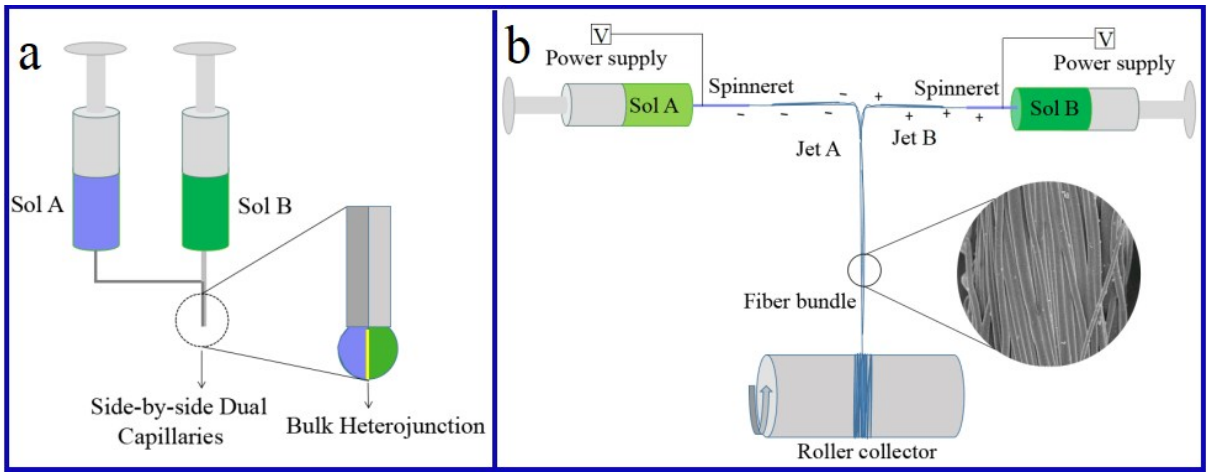

Fig. S1. The schematic diagram illustrating the bulk heterojunction was formed by the side-by-sid e dual capillaries with two distinct polymer precursors (a) and side-by-side bundles were formed by experimental setup without using the metal sheet at the tip of the spinneret (b).

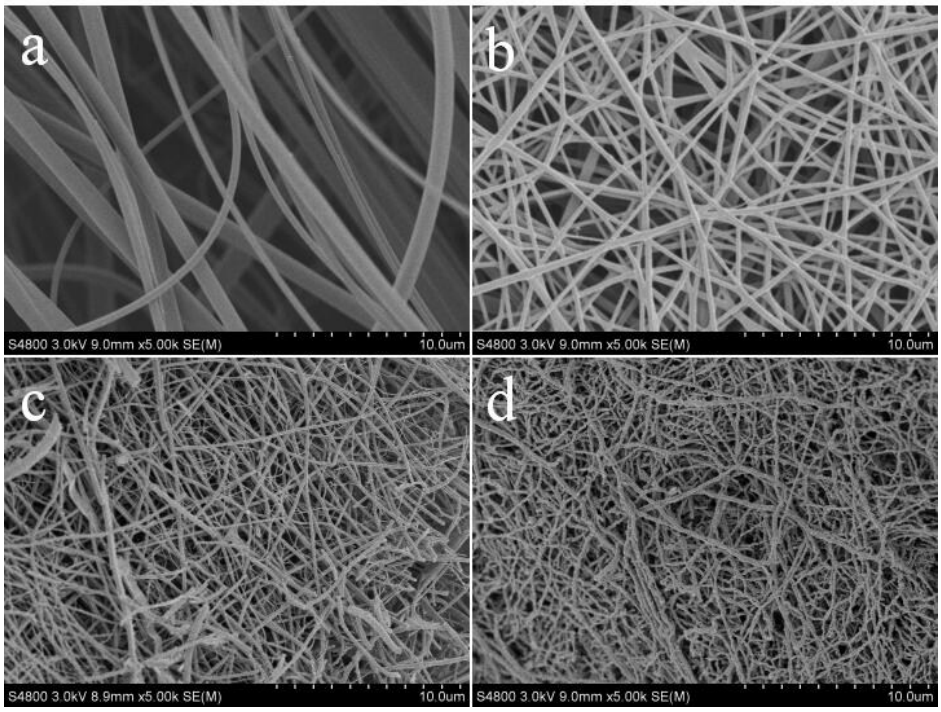

Fig. S2. (a,b) Morphology of electrospun single PVP/Co acetate and PVP/TBT fibres; (c, d) Morphology of electrospun single TiO_2 and Co_3O_4 fibres by SEM.

