

## Supporting Information

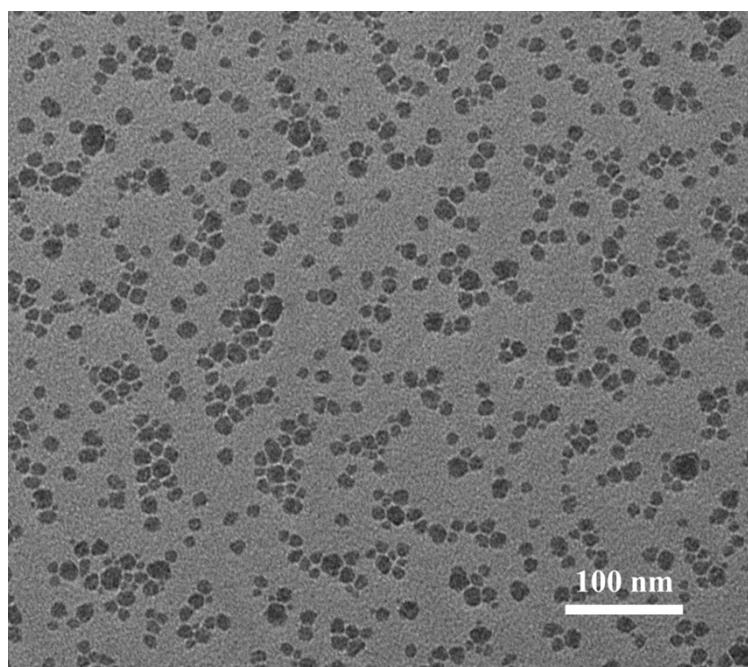


Figure S1. TEM image of  $\text{SiO}_2$  particles

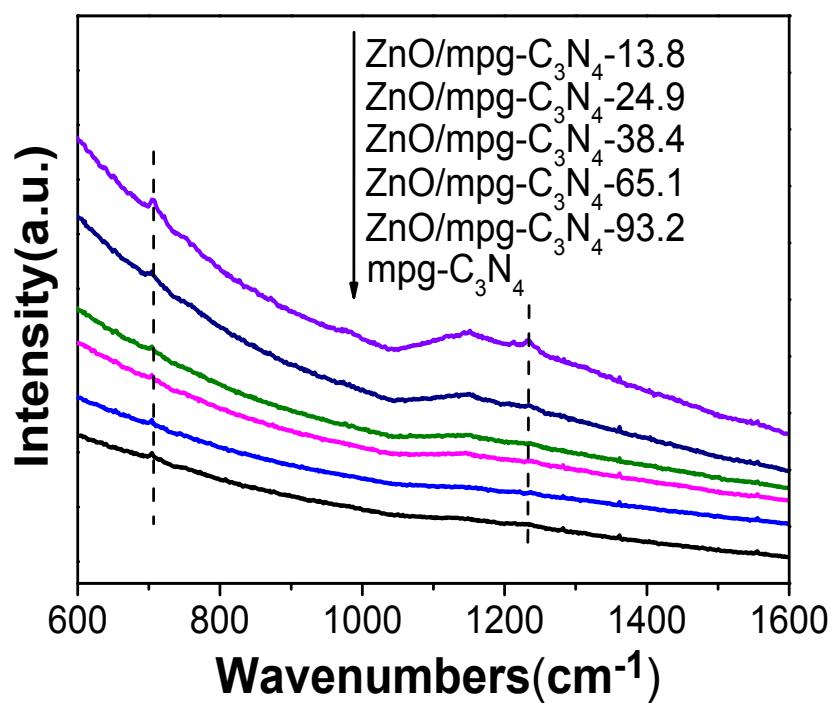


Figure S2. Raman spectra of ZnO, mpg-C<sub>3</sub>N<sub>4</sub> and ZnO/mpg-C<sub>3</sub>N<sub>4</sub> photocatalysts excited with UV-laser at 785 nm

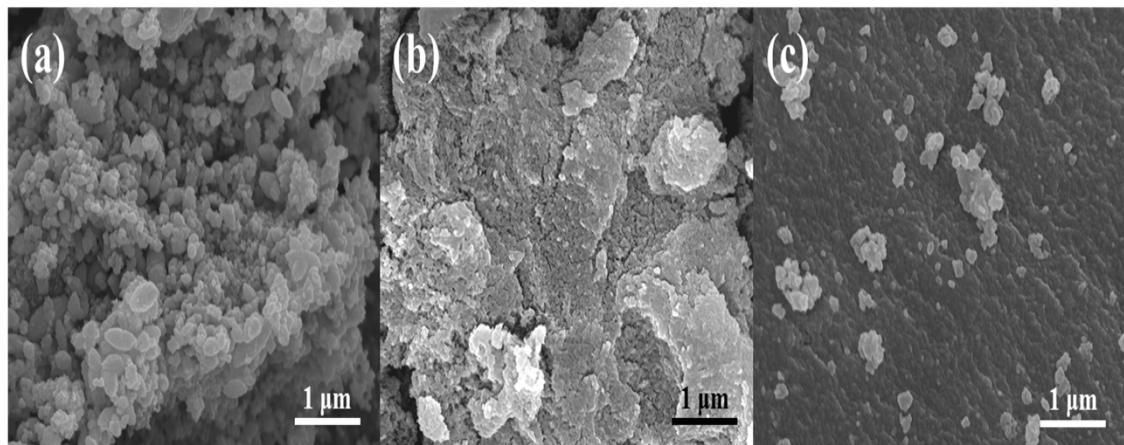


Figure S3. SEM images of (a) ZnO, (b) mpg-C<sub>3</sub>N<sub>4</sub>, (c) ZnO/mpg-C<sub>3</sub>N<sub>4</sub>

