

SUPPORTING INFORMATION

Construction a Fenton system to achieve the in-situ H_2O_2 generation and decomposition for enhanced photocatalytic performance

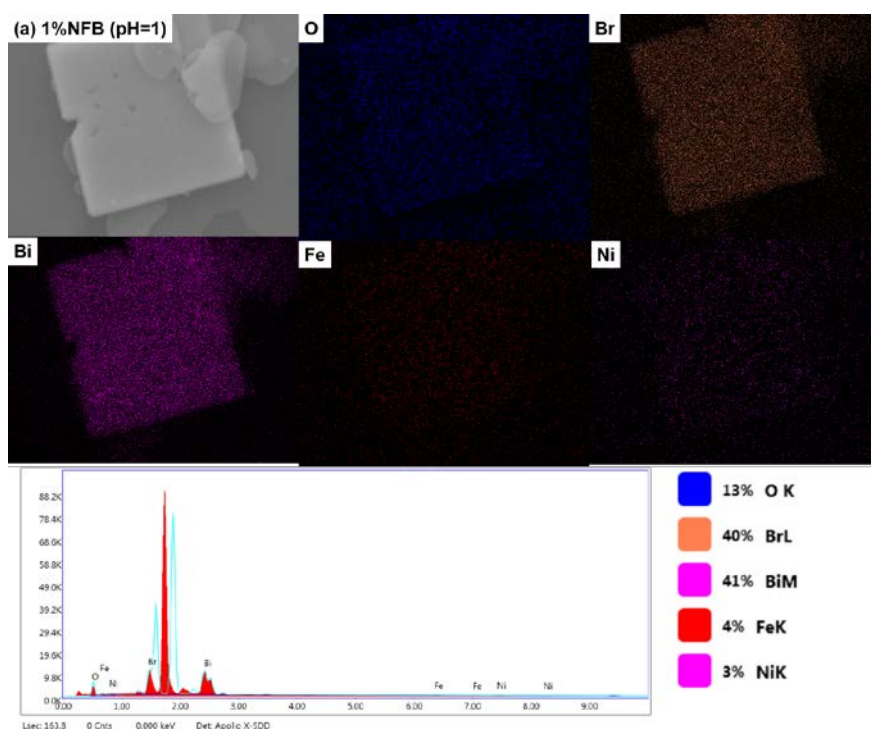
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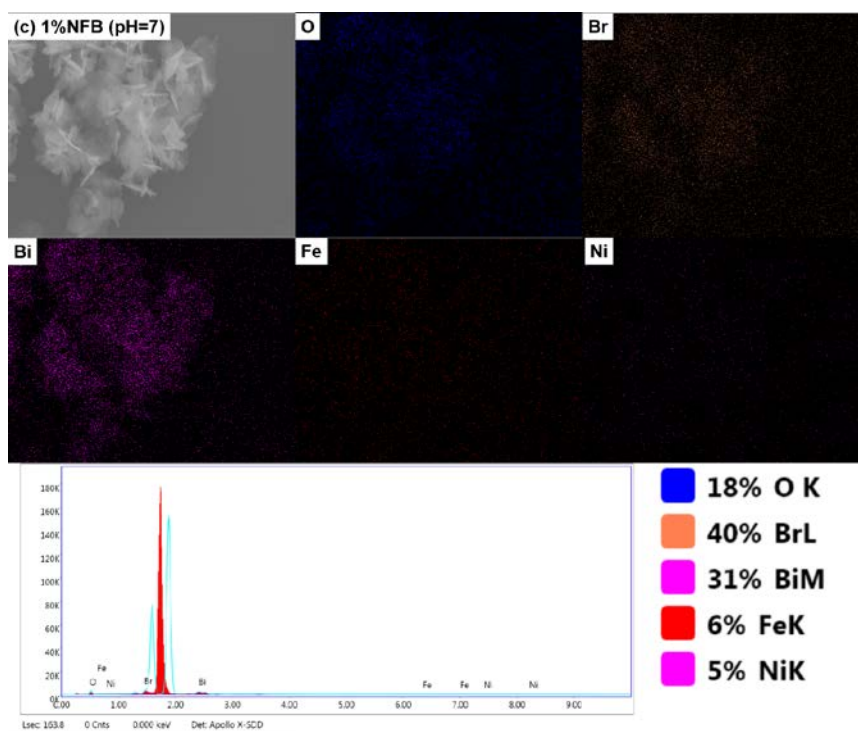
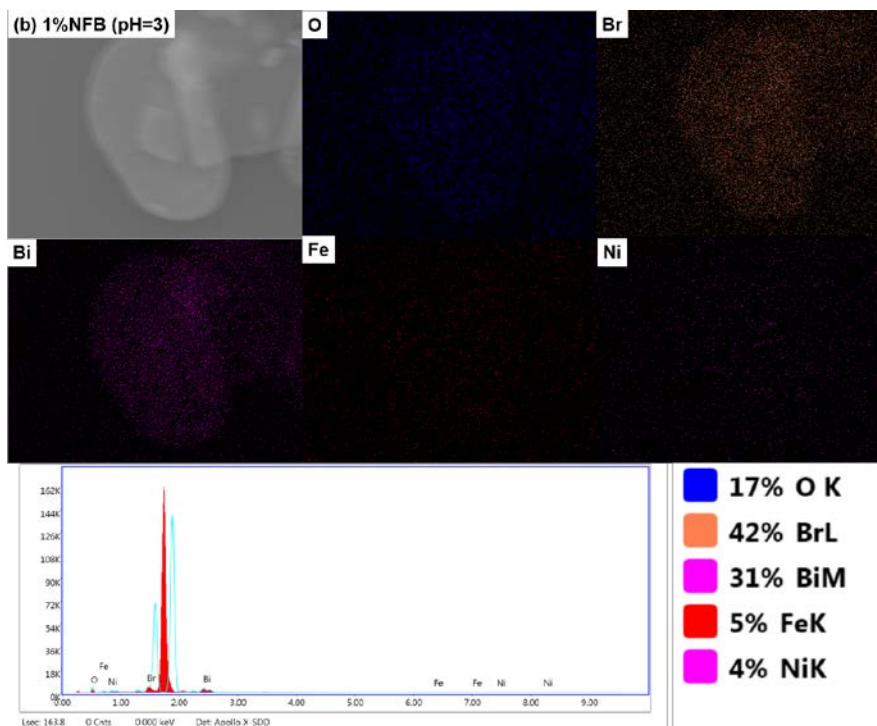


