

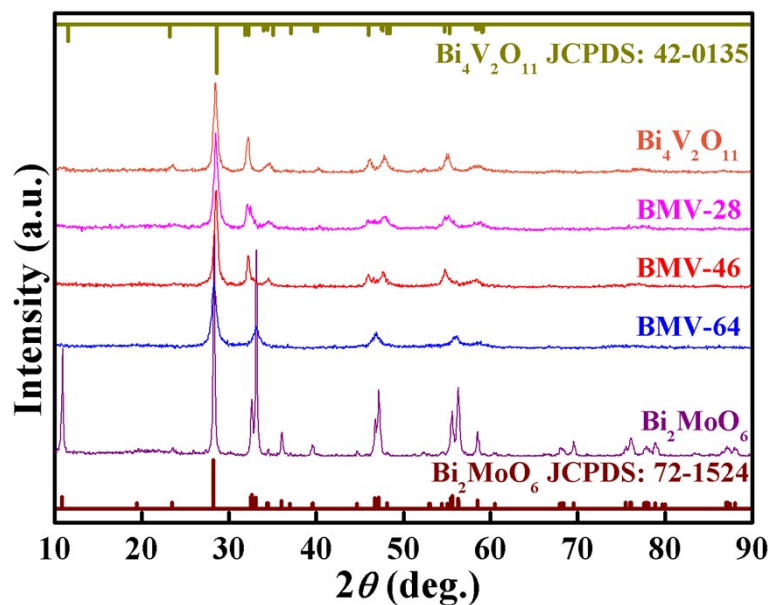
Supporting Information

## Synthesis of $\text{Bi}_2\text{MoO}_6/\text{Bi}_4\text{V}_2\text{O}_{11}$ heterojunction photocatalyst with enhanced visible-light-driven photocatalytic activity

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**Fig. S1.** XRD patterns of pristine  $\text{Bi}_2\text{MoO}_6$ ,  $\text{Bi}_4\text{V}_2\text{O}_{11}$  and BMV-28, BMV-46, BMV-64 composite samples.

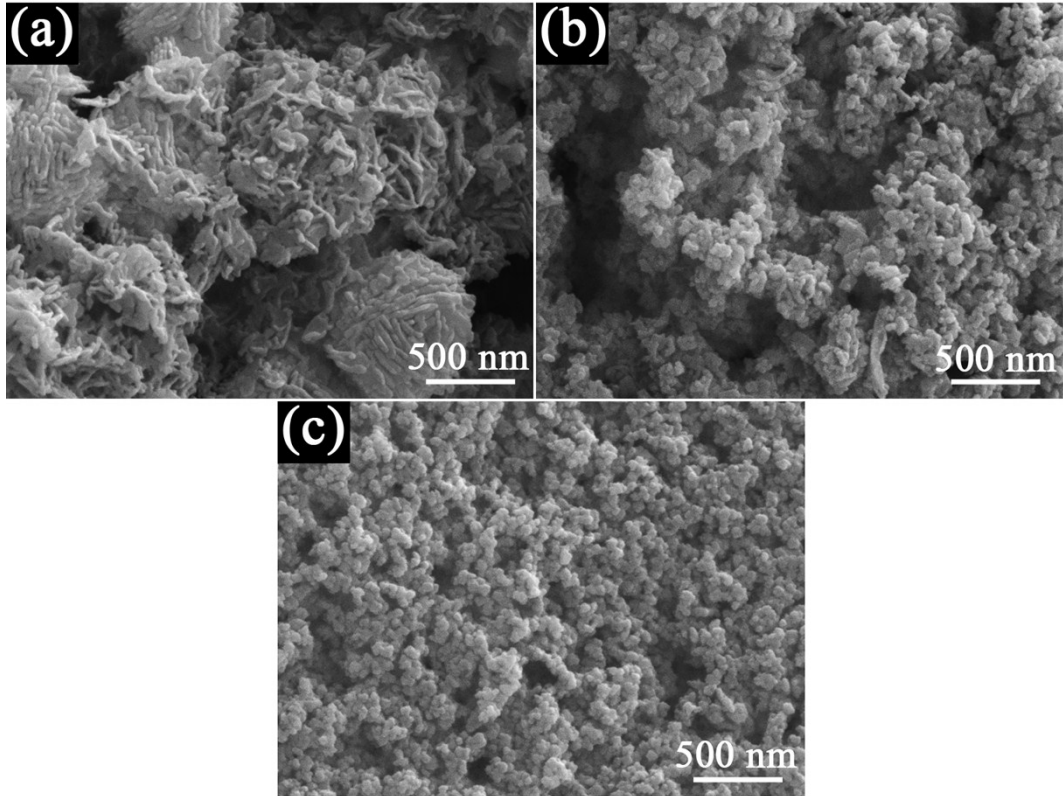


Fig. S2. SEM images of (a) BMV-28, (b) BMV-46 and BMV-64 composite samples.

