Electronic Supplementary Material (ESI) for CrystEngComm.

Supporting Information

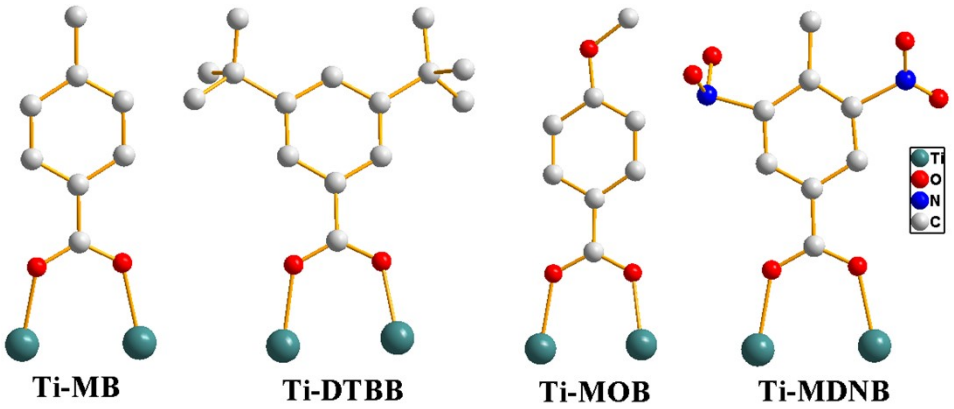

Figure S1. View of the substituted benzoate coordination modes

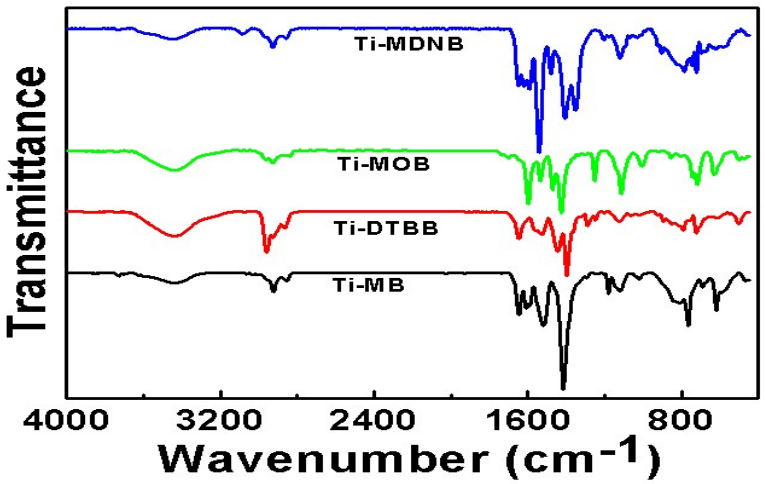

Figure S2. FT-IR spectra for **Ti-MB**, **Ti-DTBB**, **Ti-MOB** and **Ti-MDNB**

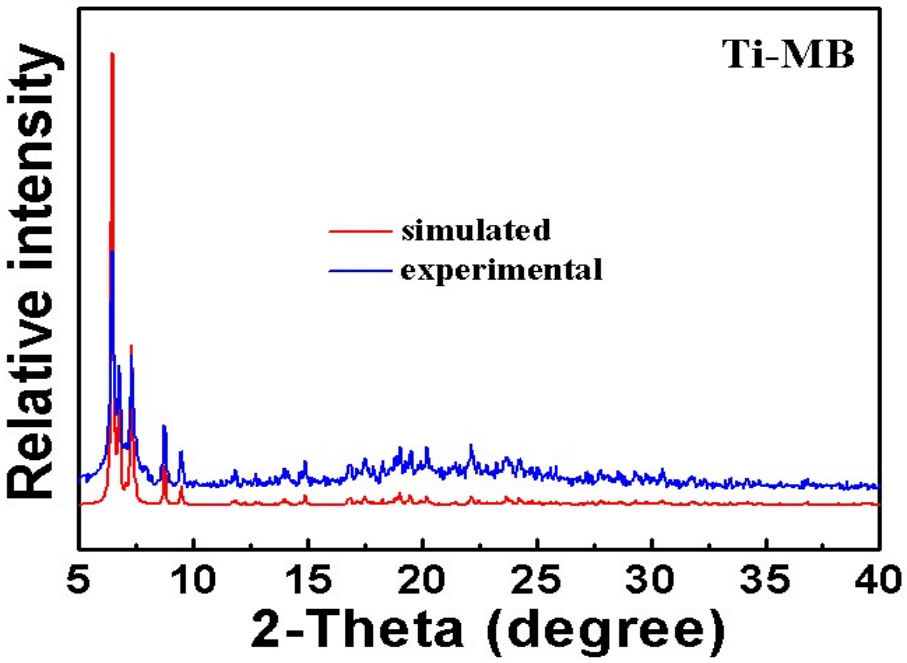

Figure S3. The experimental and simulated PXRD patterns for **Ti-MB**. The top is the experimental pattern, and the bottom is the simulated one.

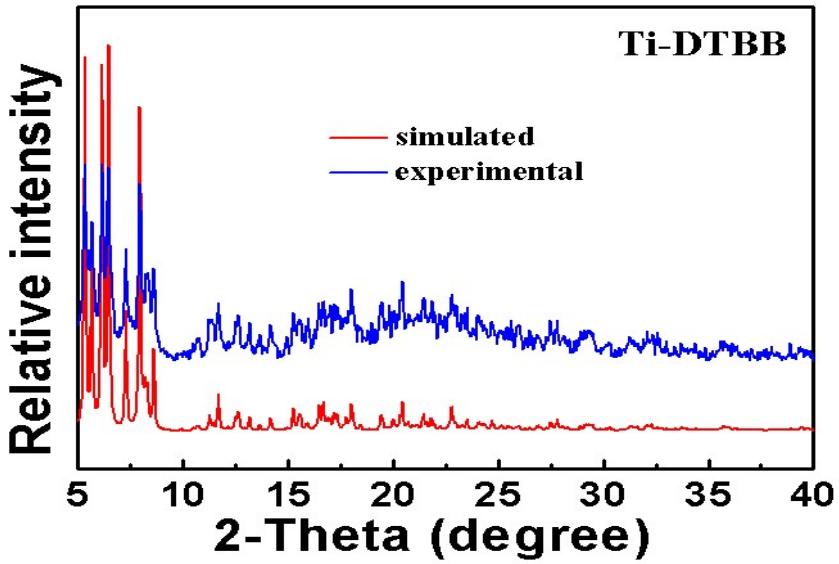

Figure S4. The experimental and simulated PXRD patterns for Ti-DTBB. The top is the experimental pattern, and the bottom is the simulated one.