Figure. S1 Mapping and EDS analysis of different samples: (a) 1% NFB (pH=1); (b) 1% NFB (pH=3); (c) 1% NFB (pH=7)

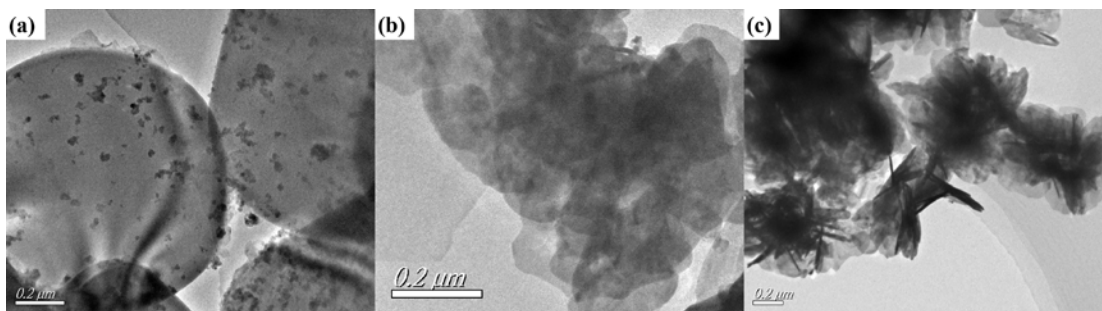


Figure. S2 The TEM images of 1% NFB in pH=1 (a); pH=3 (b); pH=7 (c).

