Supporting Information

Visible light active photocatalysis on block copolymer induced strings of ZnO nanoparticles doped with carbon

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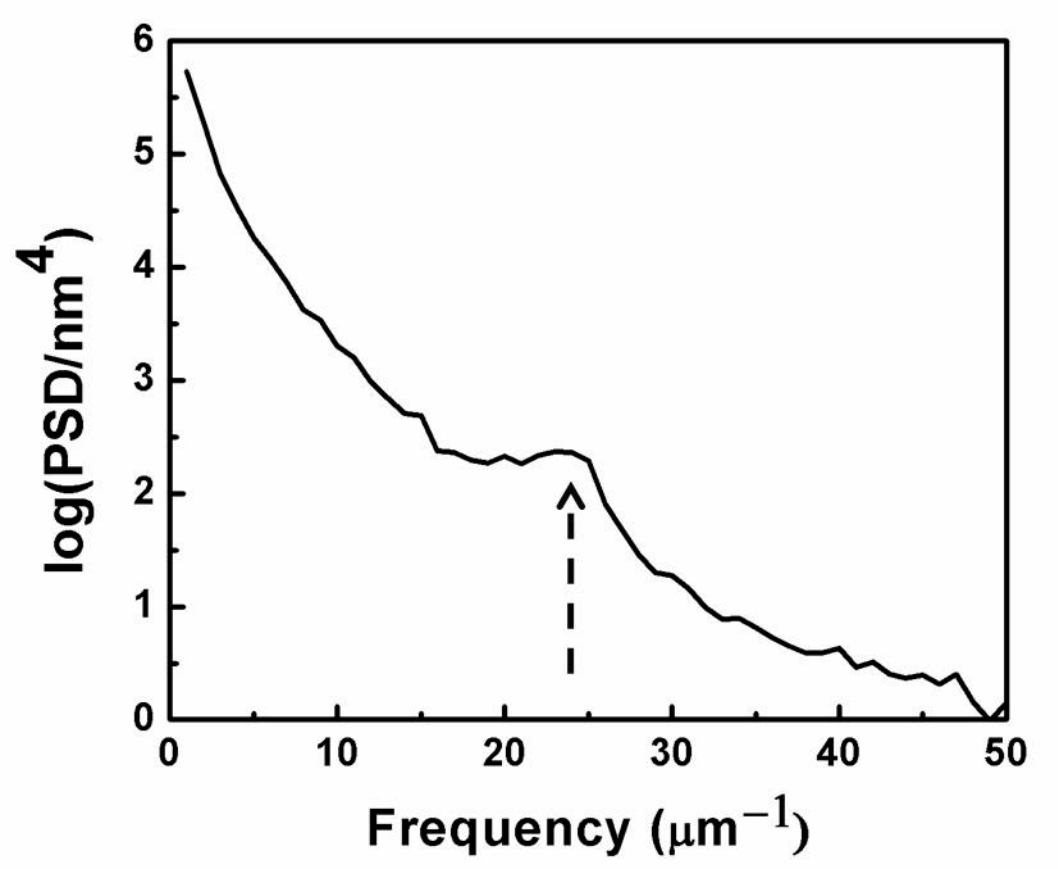

Fig. S1. Power spectral density calculated from the AFM image in figure 1b. The first order peak is distinctly observed, indicating that the nanowires are regularly spaced with a periodicity of ~ 24 nm.

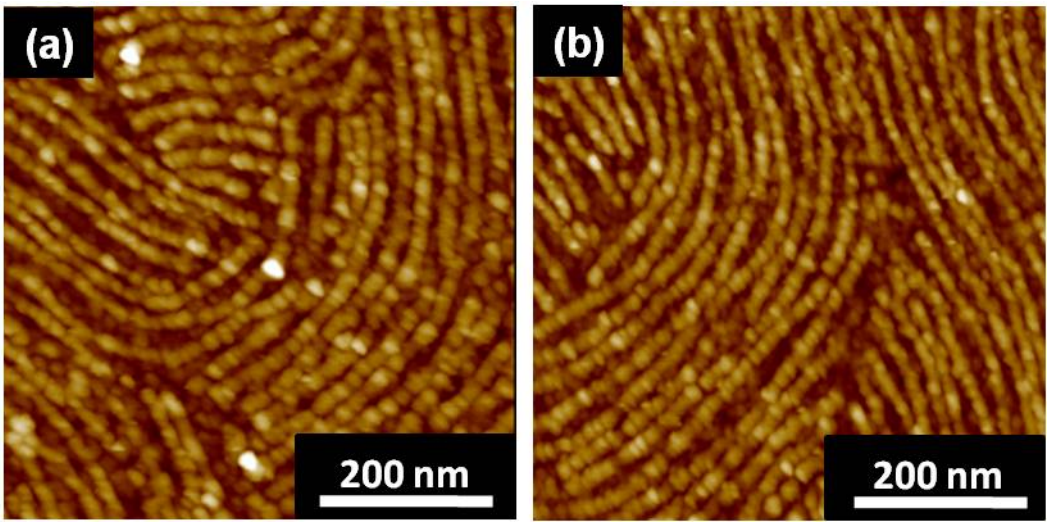

Fig. S2. AFM image of carbonized ZnO film on Quartz (a) and ITO (b). The morphology remains same as that of C-ZnO on Si substrate.

