

Electronic Supplementary Information

Preparation and Characterization of Rose-like NiO Nanostructures

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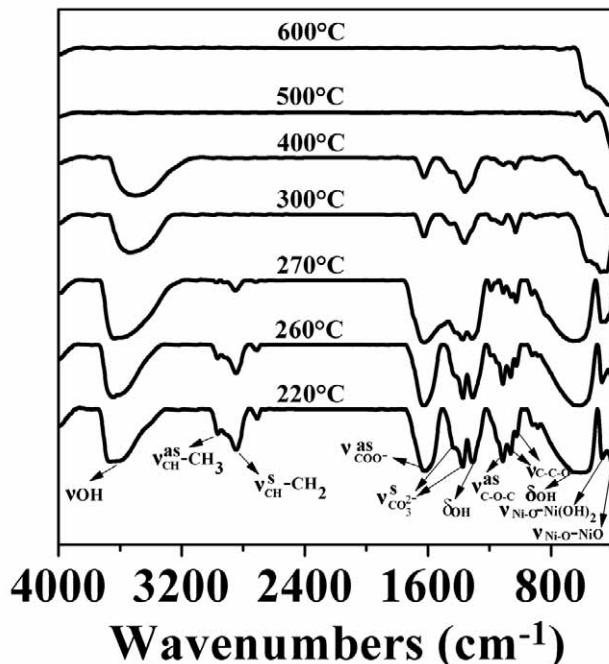


Fig. S1 The IR of products by heating the $\alpha\text{-Ni(OH)}_2$ at the rate of 10 °C/min to different temperature and calcined for 1h.

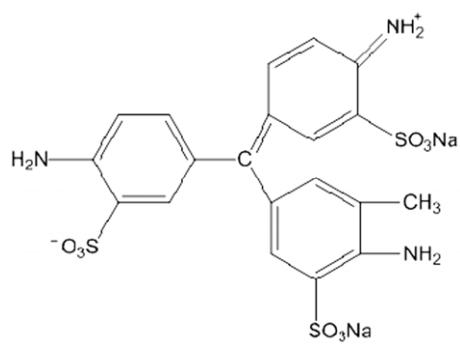


Fig. S2 Structure of the acid fuchsine molecule.

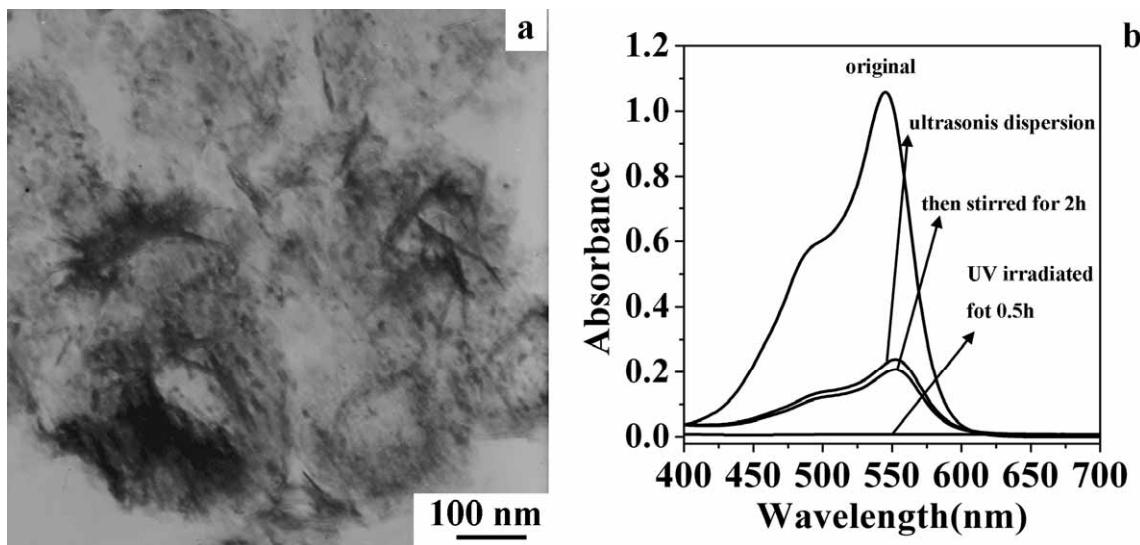


Fig. S3 (a)TEM image of rose-like NiO structures after grinding for 0.5h and (b) UV-vis spectra of acid fuchsine solution under the photocatalysis of rose-like NiO structures after grinding.