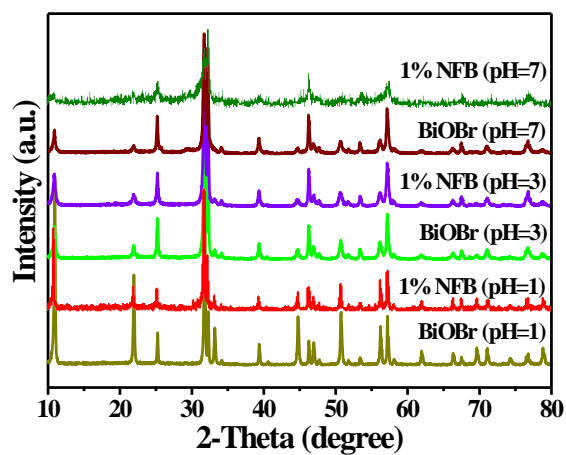


Figure. S3 The XRD patterns of BiOBr and 1% NFB (pH=1, 3 and 7)

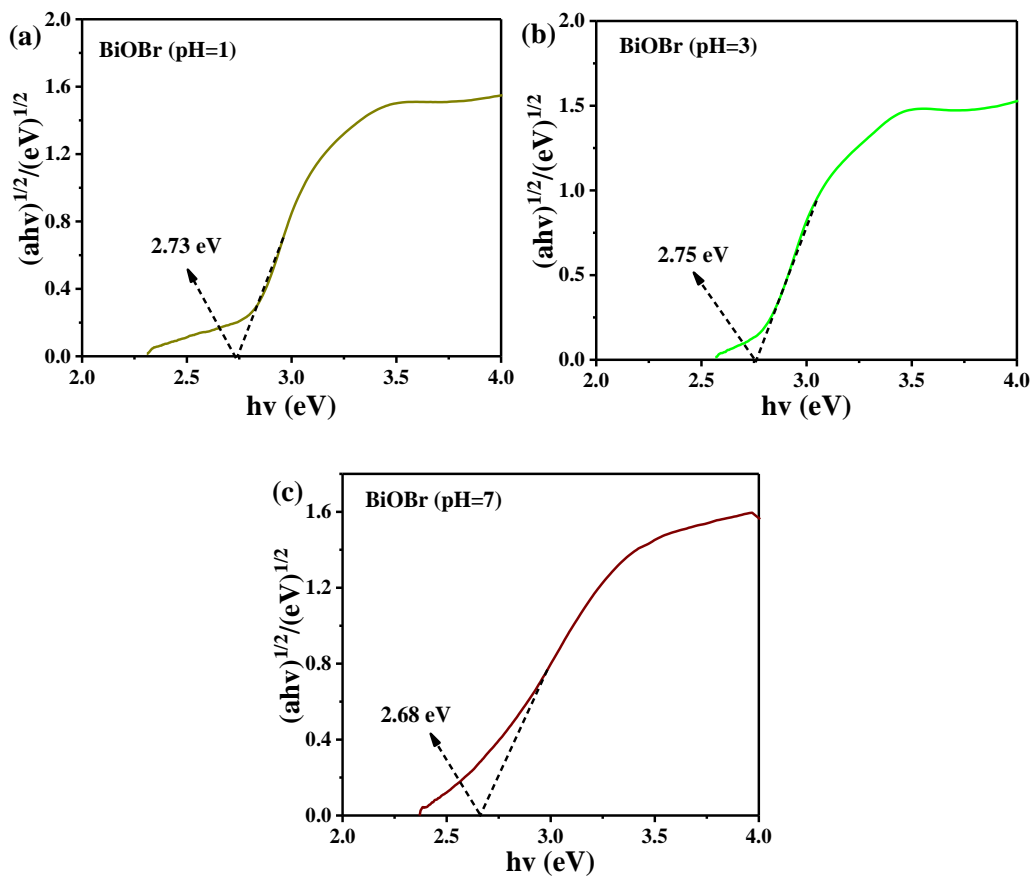


Figure. S4 Plots of $(\alpha h\nu)^{1/2}$ versus $h\nu$ of pure BiOBr with different pH.

