

Electronic Supplementary Material

Superior catalytic effect of FeCo nanosheets on MgH₂ for hydrogen storage

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Table S1 Specifications of the preliminary materials

Name	Manufacturer	Purity/ Size
Fe	Shanghai Kefeng Industrial & Commerce Co. , Ltd	98%/ 100 mesh
Co	Sinopharm Chemical Reagent Co., Ltd	99%/ 200 mesh
Mg	Jiangsu Qiangsheng Functional Chemical Co., Ltd.	99%/ 100-200 mesh
heptane	Sinopharm Chemical Reagent Co., Ltd	98.5%
oleic acid	Sinopharm Chemical Reagent Co., Ltd	90%
oleylamine	Aladdin Reagent (Shanghai) Co., Ltd.	98%
alcohol	Sinopharm Chemical Reagent Co., Ltd	99.7%

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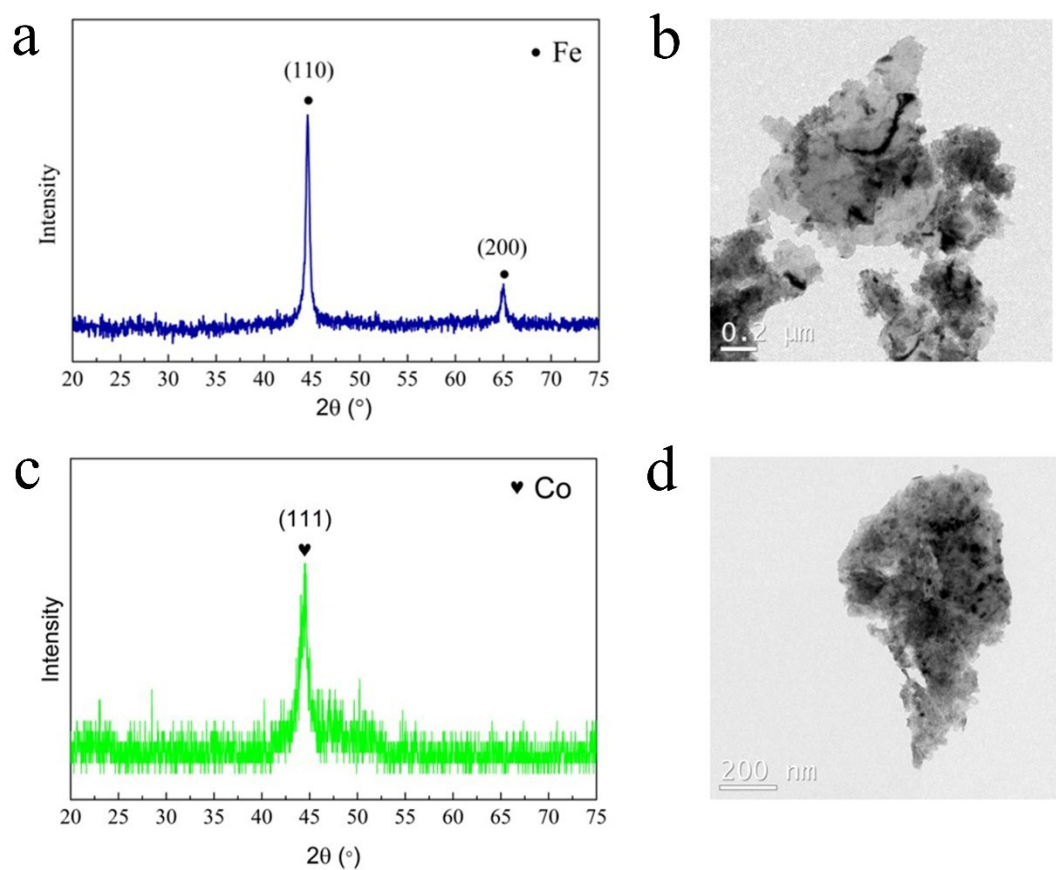


Fig. S1 XRD (a); TEM (b) of nano-Fe and XRD (c); TEM (b) of nano-Co.