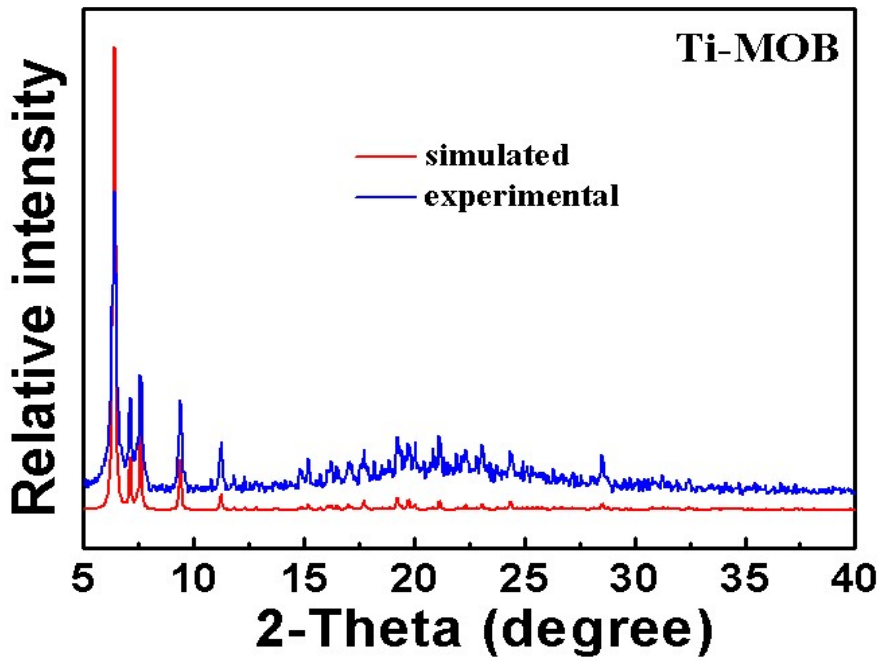

Figure S5. The experimental and simulated PXRD patterns for **Ti-MOB**. The top is the experimental pattern, and the bottom is the simulated one.

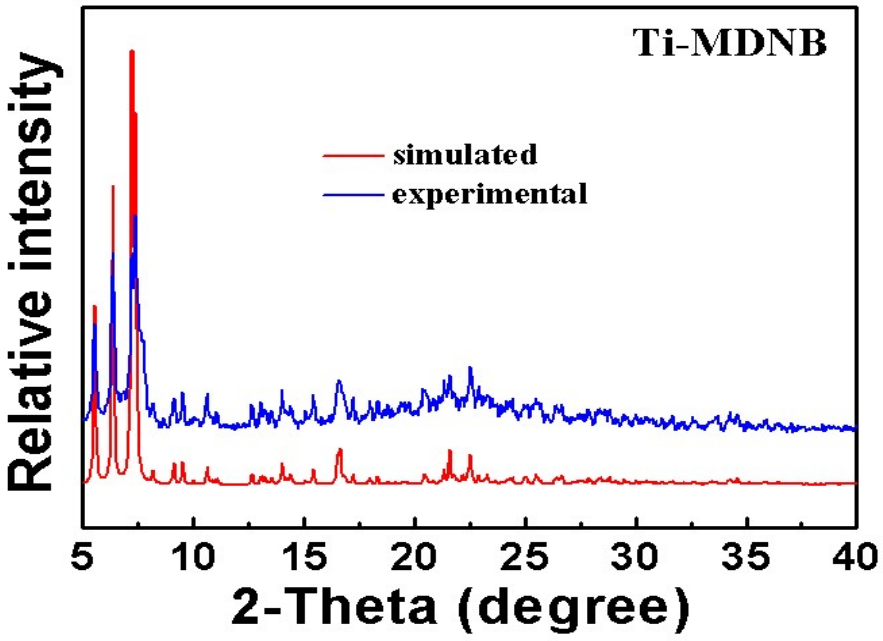

Figure S6. The experimental and simulated PXRD patterns for Ti-MDNB. The top is the experimental pattern, and the bottom is the simulated one.