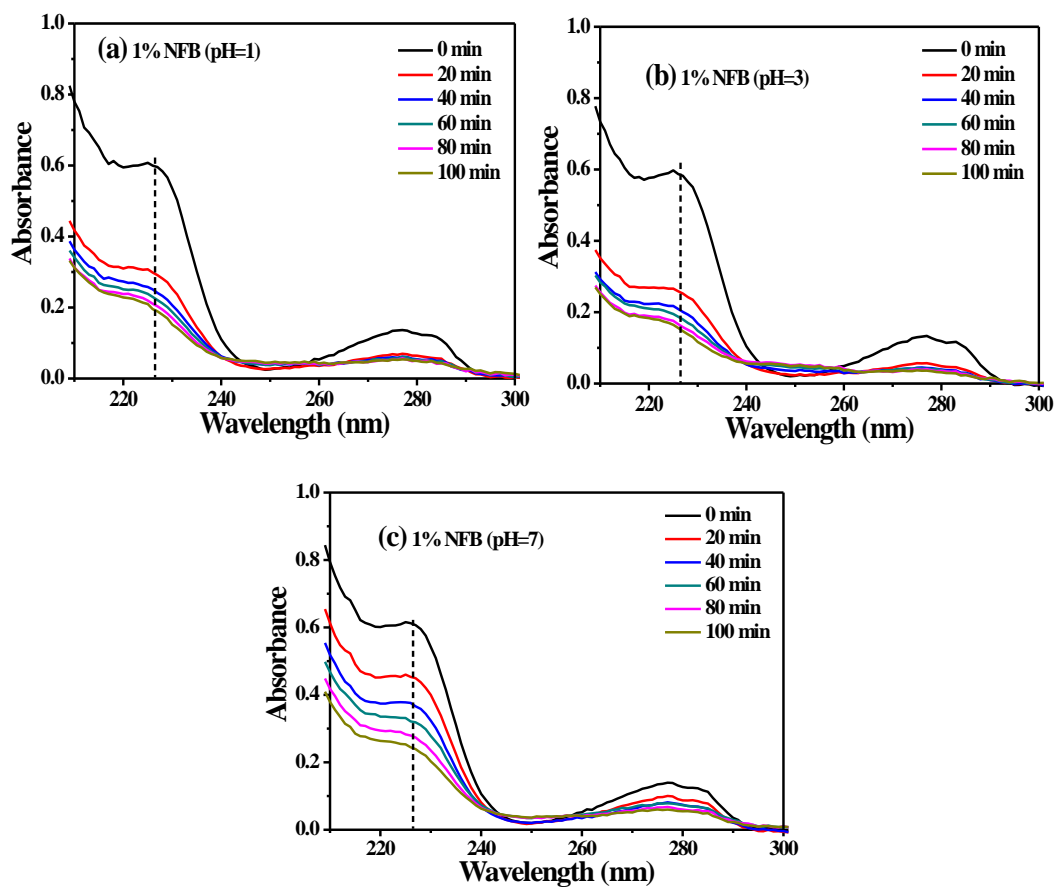


Figure. S5 UV-vis absorption spectra of BPA solution under different reaction time over the 1% NFB (pH=1, 3 and 7) composite materials.

