Electronic Supplementary Material (ESI) for New Journal of Chemistry.

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**Supporting Information** 

## Construction of Bi<sub>2</sub>WO<sub>6</sub>/Bi<sub>4</sub>V<sub>2</sub>O<sub>11</sub> heterojunction for highly efficient visible-light-driven photocatalytic reduction of Cr(VI)

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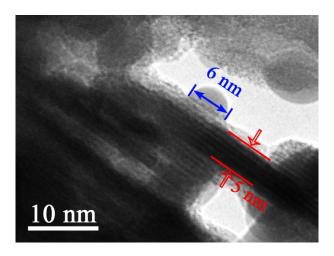


Fig. S1. TEM image of BWV-82 sample.

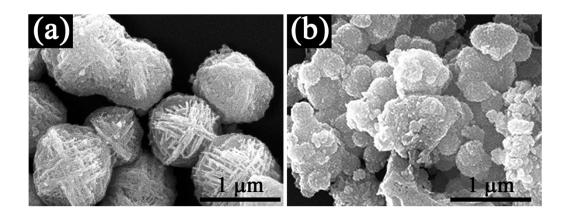


Fig. S2. SEM images of (a) BWV-46 and (b) BWV-64 samples.

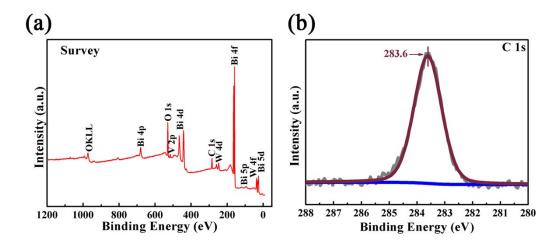
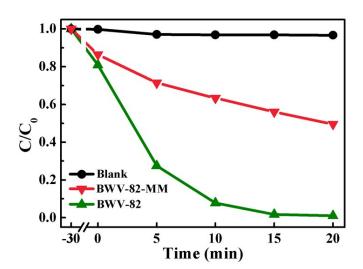
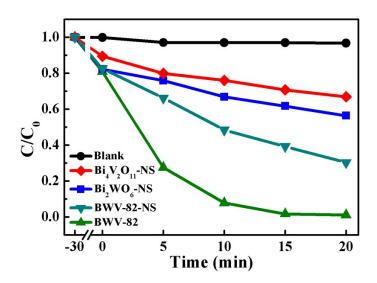


Fig. S3. XPS spectra of BWV-82 sample: (a) survey, (b) C ls.



**Fig. S4.** photocatalytic reduction curves of Cr(VI) aqueous solution over the BWV-82-MM (mechanical mixed sample) and the BWV-82 heterojunction photocatalyst under visible-light irradiation.



**Fig. S5.** photocatalytic reduction curves of Cr(VI) aqueous solution over the BWV-82-NS (without citric acid as a hole scavenger) and the BWV-82 heterojunction photocatalyst (with citric acid) under visible-light irradiation.