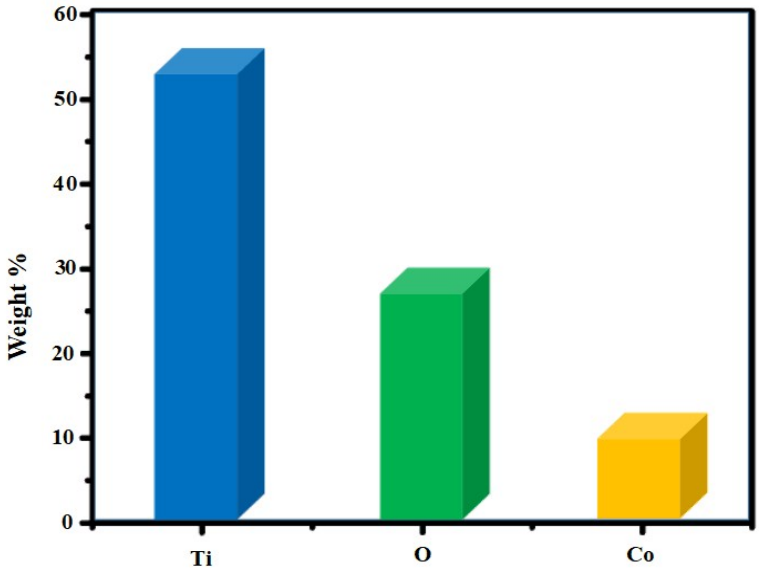

Fig. S3. EDS spectrum and the compositional analysis of TiO_2-CoO heterostructure.

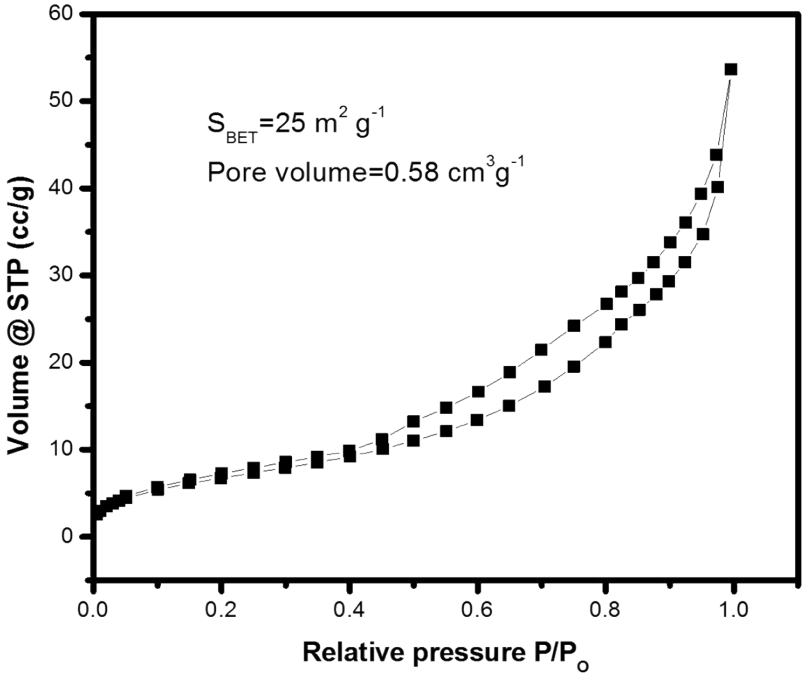

Fig. S4. Nitrogen adsorption desorption isotherms of the prepared photocatalysts TiO_2-CoO.Com ponent fibres were made scores of particles around a few tens of nanometers in diameter.