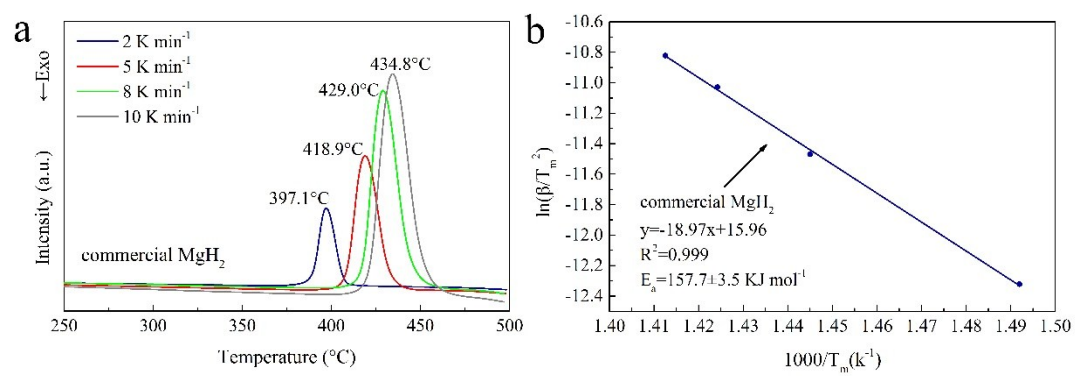


Fig. S2 DSC profiles at various heating rates (a); Kissinger's plots (b) of commercial MgH_2 .

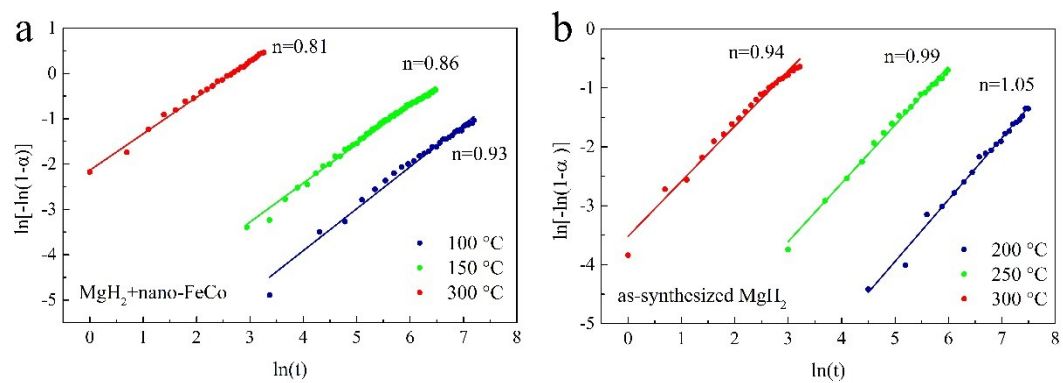


Fig. S3 JMAK plots of MgH_2 with (a) and without (b) nano-FeCo.

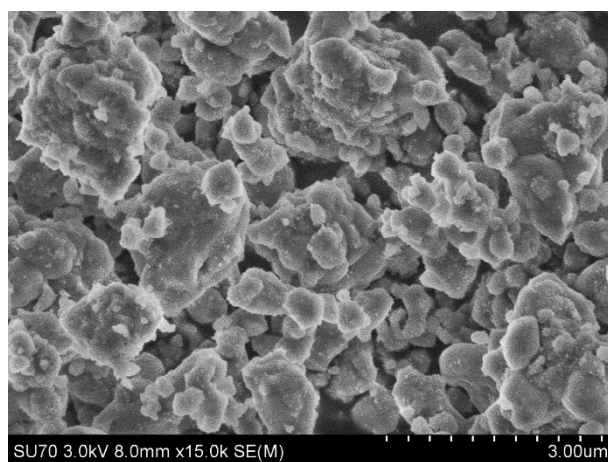


Fig. S4 SEM photograph of as-synthesized MgH_2