

Electronic Supplementary Information (ESI)

Thermal induced surface defective Co/Fe-Co planar hybrid composite nanosheet with enhanced catalytic activity in the Fenton-like reaction

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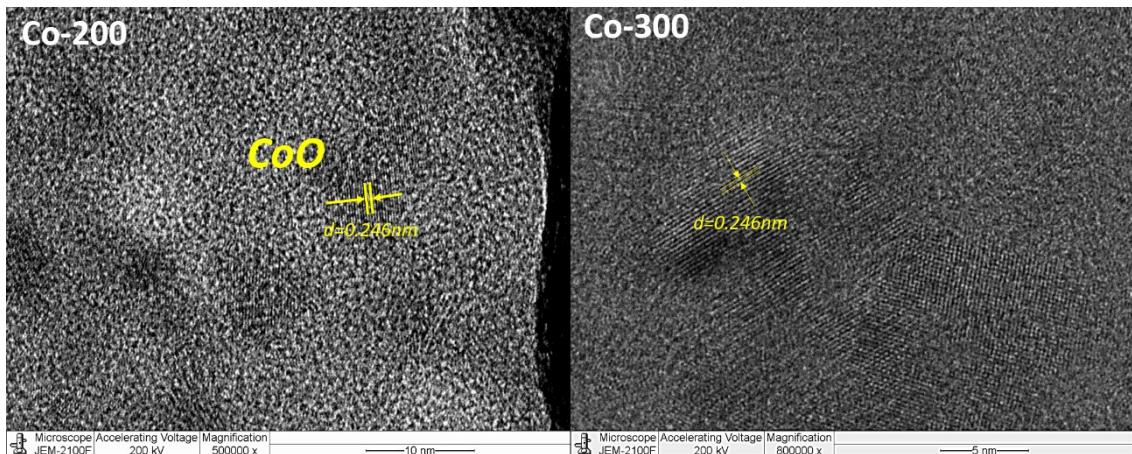


Fig. S1 HRTEM images of samples Co-200, and Co-300.