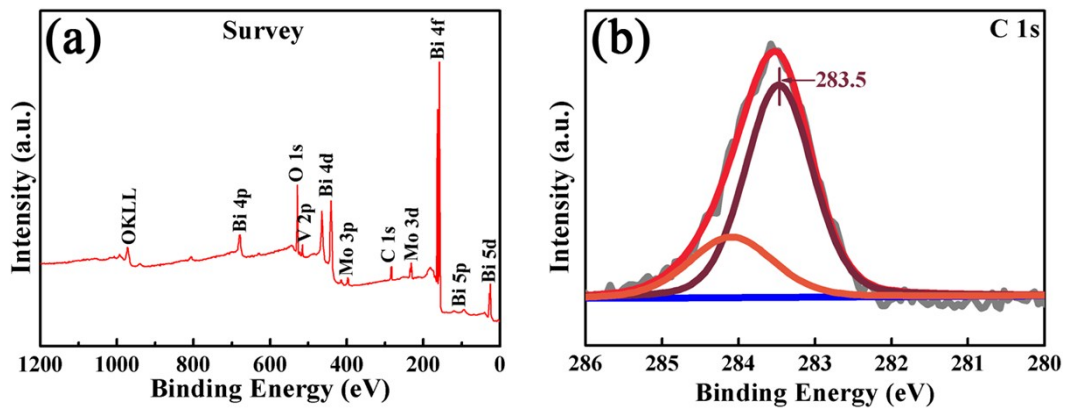
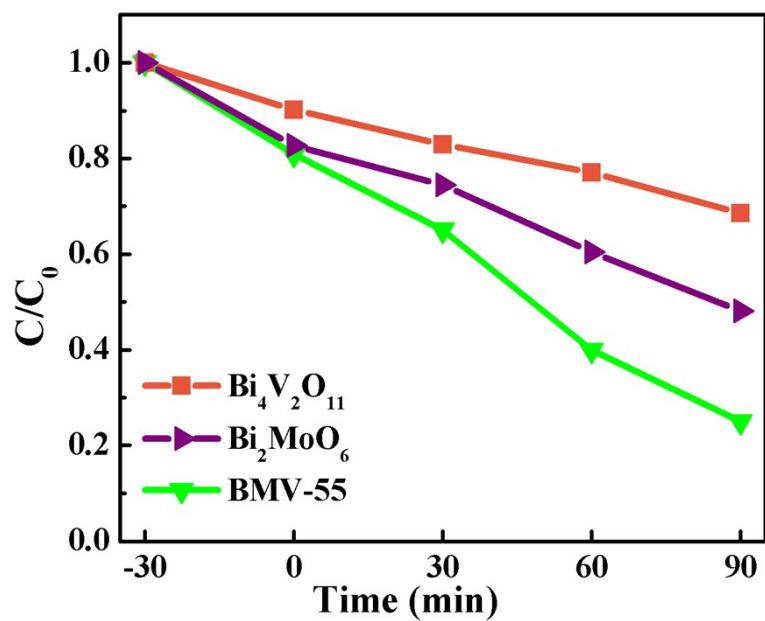
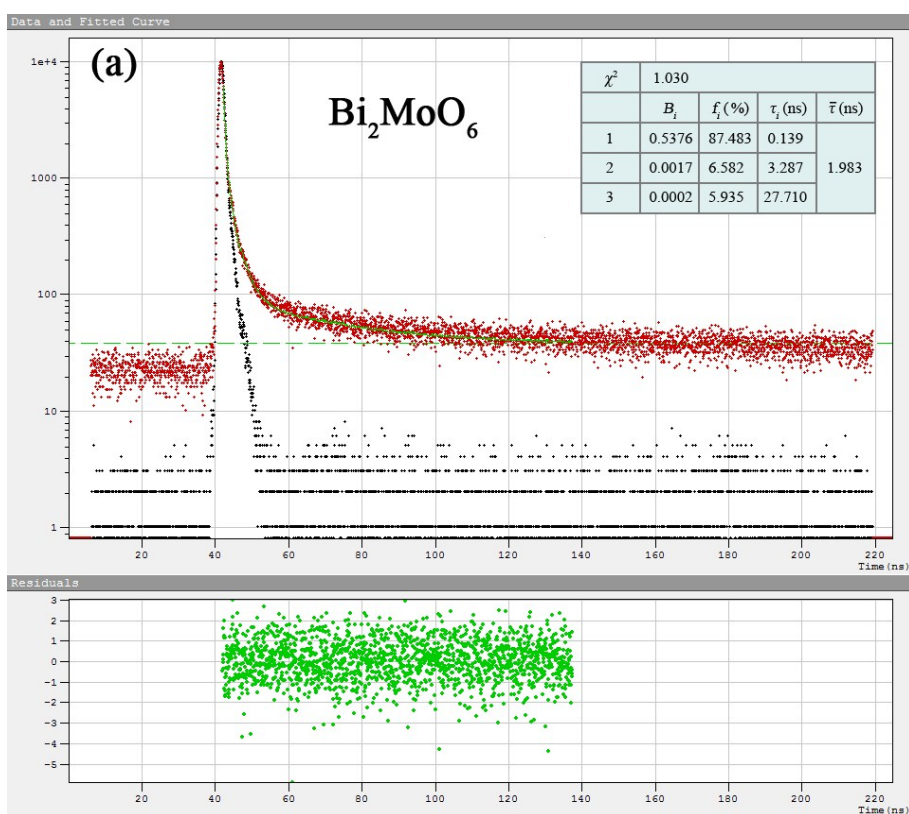
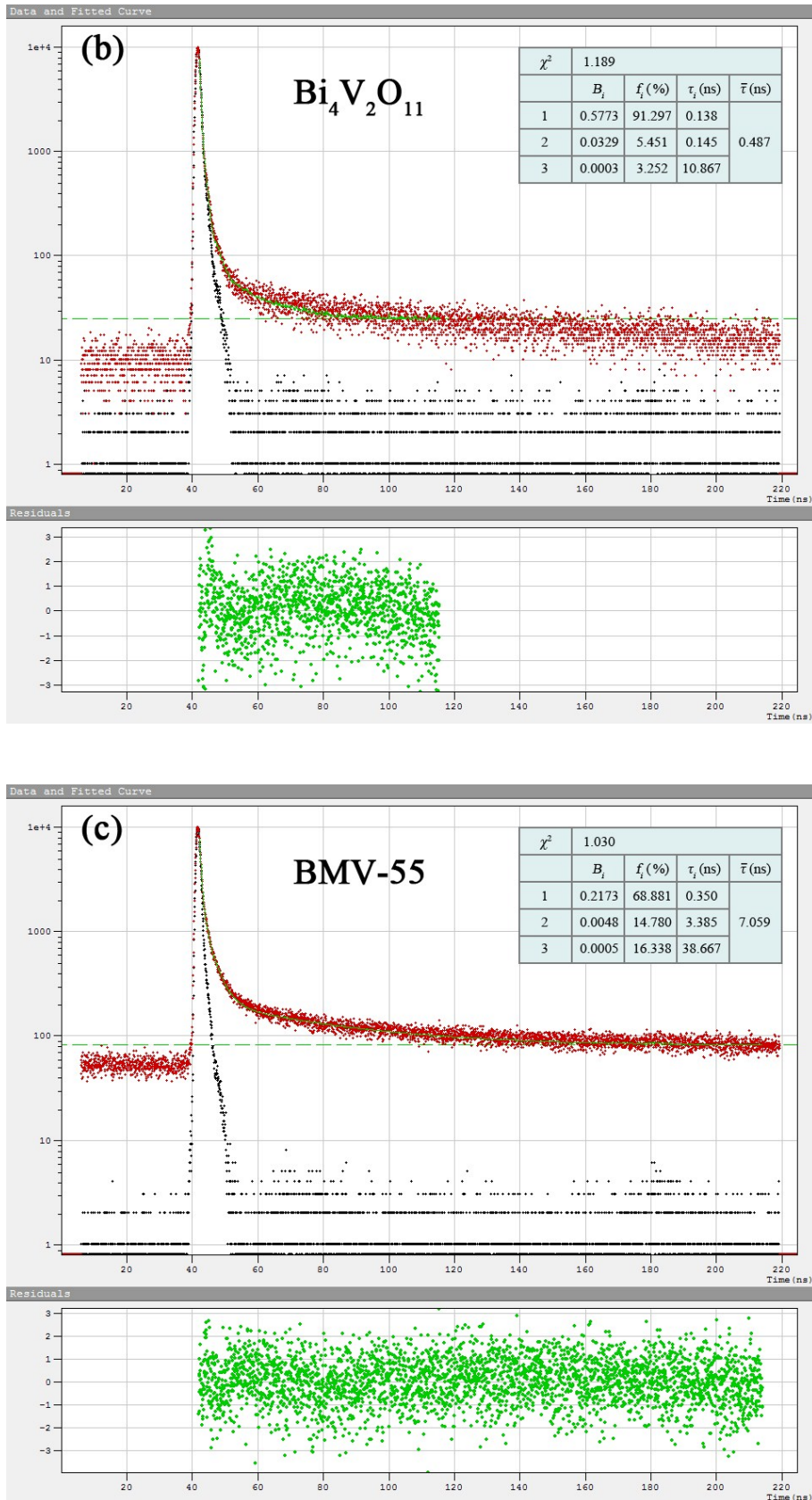


Fig. S3. (a) Full survey spectra and (b) C 1s spectra of BMV-55 composite.



**Fig. S4.** Photocatalytic degradation plots of MB in the absence of  $\text{H}_2\text{O}_2$  over pristine  $\text{Bi}_2\text{MoO}_6$ ,  $\text{Bi}_4\text{V}_2\text{O}_{11}$ , BMV-55 composite samples.





**Fig. S5.** Fitting curves using 3-exponential model and resulting of kinetic parameters; (a) as-fabricated pristine  $\text{Bi}_2\text{MoO}_6$ , (b)  $\text{Bi}_4\text{V}_2\text{O}_{11}$  and (c) BMV-55 composite samples.