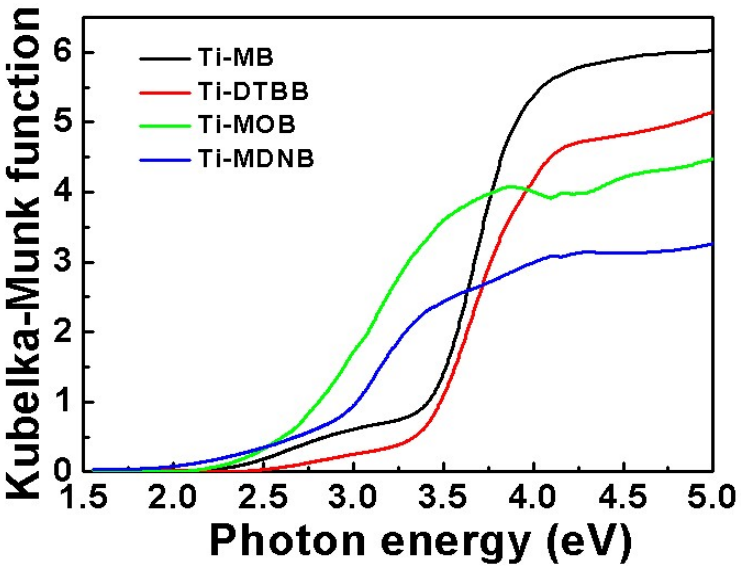

Figure S7. Kubelka-Munk transformation of diffuse reflectance data for for **Ti-MB**, **Ti-DTBB**, **Ti-MOB** and **Ti-MDNB**