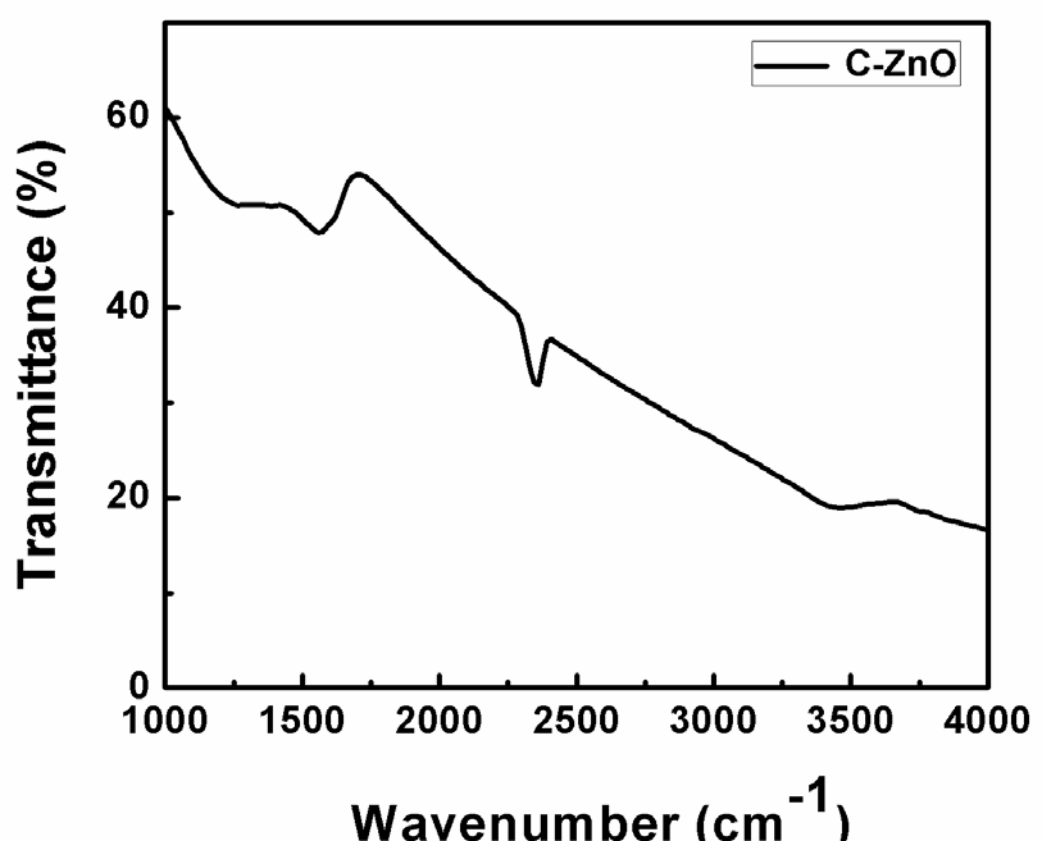

Fig. S3. FTIR profile C-ZnO showing the presence of surface hydroxyl groups at 3500 cm^{-1}.

Fig. S4. Experimental setup for photocatalysis. C-ZnO film on Quartz substrate is suspended in PNP solution in quartz container. The experiment was conducted under stirring and the set up was exposed to light through the flattened window

