Supporting Information

In situ synthesis of dual-functional photocatalyst $xBi^0/BiVO_4$ for the selective oxidation of cinnamaldehyde to benzaldehyde under visible light using oxygen

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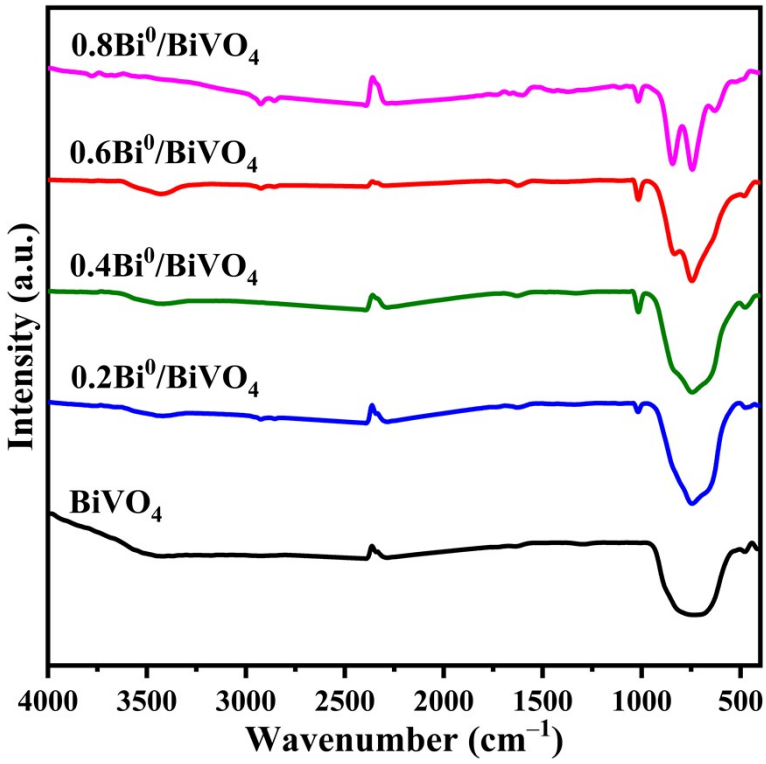

Fig. S1 FT-IR spectra of $BiVO_4$ and$xBi^0/BiVO_4$

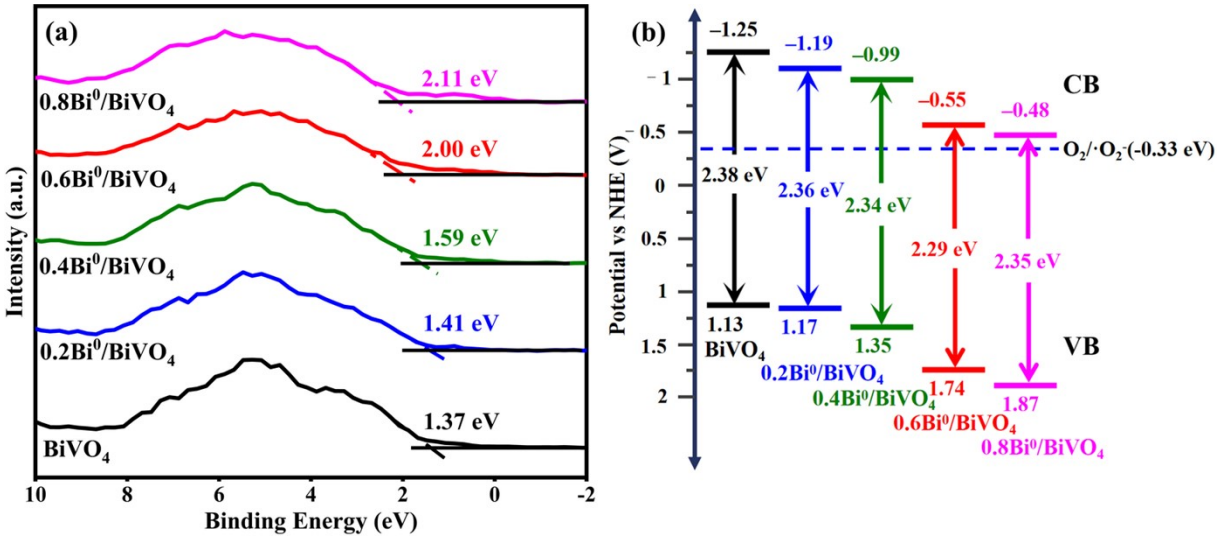

Fig. S2 XPS valence band spectra (a), and energy band alignment (b) of $BiVO_4$, and $xBi^0/BiVO_4$