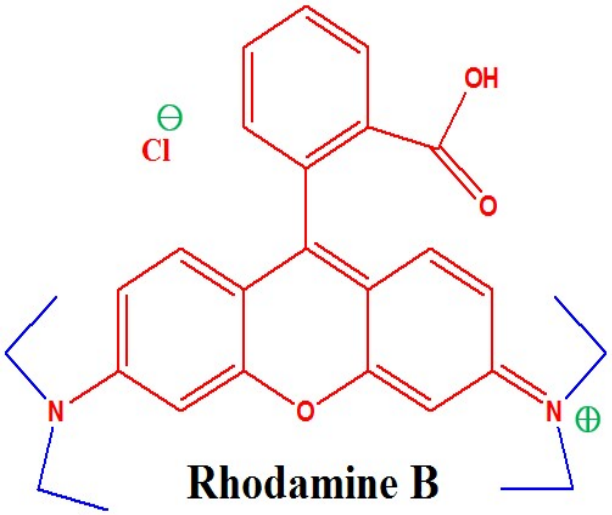

Chart S1. The chemical structure of RhB

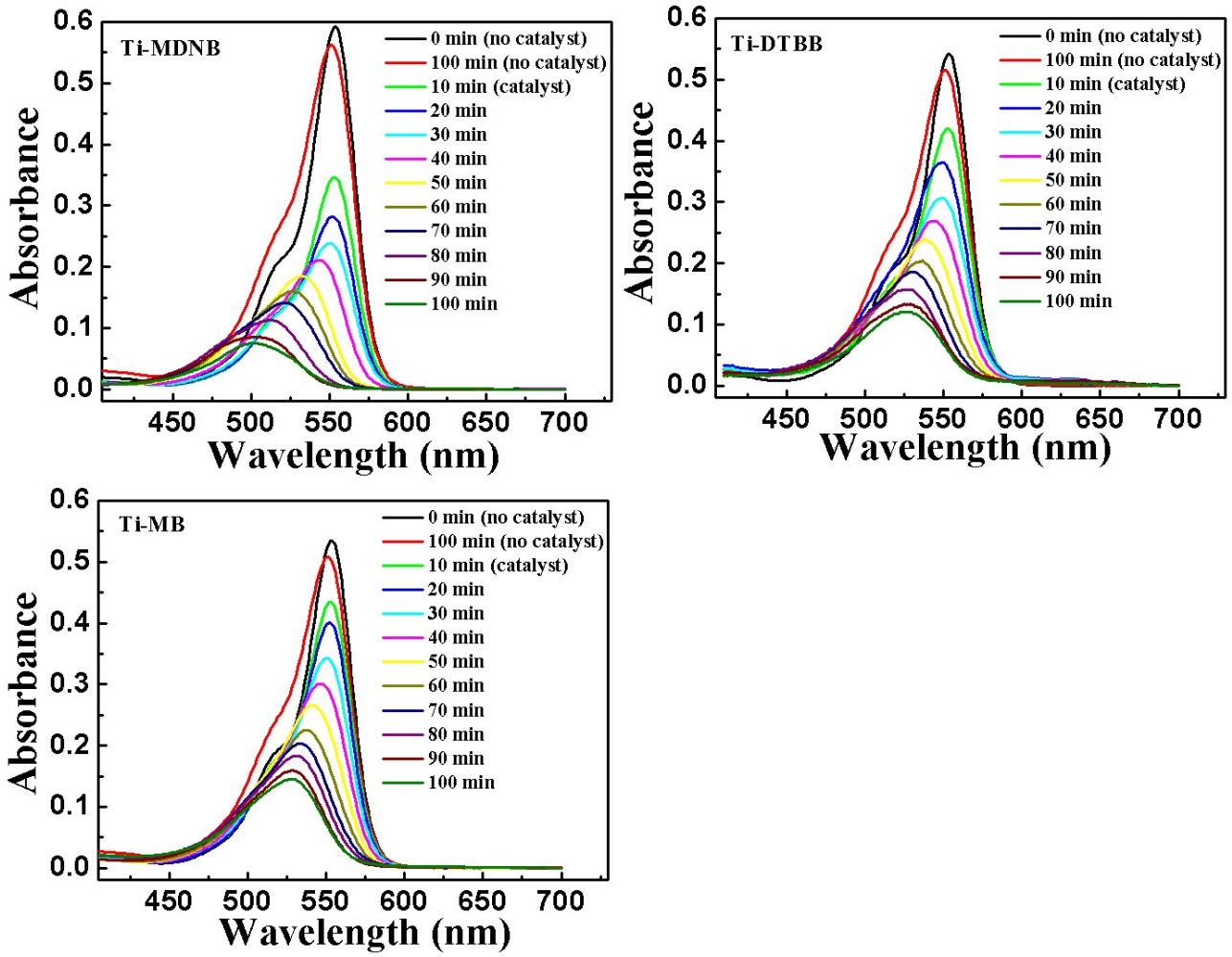

Figure S8. The temporal UV-vis absorption spectrum changes of RhB