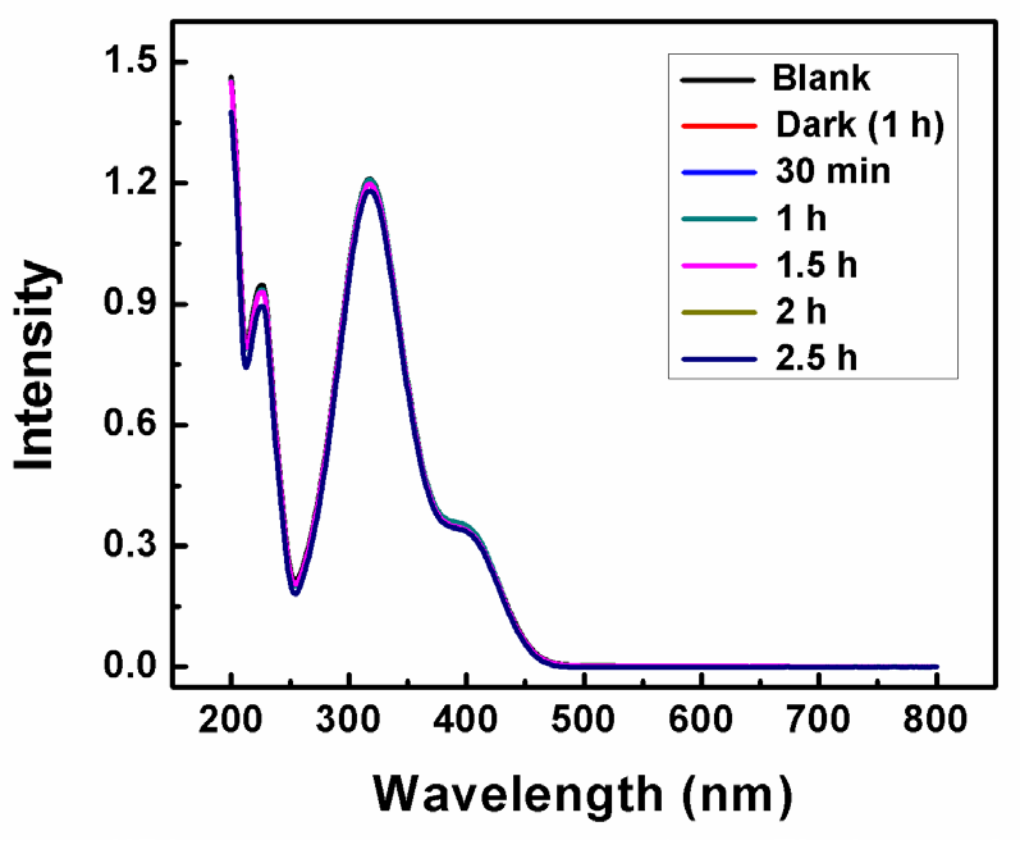

Fig. S5. Absorption profile for the photodegradation of PNP without catalyst.

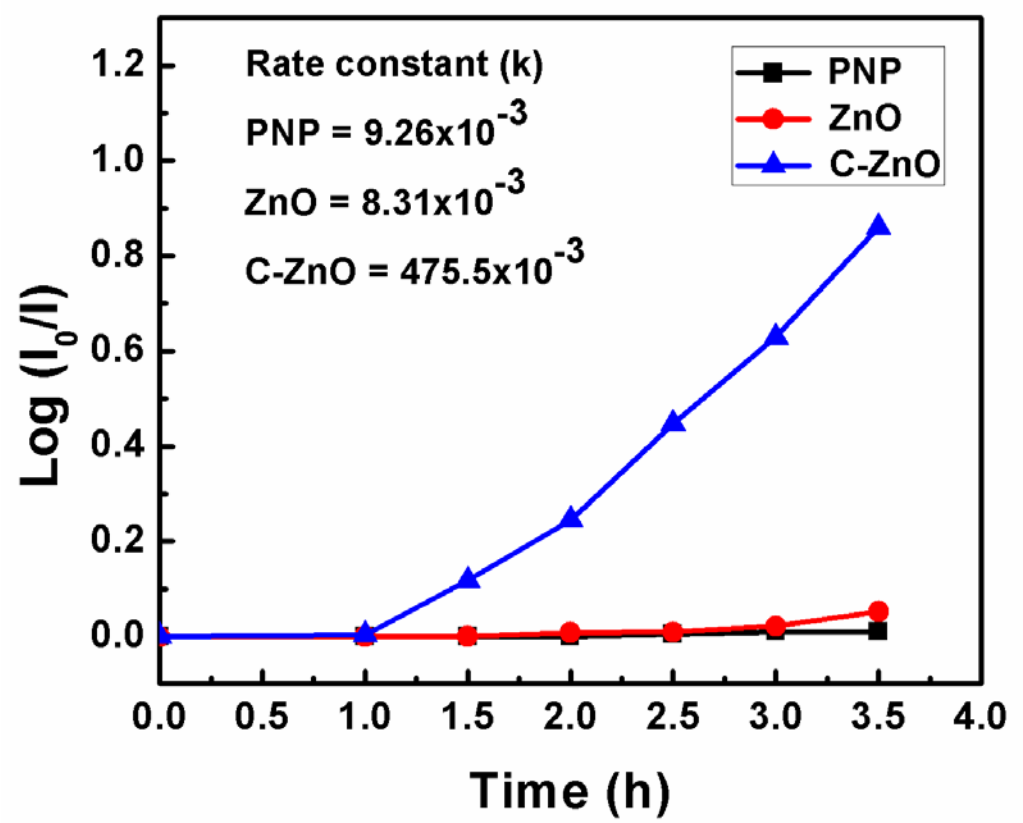

Fig. S6. The plot of log (I_0/I) at 320 nm versus time. The slop of the straight line gives the rate constant of the photocatalytic reaction.