

Electronic Supplementary Information

Preparation and characterization of Fe-doped TiO₂ nanoparticles as a support for a high performance CO oxidation catalyst

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Sample	BET Surface Area (m^2/g)
TiO_2	88.70
$\text{Ti}_{0.96}\text{Fe}_{0.04}\text{O}_2$	81.77
$\text{Ti}_{0.94}\text{Fe}_{0.06}\text{O}_2$	78.49
$\text{Ti}_{0.92}\text{Fe}_{0.08}\text{O}_2$	78.90
$\text{Ti}_{0.88}\text{Fe}_{0.12}\text{O}_2$	64.24
Commercial TiO_2 (P25)	47.13

Table S1. BET surface area for bare TiO_2 and Fe-doped TiO_2 samples.

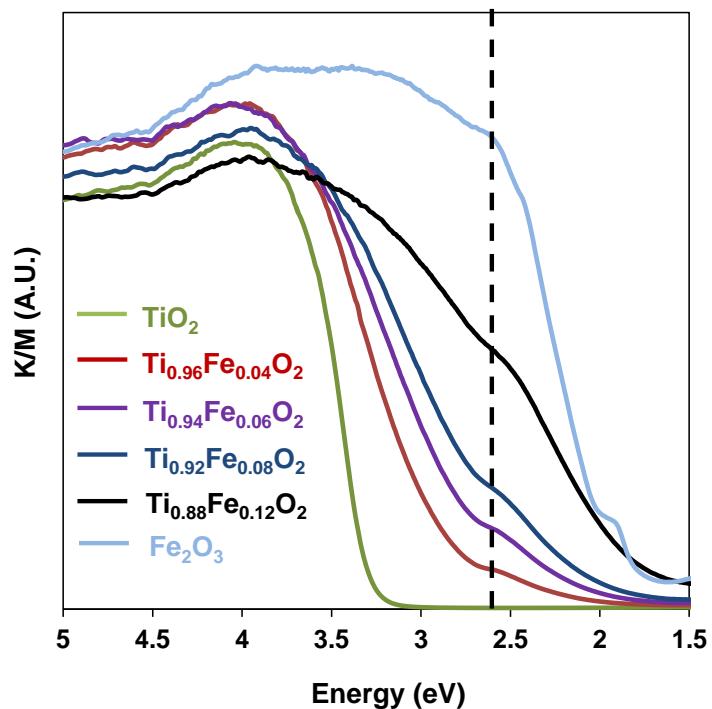


Fig. S1 UV-visible diffused reflectance spectrum of anatase TiO_2 , Fe-doped TiO_2 and commercial Fe_2O_3 nanoparticle.

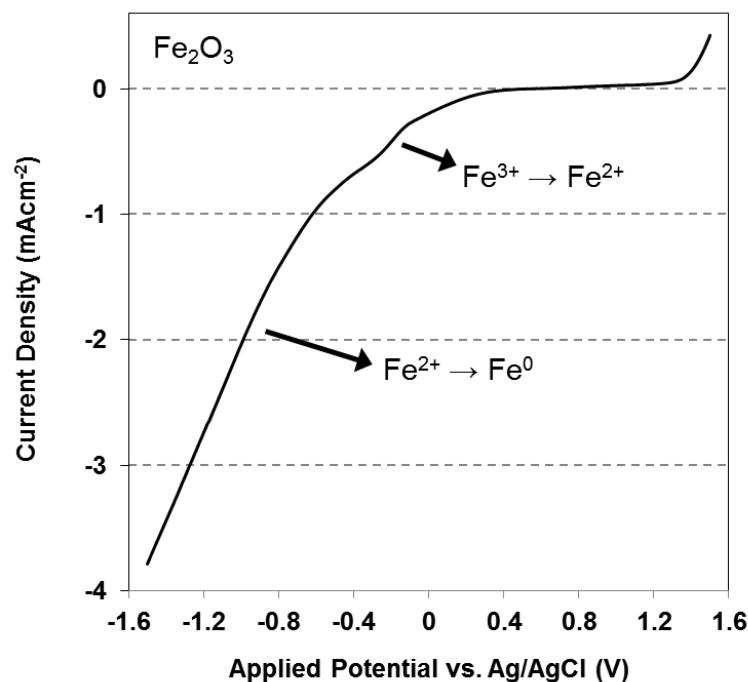


Fig. S2 Linear sweep voltammograms for an aqueous electrolyte of 0.1 M NaClO_4 on Fe_2O_3 electrode.