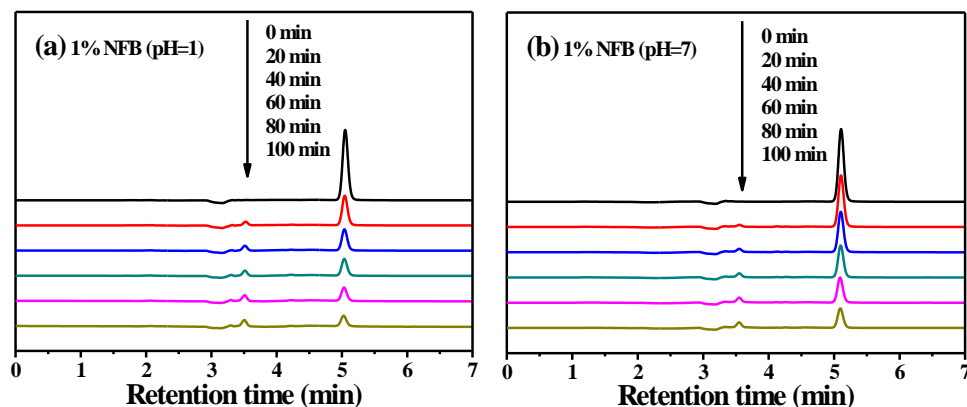


Figure. S6 HPLC chromatograms of the BPA degradation by the 1% NFB (pH=1 and 7) composite materials.

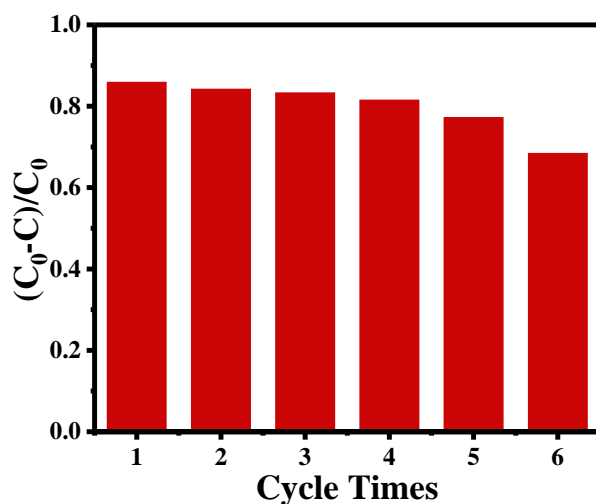


Figure. S7 Cycling runs for the photodegradation of BPA in the presence of 1% NFB (pH=3) composite under visible light irradiation.