aqueous solutions for **Ti-MDNB**, **Ti-DTBB** and **Ti-MB**.

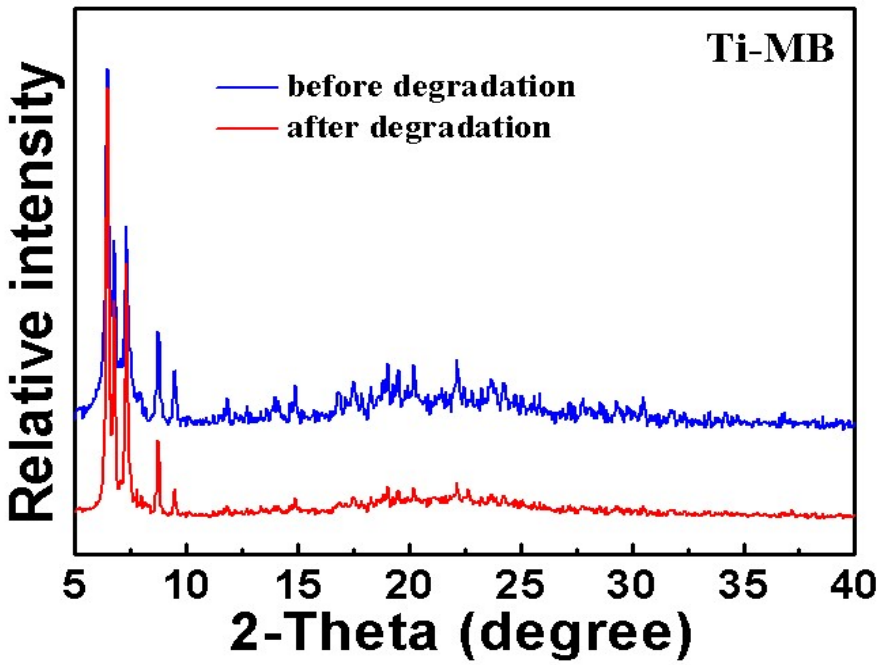

Figure S9. The PXRD patterns of **Ti-MB** before and after photocatalytic RhB degradation

