

Transition metal nanoparticles dispersed in alumina matrix as active and stable catalysts for CO_x-free hydrogen production from ammonia

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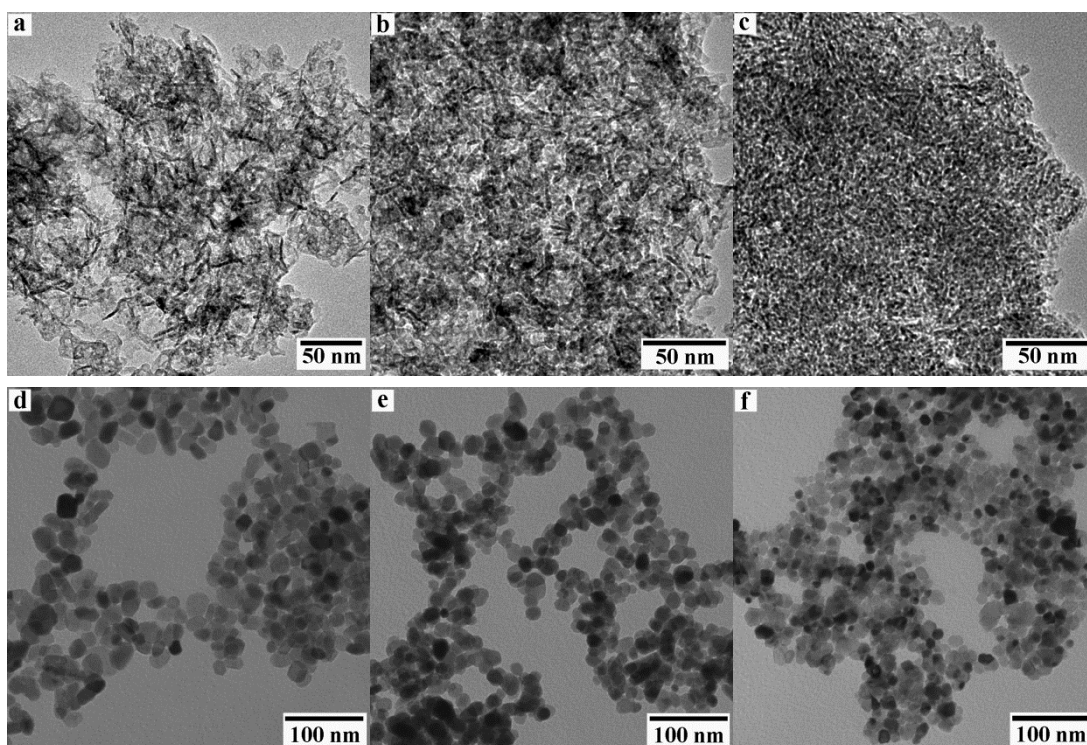


Fig. S1 TEM images of the fresh 10FeAl (a), 10CoAl (b), 10NiAl (c), 100 Fe (d), 100Co (e) and 100Ni (f) catalysts.

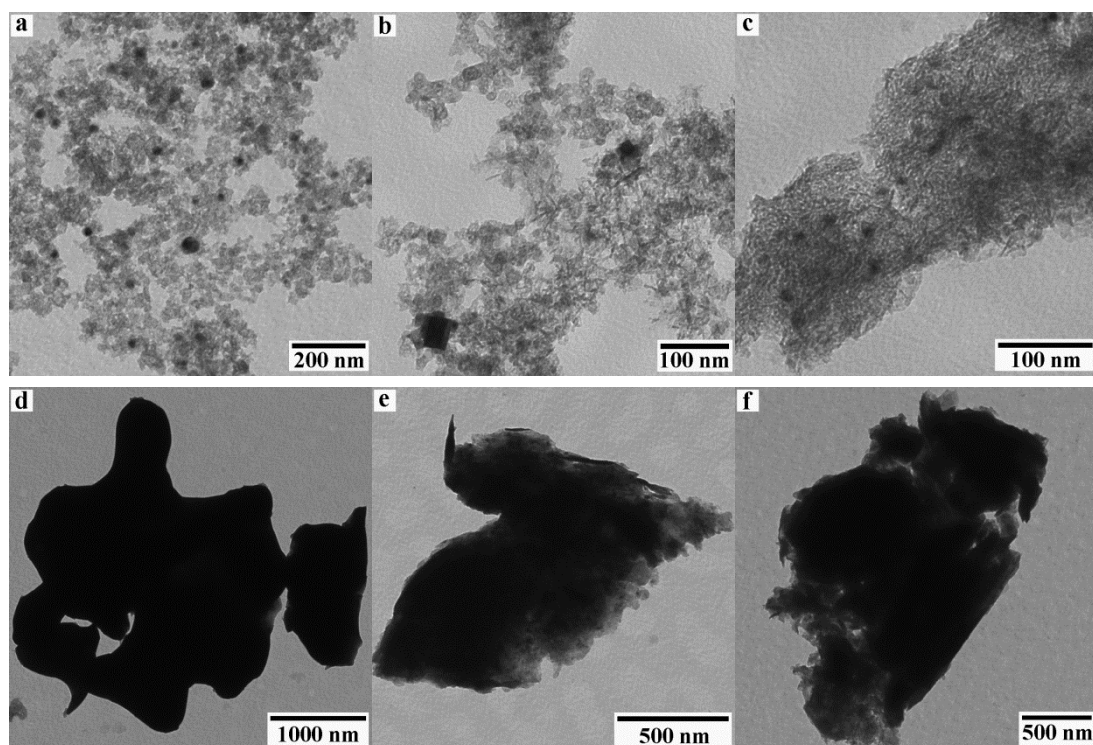


Fig. S2 TEM images of the used 10FeAl (a), 10CoAl (b), 10NiAl (c), 100 Fe (d), 100Co (e) and 100Ni (f) catalysts.

