Supporting Information

Facile electrochemical assisted synthesis of ZnO/graphene nanosheets with enhanced photocatalytic activity

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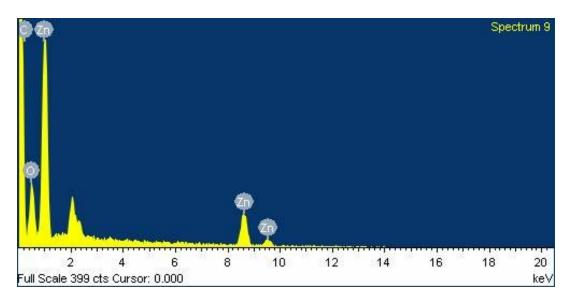


Fig. S1 EDX spectrum of ZnO/Gr_7 nanocomposite.



Fig. S2 TEM image of graphene sheet prepared using electrochemical exfoliation.

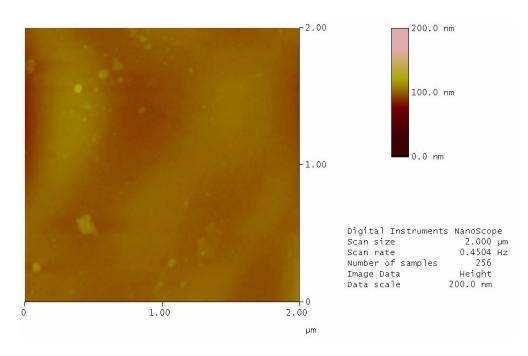
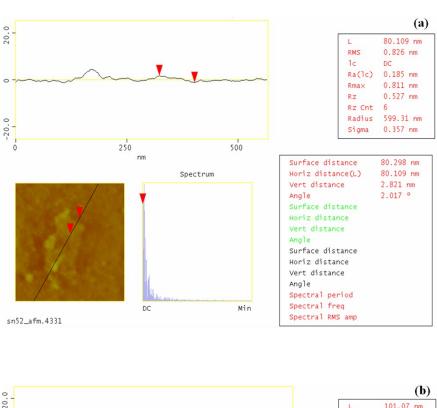


Fig. S3 AFM image showing the electrochemically exfoliated graphene sheets with different shapes and sizes.



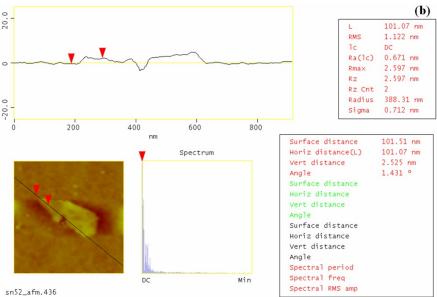


Fig. S4 AFM image showing the sectional analysis of the two different graphene particles.

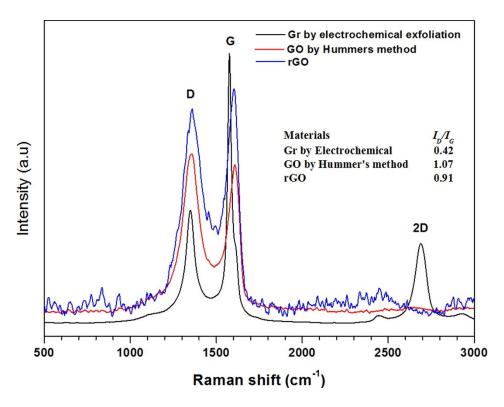


Fig. S5 Raman spectra of graphene produced using electrochemical exfoliation, GO and RGO.

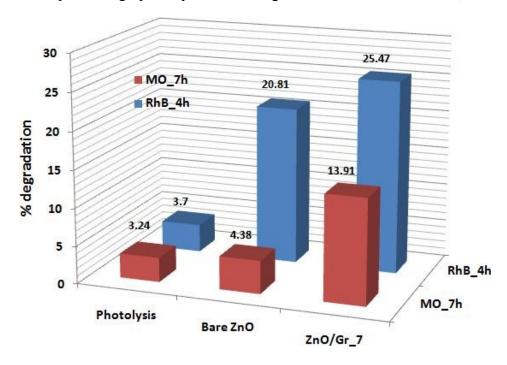


Fig. S6 Photolysis and photocatalytic performance of bare ZnO and ZnO/Gr_7 under visible light for degradation of MO after 7 h and RhB after 4 h.

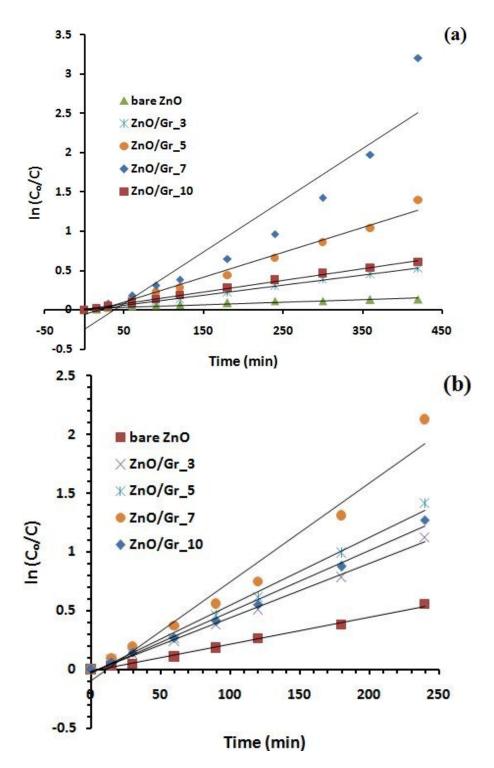


Fig. S7 Pseudo-first order kinetics plots of (a) MO and (b) RhB degradation using ZnO/Gr_7 under UV radiation.

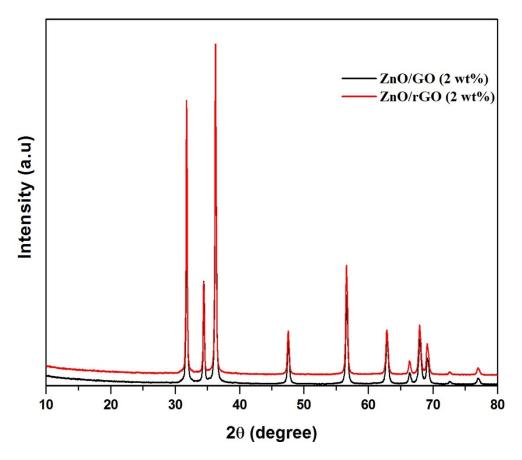


Fig. \$8 XRD pattern of ZnO/GO and ZnO/rGO synthesized using KOH precipitation method.