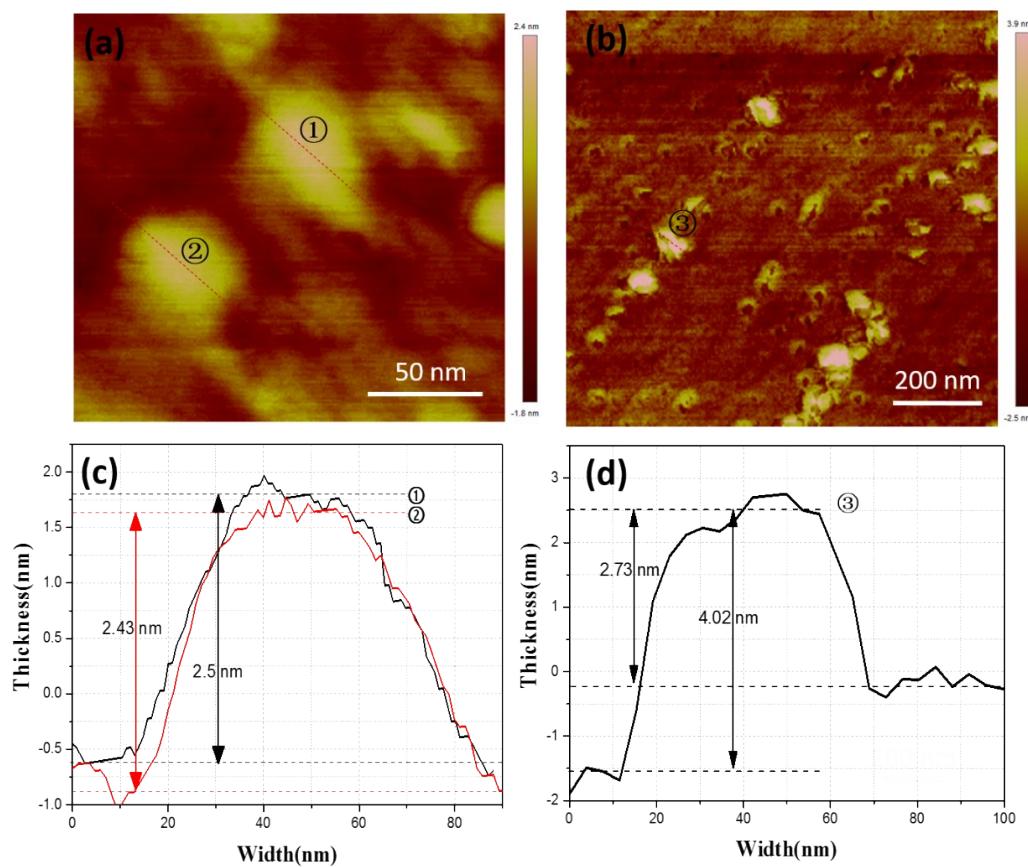


Fig. S2 Atomic force microscopy(AFM) images of controllable samples (a) as-obtained $\text{Co}(\text{OH})_2$, and (b) Co-200 with their corresponding height profiles(c), (d).

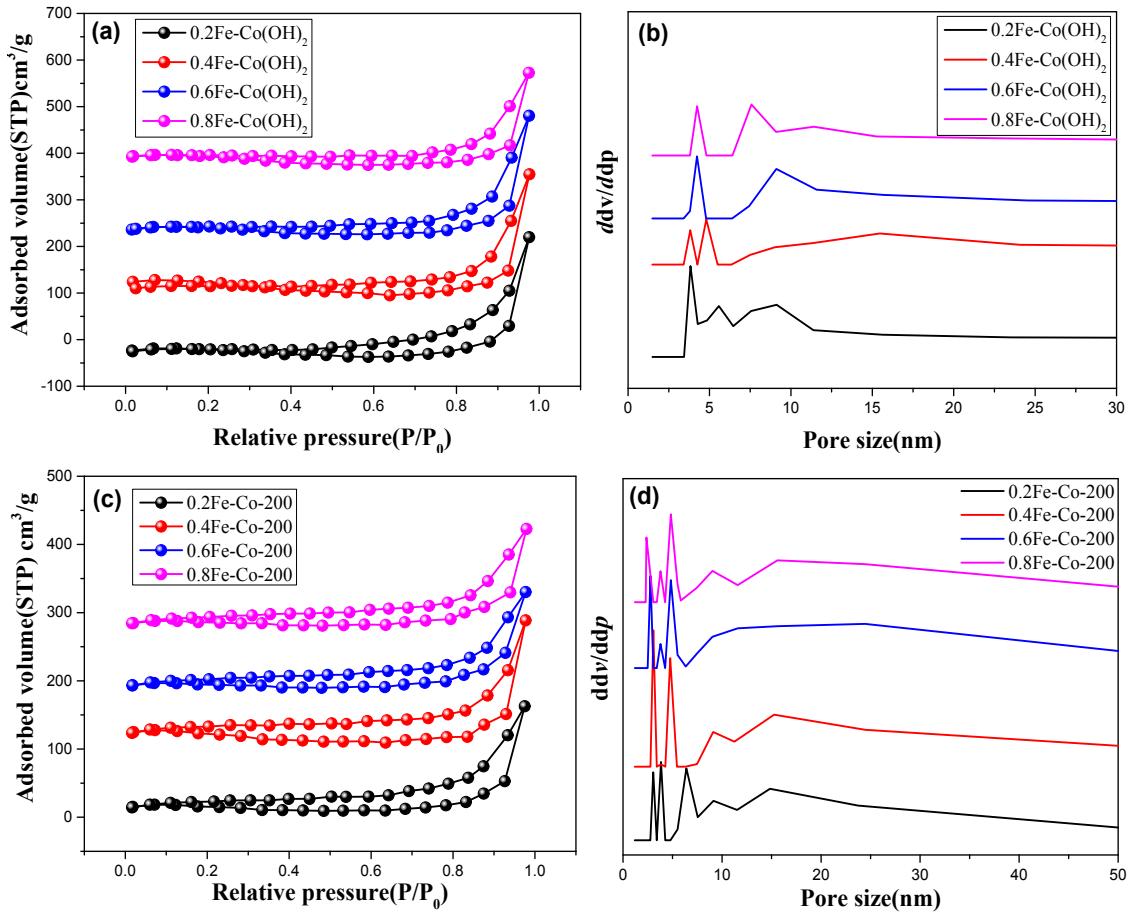


Fig. S3 N₂ adsorption/desorption isotherms of the various Fe-containing samples.