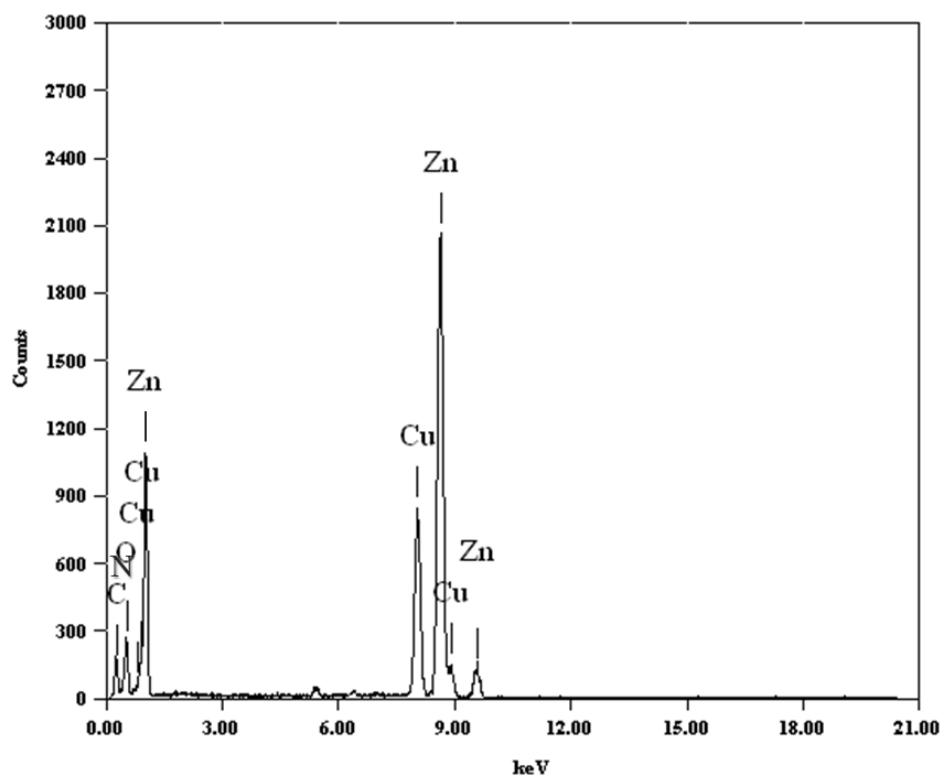


Figure S4. EDX patterns of the selected area in HTEM image of ZnO/mpg-C<sub>3</sub>N<sub>4</sub>-24.9

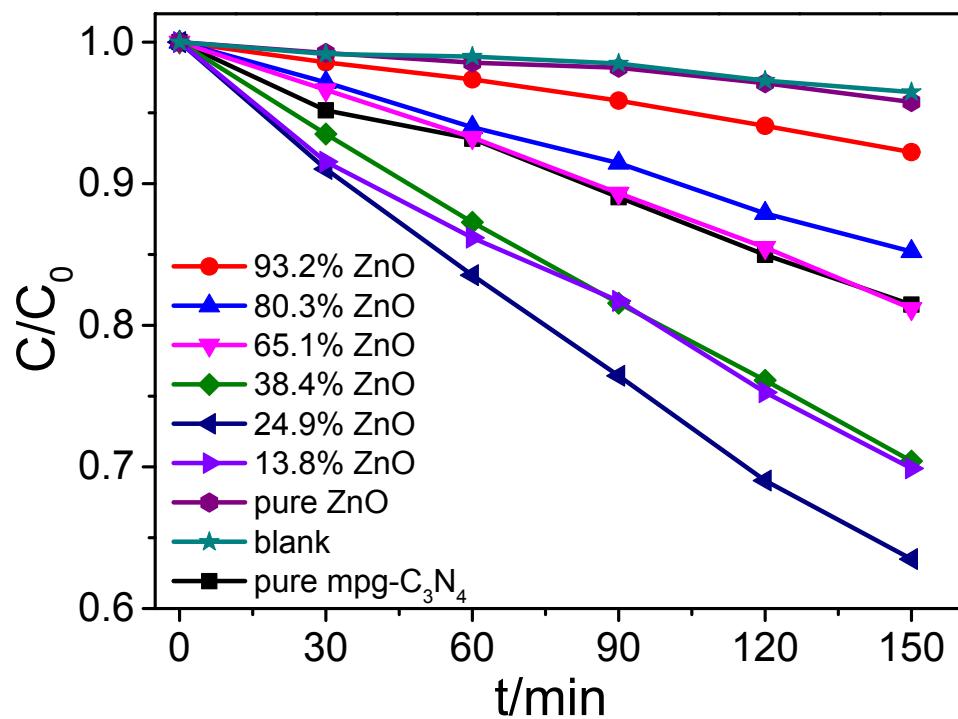


Figure S5. Photolysis of MB and photocatalytic degradation of MB over ZnO, mpg-C<sub>3</sub>N<sub>4</sub> and ZnO/mpg-C<sub>3</sub>N<sub>4</sub> photocatalysts under visible light irradiation ( $\lambda > 420$  nm)