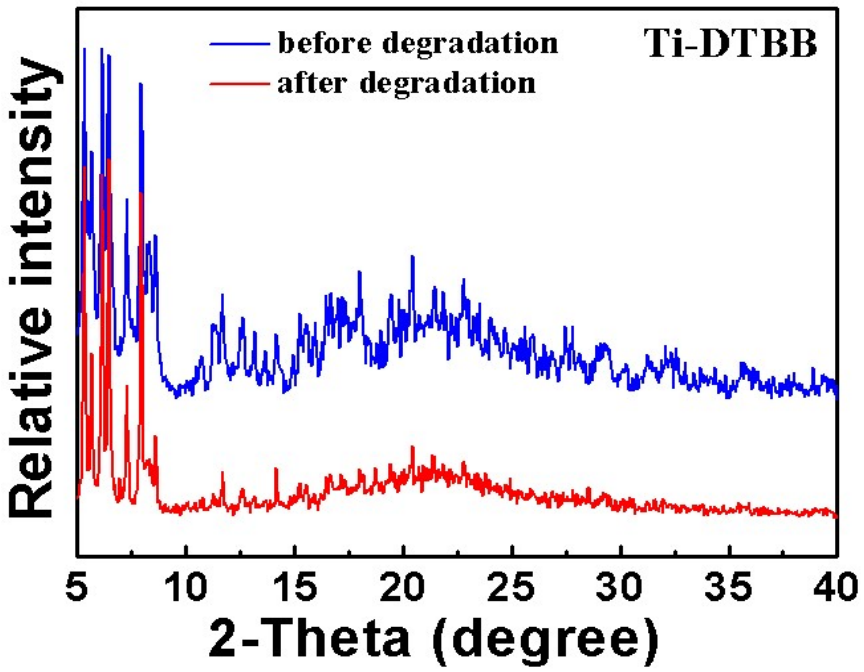

Figure S10. The PXRD patterns of **Ti-DTBB** before and after photocatalytic RhB degradation

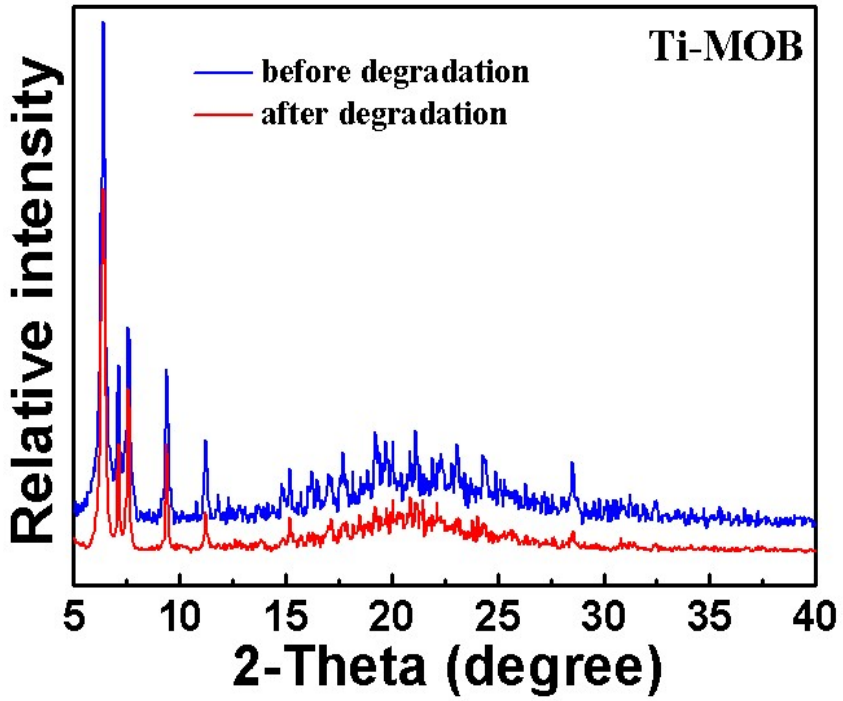

Figure S11. The PXRD patterns of **Ti-MOB** before and after photocatalytic RhB degradation