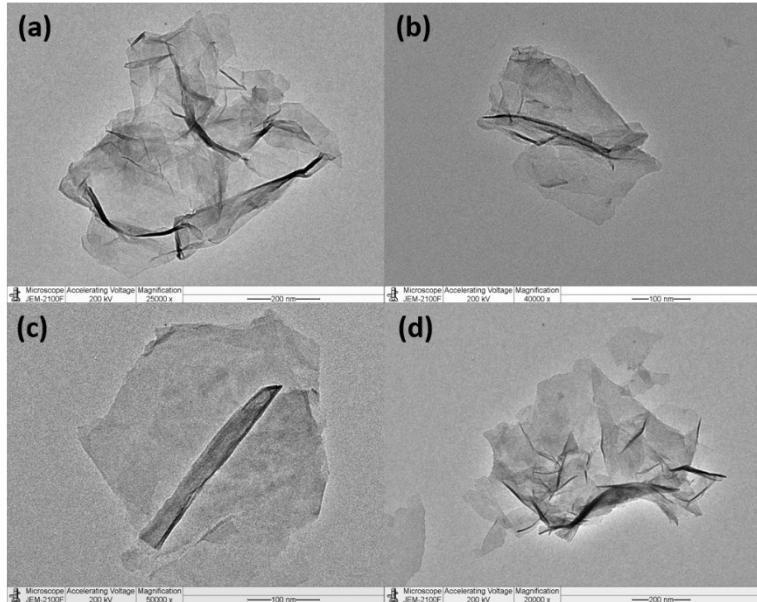


Fig. S4 TEM images of (a) 0.2Fe-Co-200(1h), (b) 0.4Fe-Co-200(1h), (c) 0.6Fe-Co-200(1h) and (d) 0.8Fe-Co-200(1h).

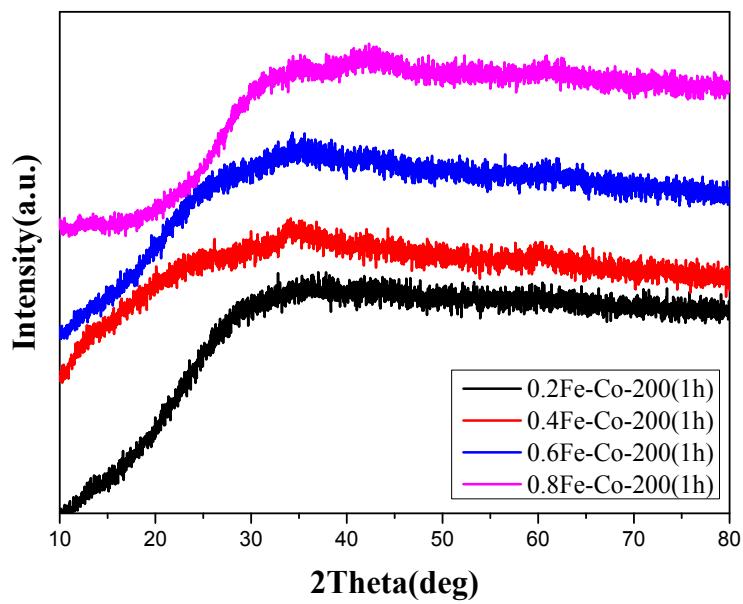


Fig. S5 wide-angle XRD patterns of 0.2Fe-Co-200(1h), 0.4Fe-Co-200(1h), 0.6Fe-Co-200(1h) and 0.8Fe-Co-200(1h).