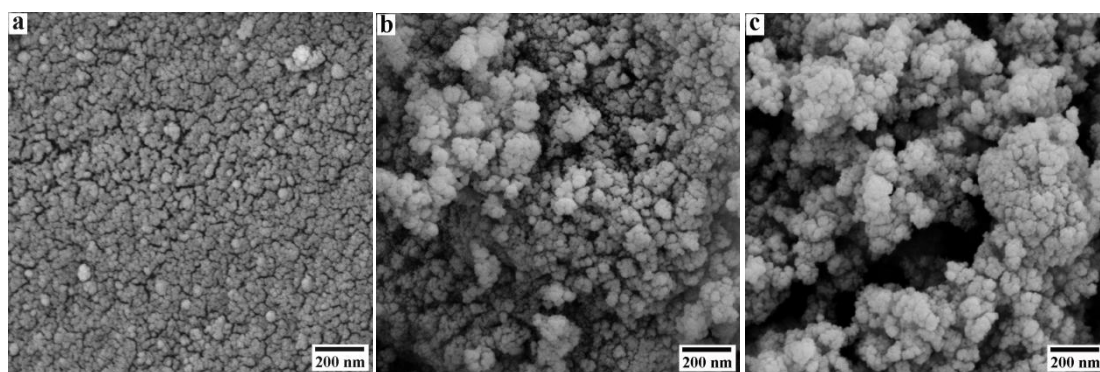


Fig. S3 SEM images of the used $^{90}\text{FeAl}$ (a), $^{90}\text{CoAl}$ (b) and $^{90}\text{NiAl}$ (c) catalysts.

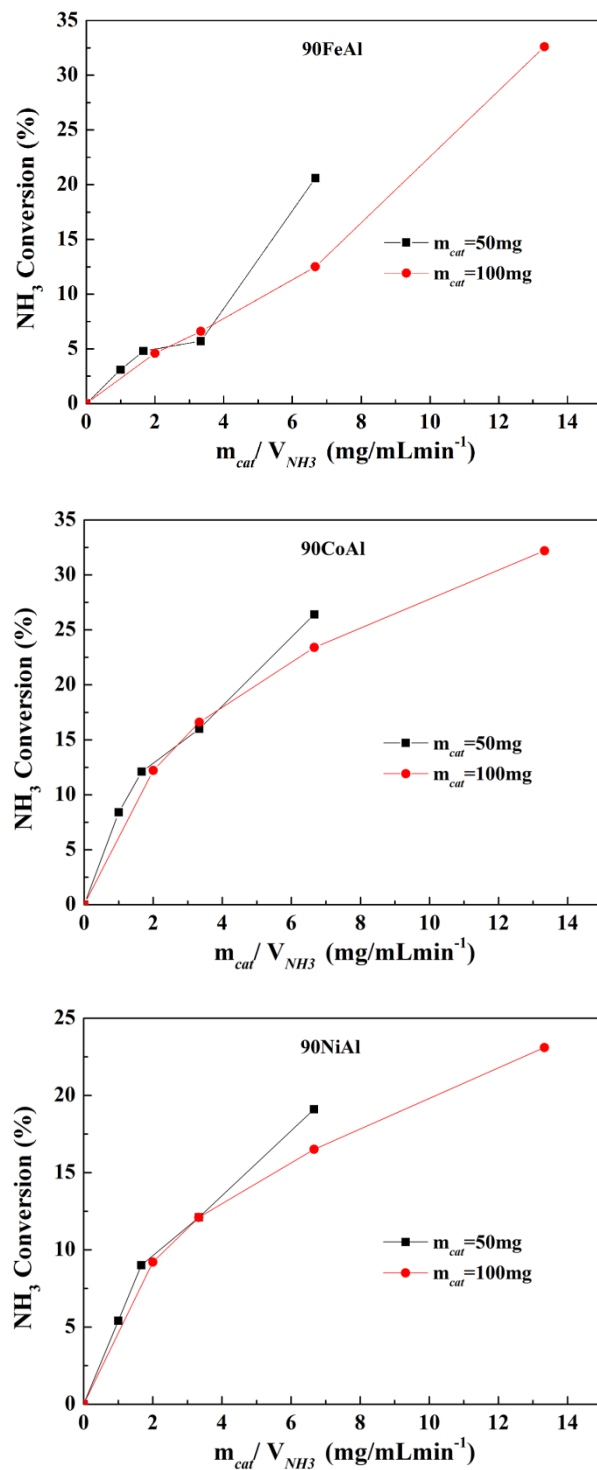


Fig. S4 Mass transfer limitation study at 400 °C by change catalyst mass and NH_3 flow.