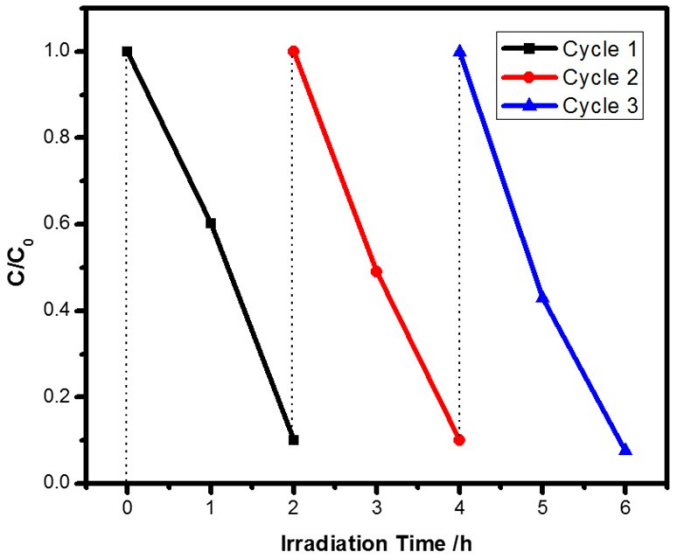

Fig. S5. Relative dye concentration versus light exposure time for three consecutive cycles of op eration for TiO_2-CoO SBS fibres.

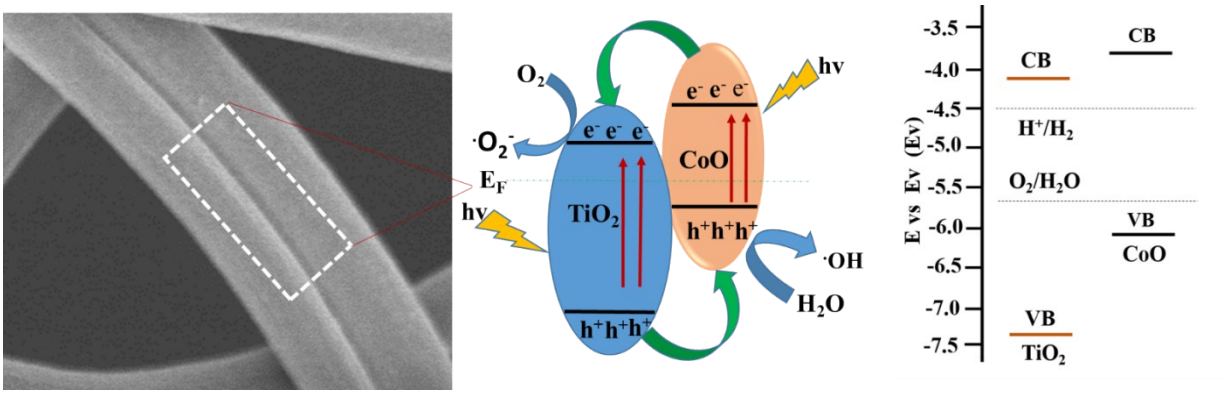

Fig. S6. Charge separation process of TiO_2-CoO side by side fibres under the light irradiation**.**