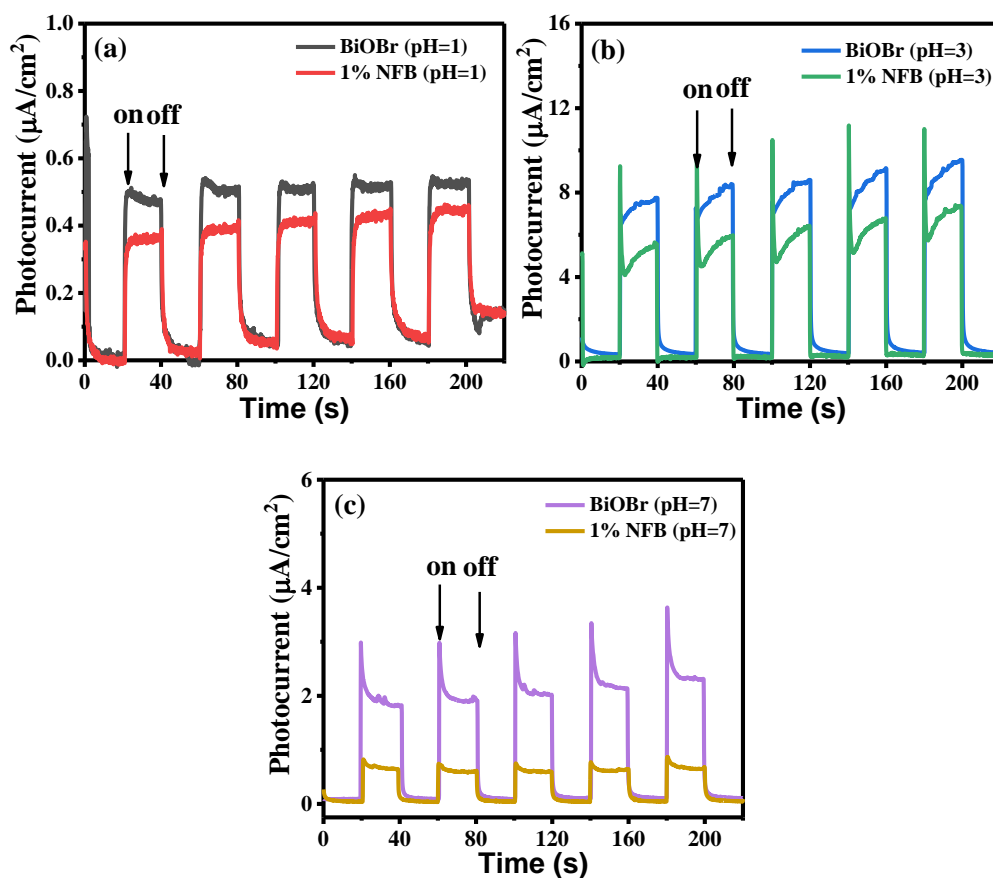


Figure. S8 Transient photocurrent response of the sample electrodes of BiOBr and 1% NFB in pH=1 (a); pH=3 (b) and pH=7 (c).

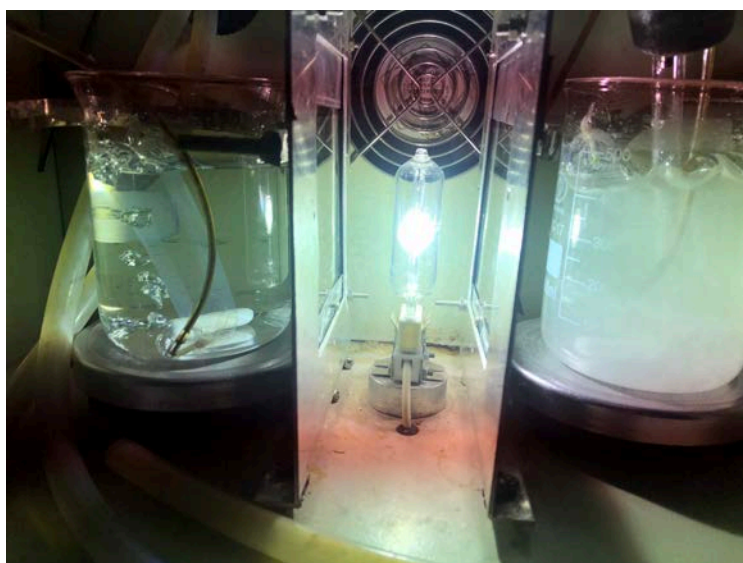


Figure. S9 Schematic illustration of partition system setup used in the photocatalytic BPA degradation.

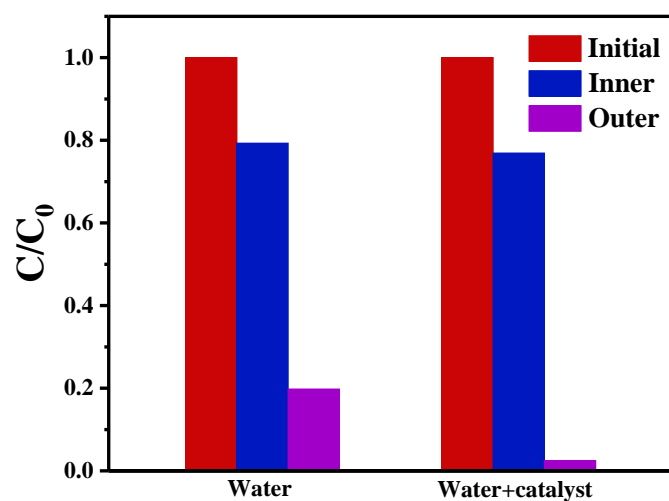


Figure. S10 Concentration of BPA in the inner and outer of the partition system with and without catalyst.