

Supporting information

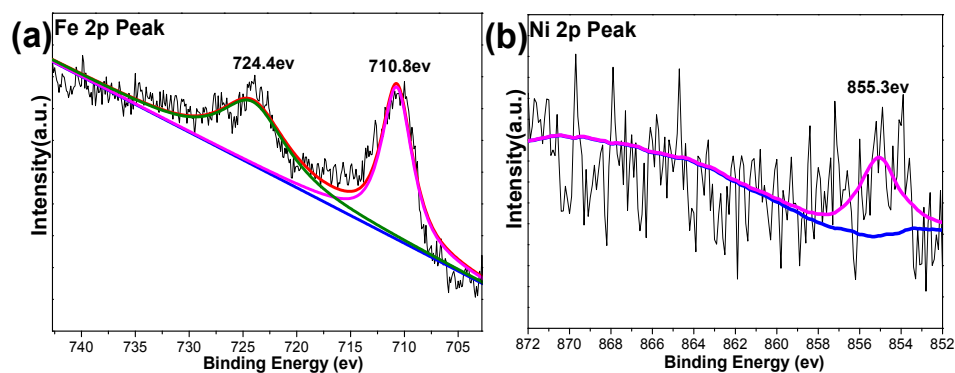


Fig.S1 XPS high-resolution spectra of the Fe 2p and Ni 2p regions of the as-prepared 10% $\text{Fe}_{3(1-x)}\text{Ni}_x\text{N}$, respectively.

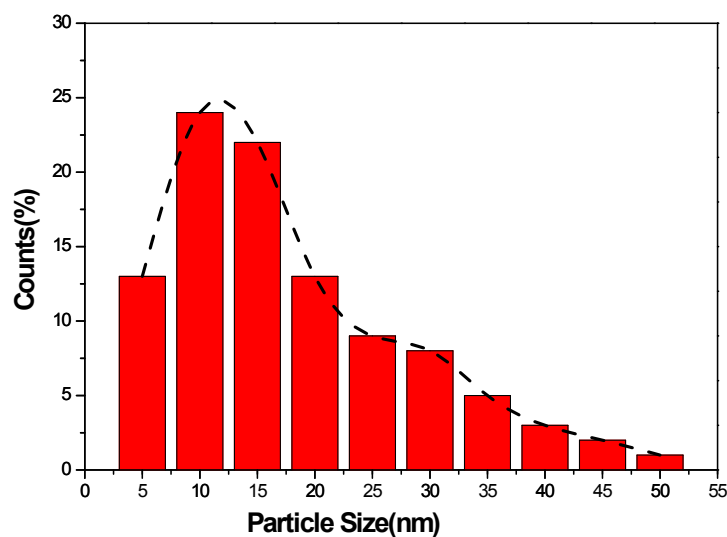


Fig.S2 The particle size distribution of 20% $\text{Fe}_{3(1-x)}\text{Ni}_x\text{N}$ NPs.

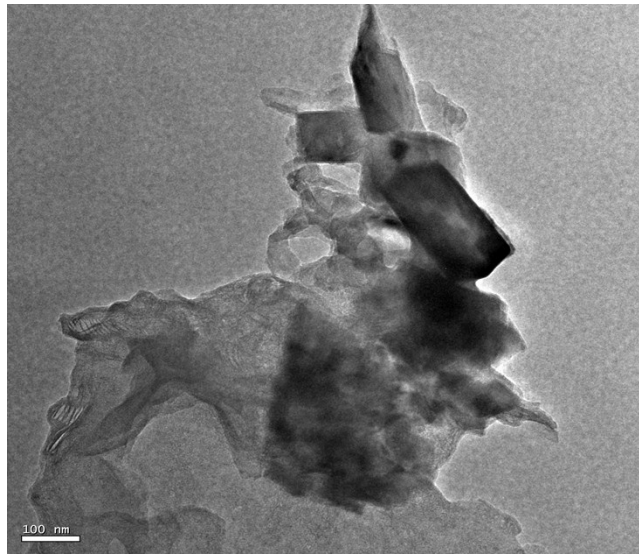


Fig.S3 HRTEM images of Fe₃N

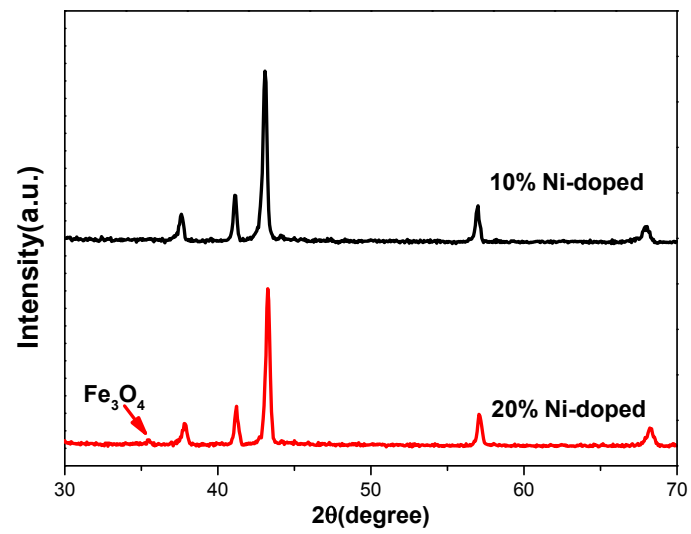


Fig.S4 XRD spectra of samples after catalysis