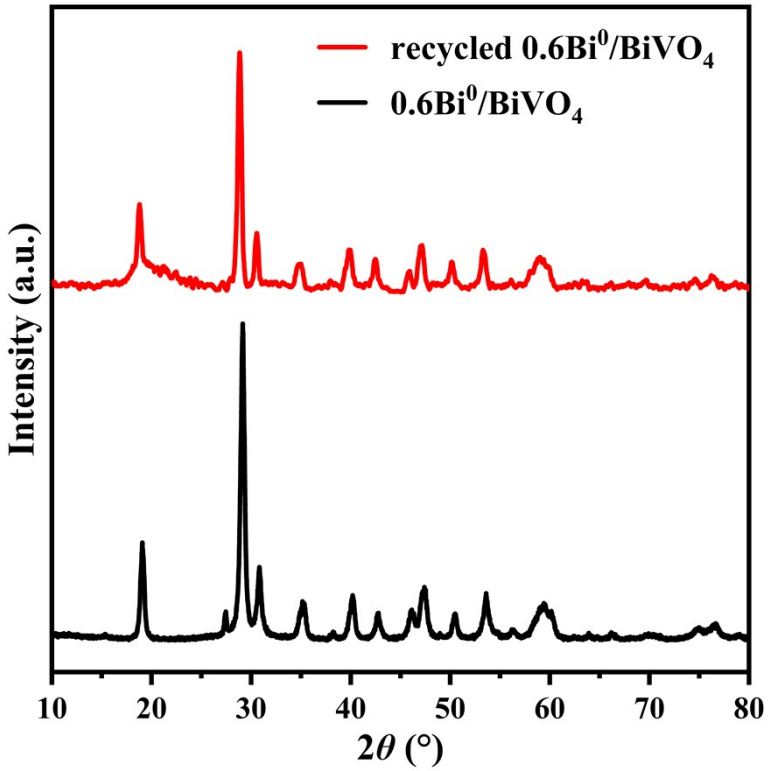

Fig. S3 XRD patterns of $0.6Bi^0/BiVO_4$ before and after reaction

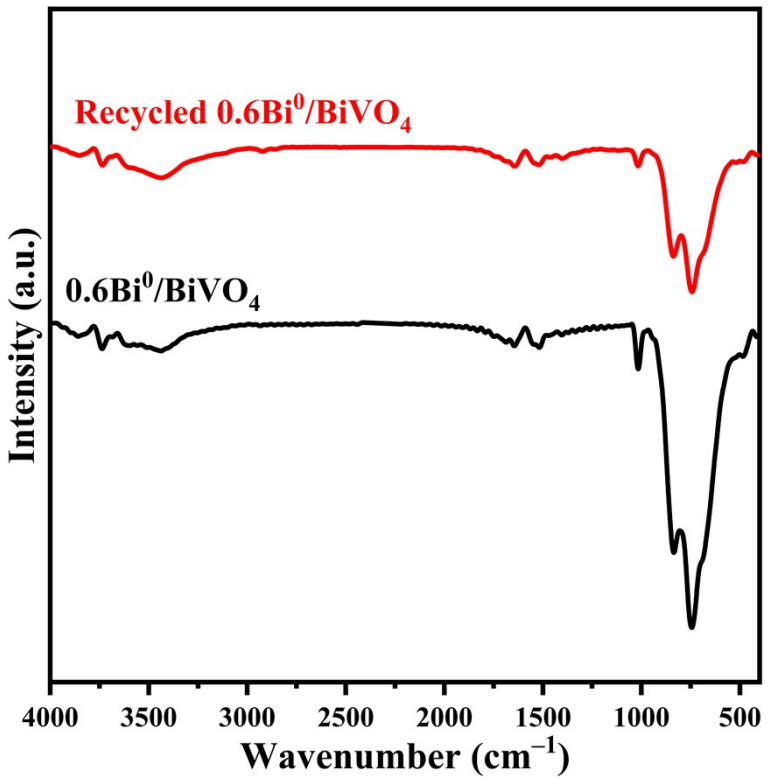

Fig. S4 FT-IR spectra of $0.6Bi^0/BiVO_4$ before and after reaction

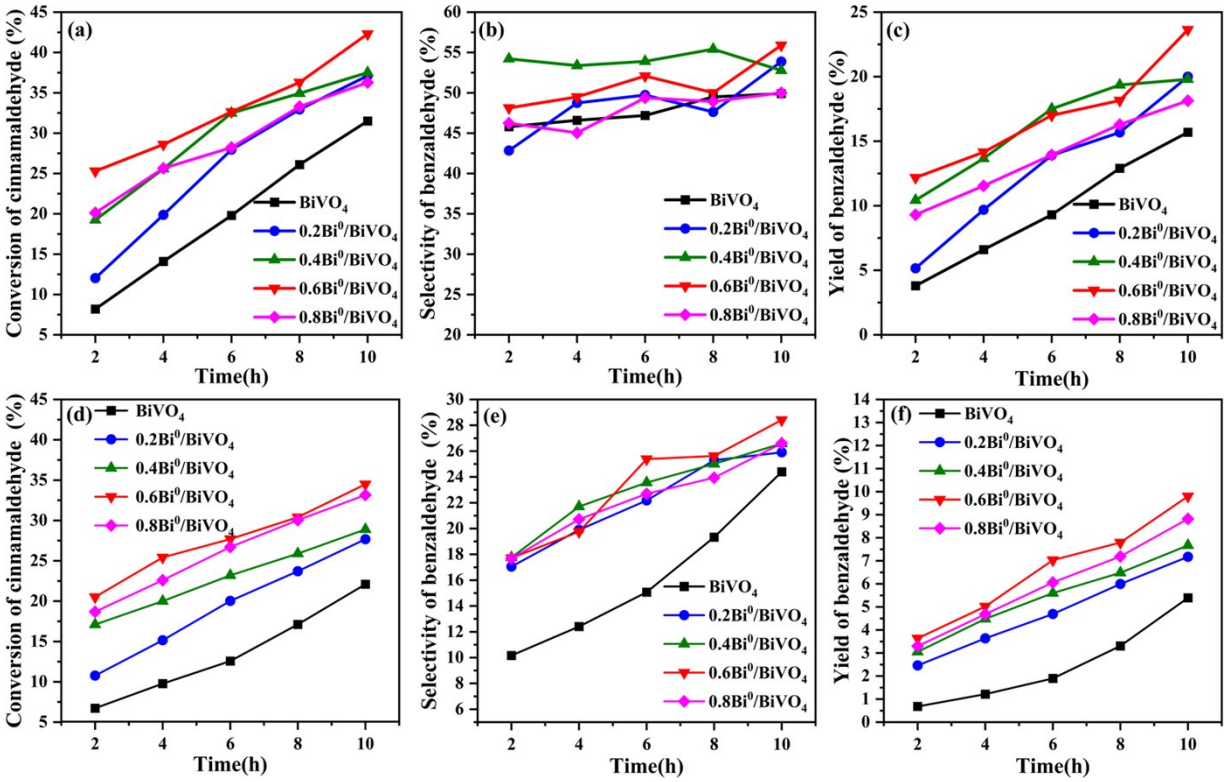

Fig. S5 Conversion of cinnamaldehyde (a, d), selectivity of benzaldehyde (b, e), and yield of benzaldehyde (c, f) for $BiVO_4$ and $xBi^0/BiVO_4$-catalyzed oxidation with *p*-benzoquinone (a–c) and furfuryl alcohol (d–f) as quenchers