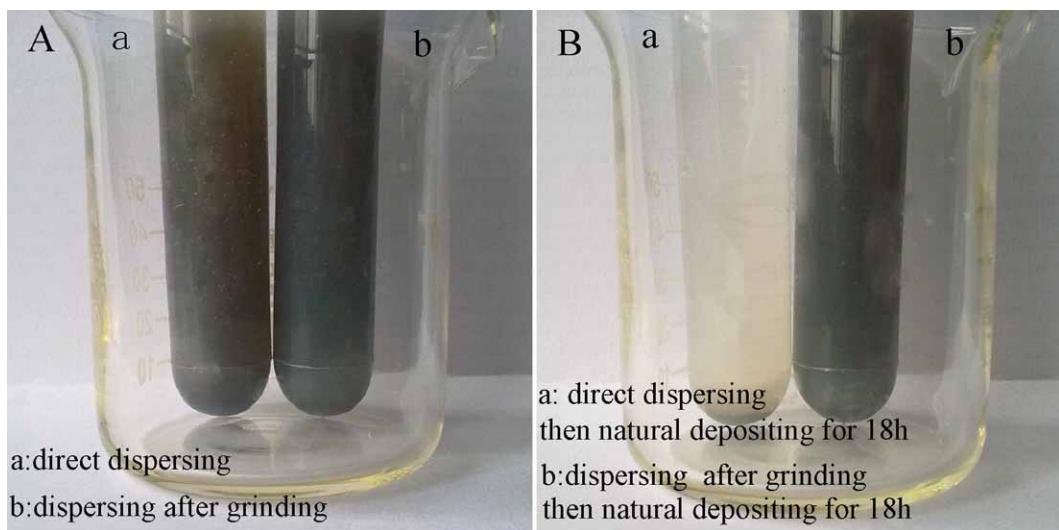


Fig. S4 Natural depositing of the rose-like NiO structure and the destroyed rose-like structure.

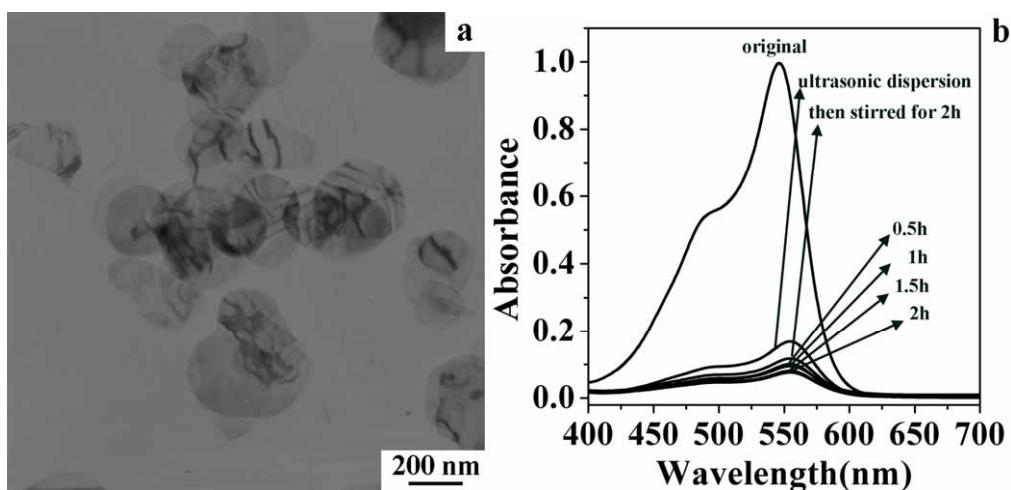


Fig. S5 (a) TEM image of NiO nanosheets from β -Ni(OH)₂ and (b) UV-vis spectra of acid fuchsine solution under the photocatalysis of NiO nanosheets.