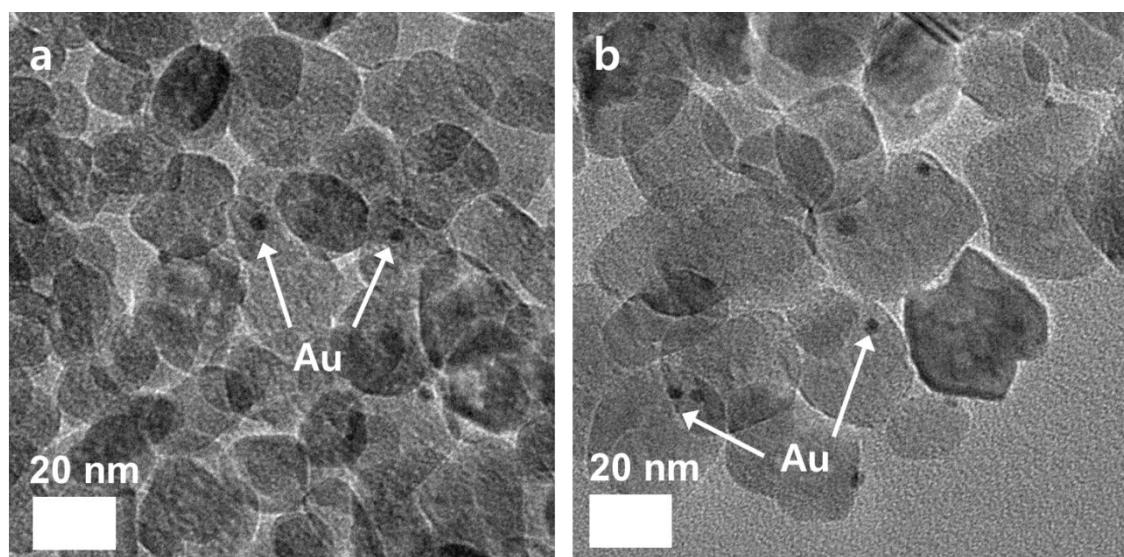


Fig. S3 TEM images of Au deposited on (a) bare TiO₂ nanoparticle and (b) Ti_{0.88}Fe_{0.12}O₂

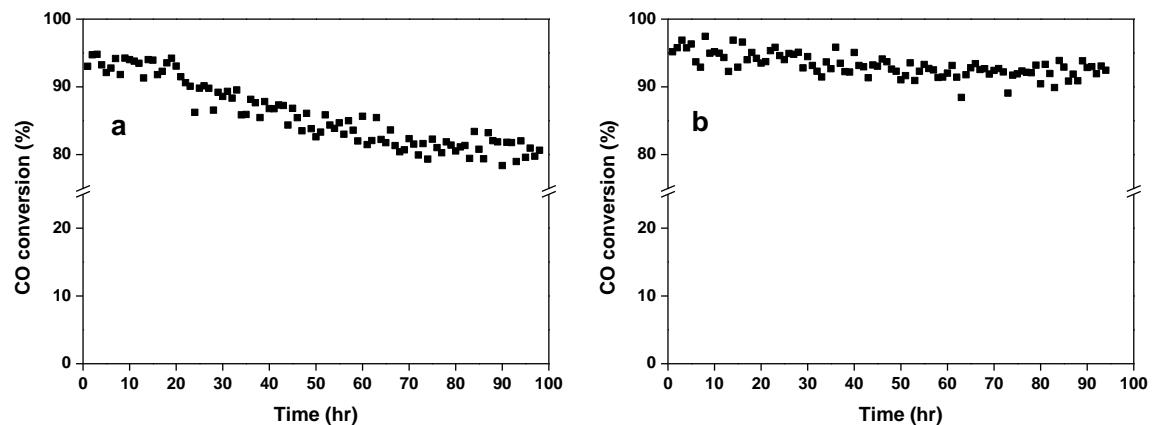


Fig. S4 CO oxidation on (a) Au/TiO₂, (b) Au/Ti_{0.94}Fe_{0.06}O₂ catalysts at T₉₀ for 100 hr. T₉₀ of Au/TiO₂, Au/Ti_{0.94}Fe_{0.06}O₂ catalysts was 92 °C and 166 °C, respectively.