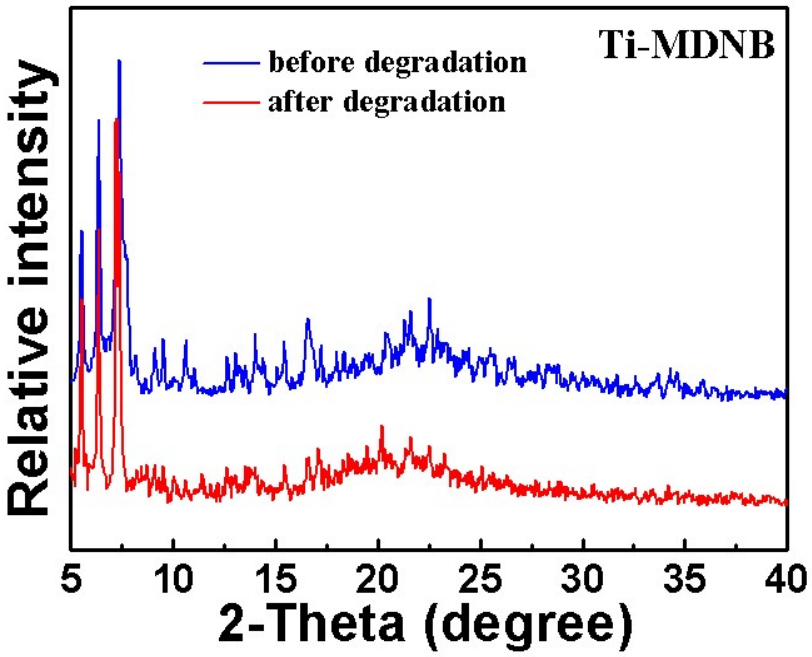

Figure S12. The PXRD patterns of **Ti-MDNB** before and after photocatalytic RhB degradation

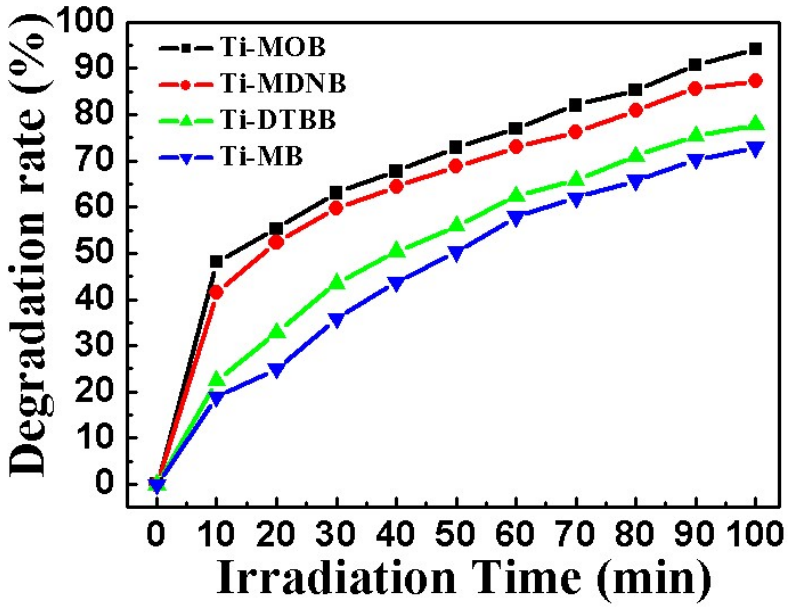

Figure S13. Degradation rate of RhB for **Ti-MOB**,**Ti-MDNB**, **Ti-DTBB** and **Ti-MB**.