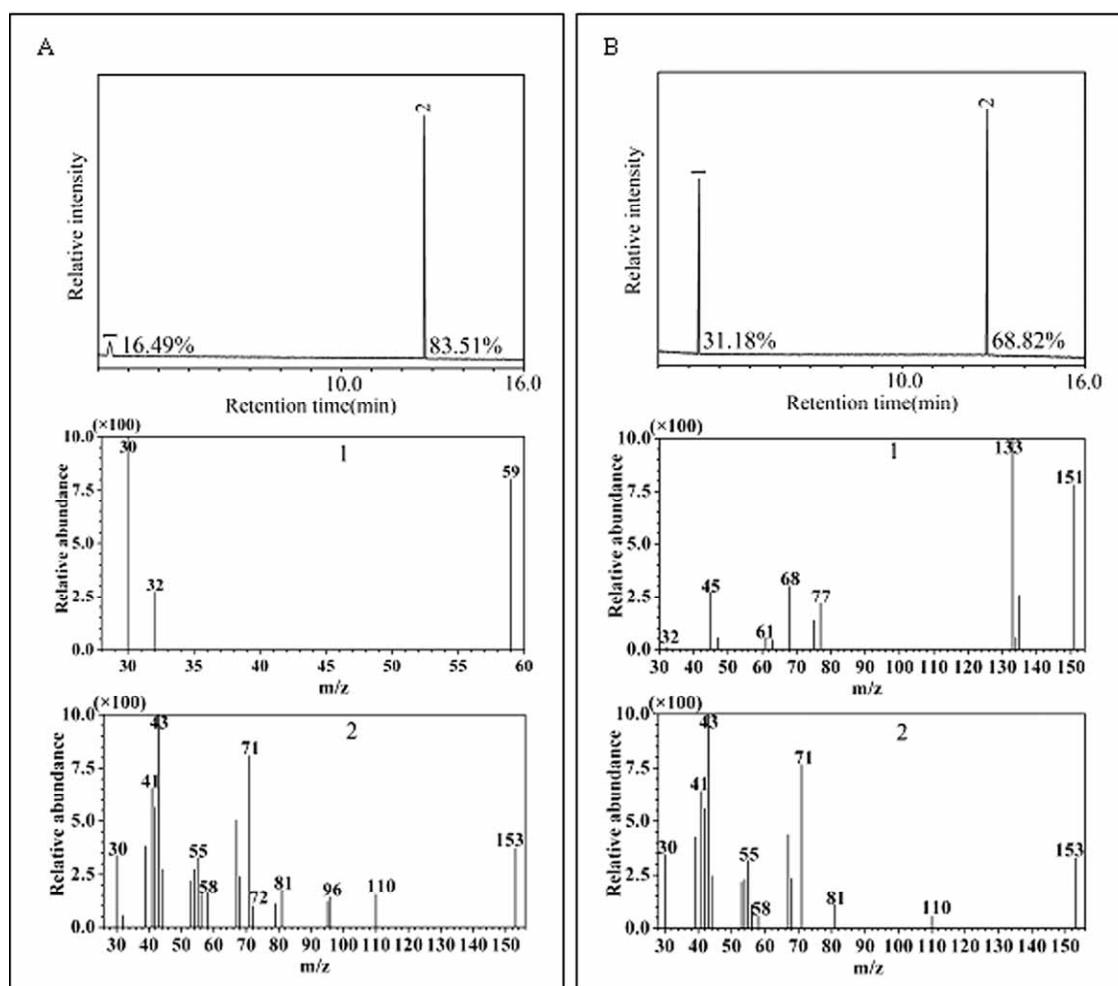


Fig. S6 GC/MS chromatogram of filtrate after photocatalytic degradation aqueous solution of acid fuchsine for 0.5 h by ultraviolet light irradiation using NiO (A) and P25 (B) as photocatalysts.