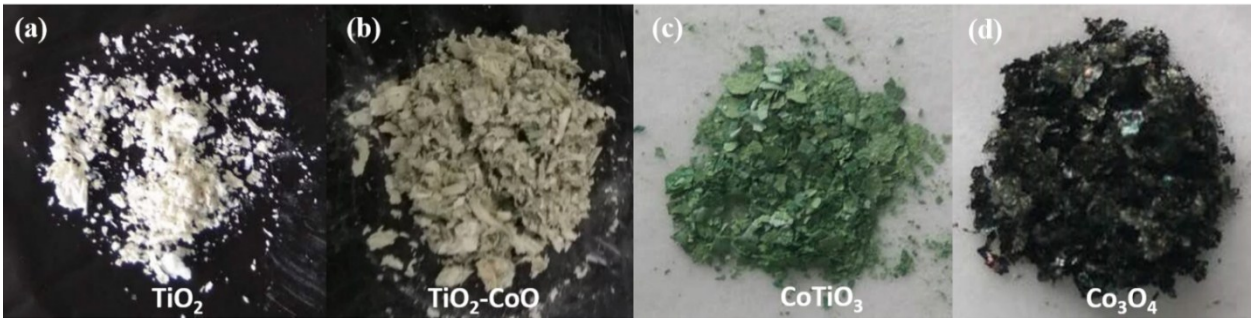

Fig. S7. Images of single TiO_2 fibres, TiO_2-CoO SbS fibres, $CoTiO_3$ single fibres and Co_3O_4 sin gle fibres.

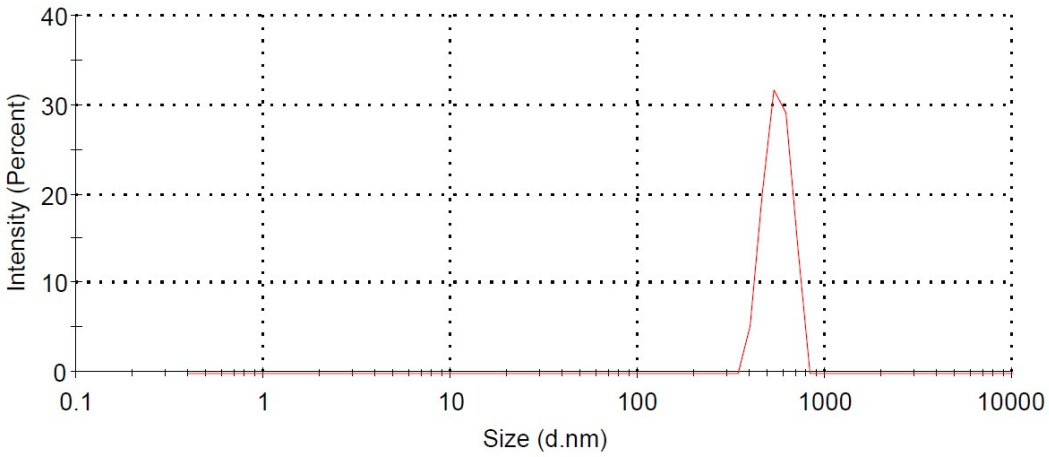

Fig. S8. The average thickness and thickness distribution of SBS electrospun nanofibres by DLS (Dynamic light scattering).

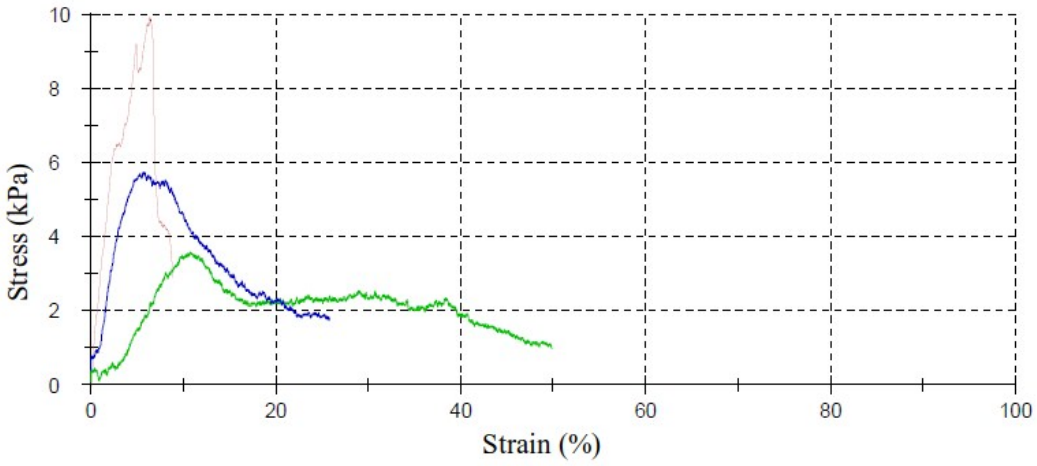

Fig. S9. Tensile properties of the electrospun SBS nanofibres mat with different thickness.