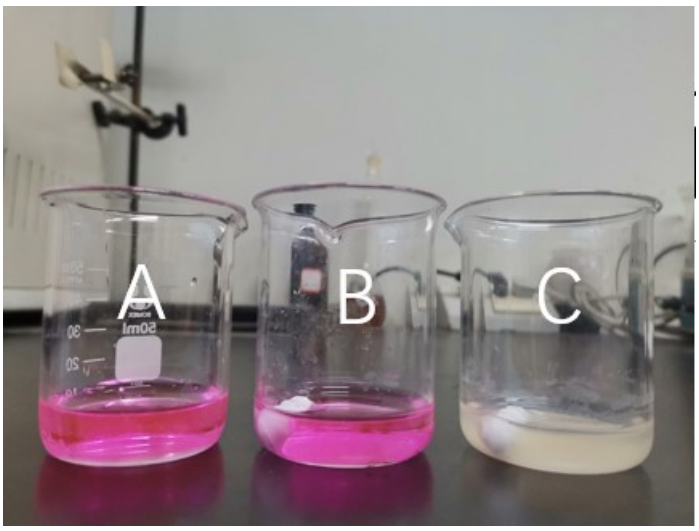

Figure S14. Photographs showing the different degradation efficiencies of RhB aqueous solutions (A: initial RhB aqueous solutions ; B: in the absence of **Ti-MOB** after the irradiation of 100 min; C: in the presence of **Ti-MOB** after the irradiation of 100 min)

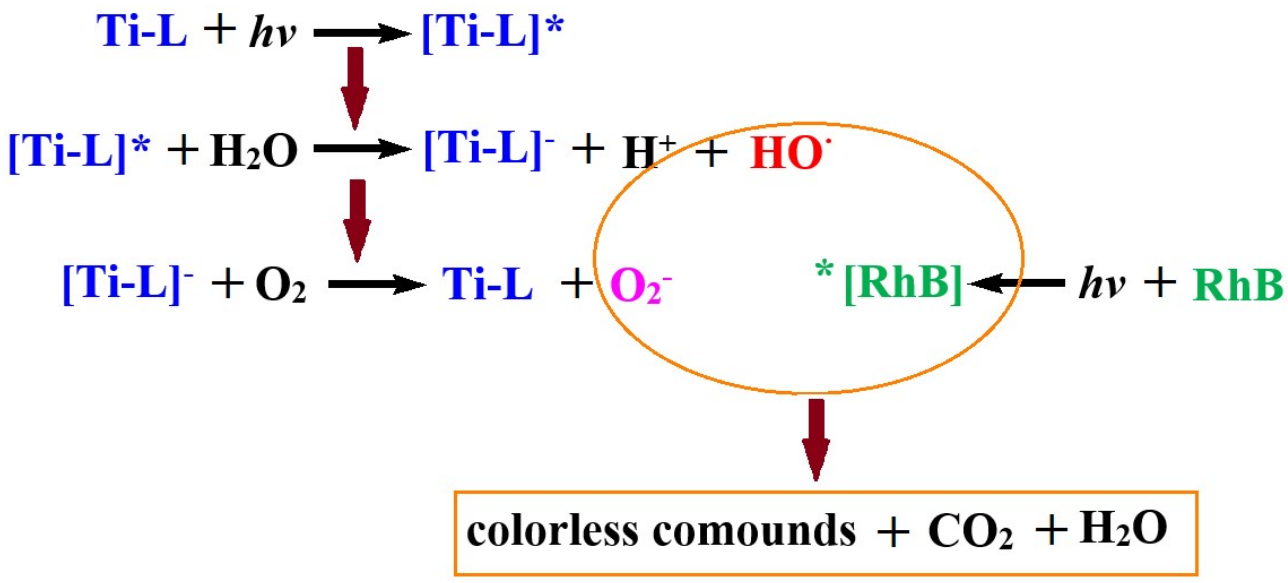

Figure S15. The possible photocatalytic degradation mechanism of RhB over **Ti-L**