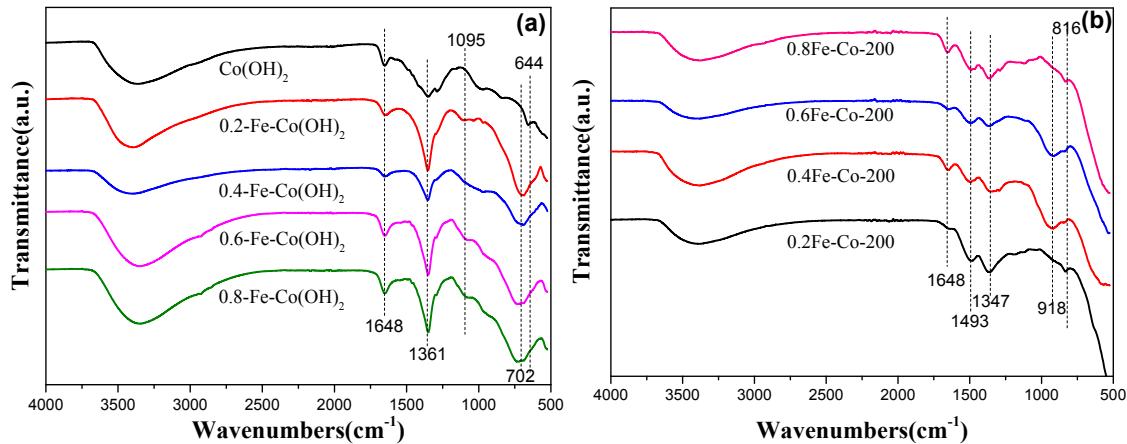


Fig. S6 IR spectra of Fe-doping Co(OH)₂ and their corresponding thermal treated samples.

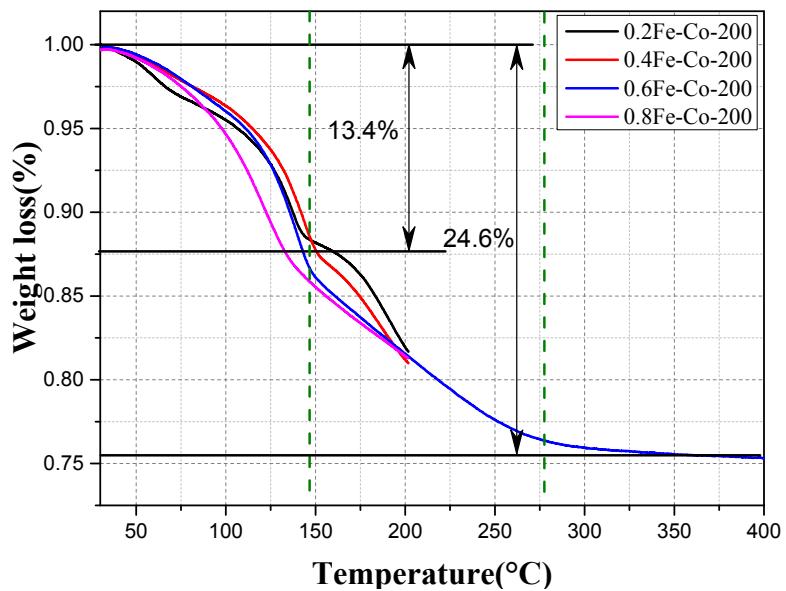


Fig. S7 TG curves for the different loadings of Fe-doping Co(OH)₂.

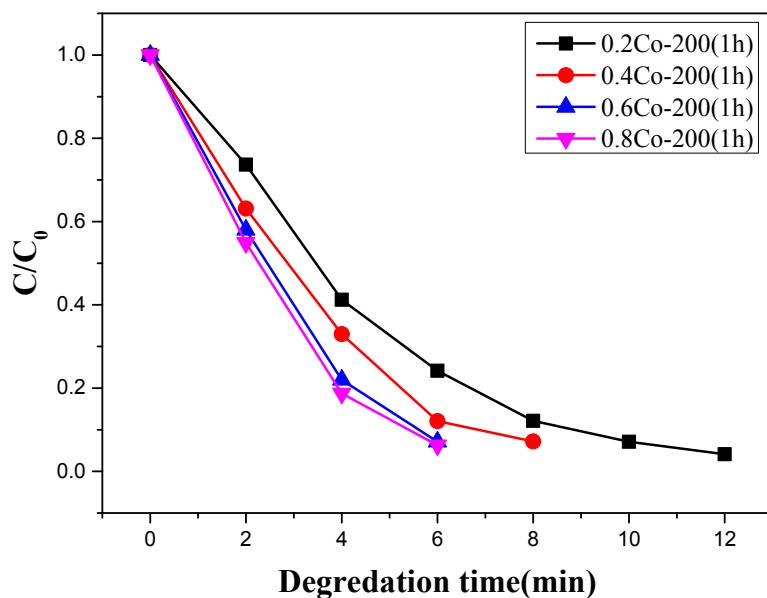


Fig. S8 Catalytic degradation of MB versus reaction time based on the controlled samples of thermal-treated xFe-Co-200(1h) for 1h.