Electronic supplementary information (ESI)

**Fig. S1** Full-scale XPS spectra of pure Bi$_2$O$_3$ and 0.075 wt% Pt/Bi$_2$O$_3$.

**Fig. S2** Cyclic use of 0.075 wt% Pt/Bi$_2$O$_3$ for photocatalytic degradation of RhB.