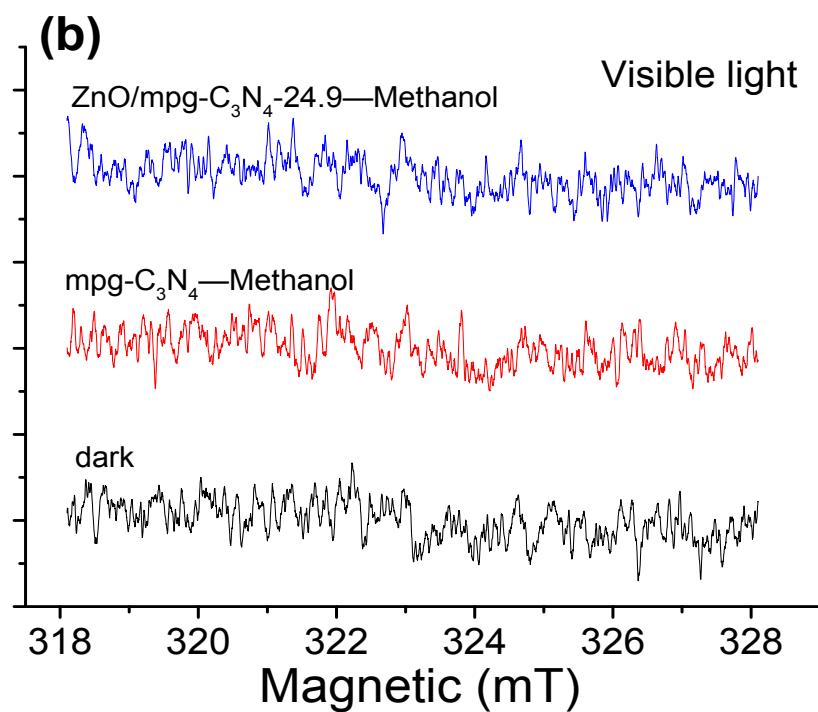
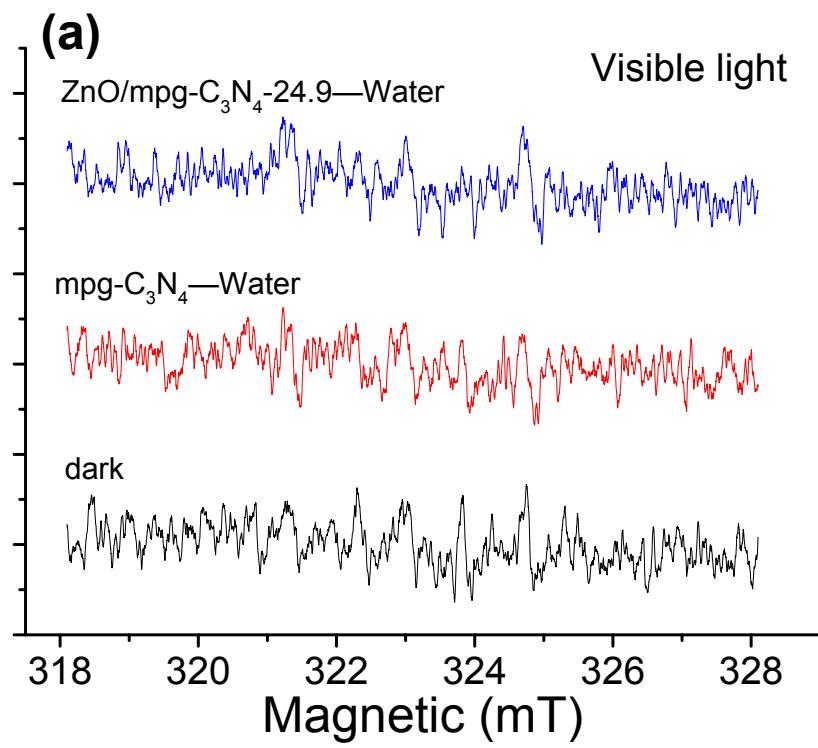


Figure S6. ESR spectra of mpg- $\text{C}_3\text{N}_4$  and ZnO/mpg- $\text{C}_3\text{N}_4$  photocatalysts photocatalysts in water and methanol solvents under visible light irradiation ( $\lambda > 420\text{nm}$ ) (DMPO as the radical trapper)