

Figure S1- NO step feed: blank transient without catalyst (T=120°C)

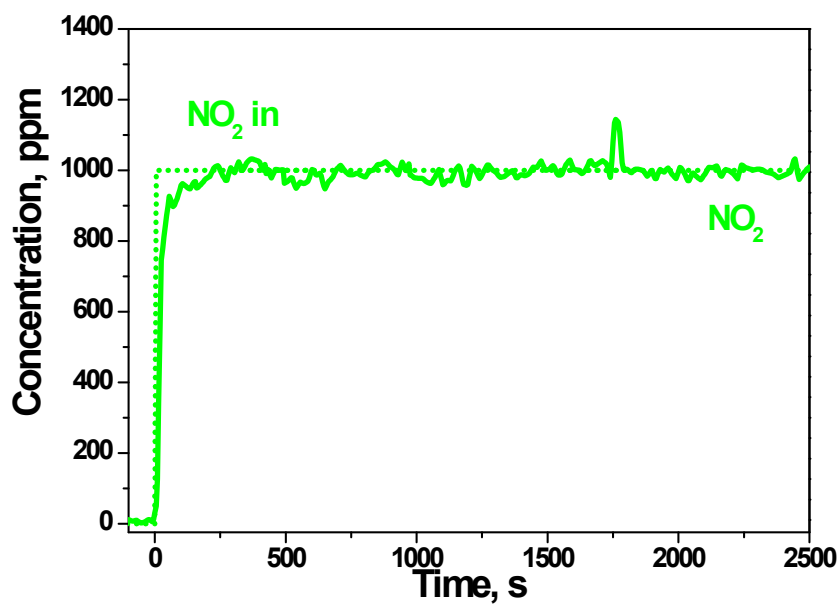


Figure S2- NO<sub>2</sub> step feed: blank transient without catalyst (T=120°C)

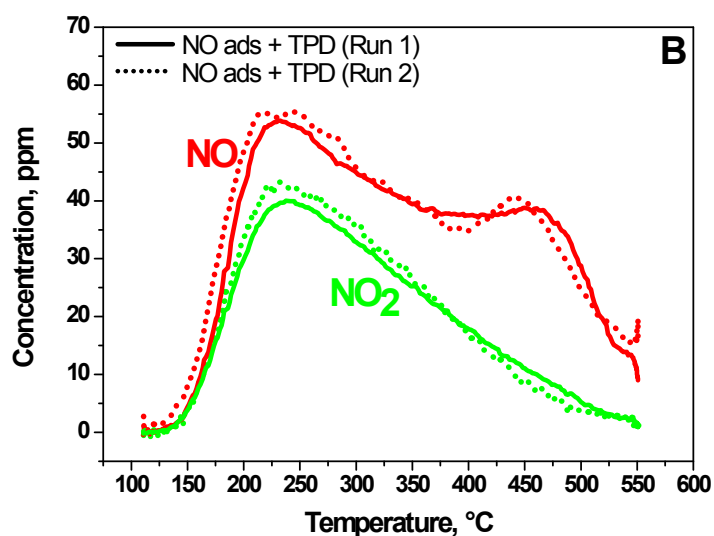
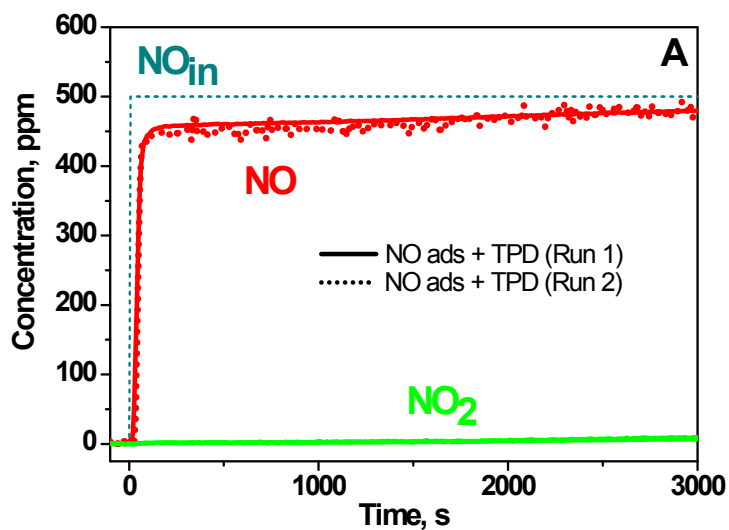


Figure S3- Reproducibility experiments: Fe-Ba-MM samples.  $NO+O_2$  isothermal adsorption at 120 °C.  $Q=120\text{ cm}^3/\text{min}$  (STP); feed:  $O_2=8\%$ ;  $H_2O=0\%$ ;  $CO_2=0\%$ ;  $NO=500\text{ ppm}$ . (A) Adsorption phase (B) TPD phase.

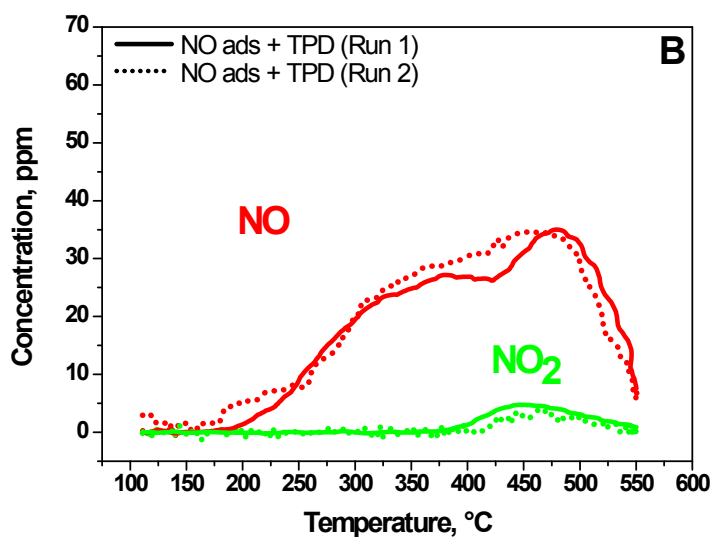
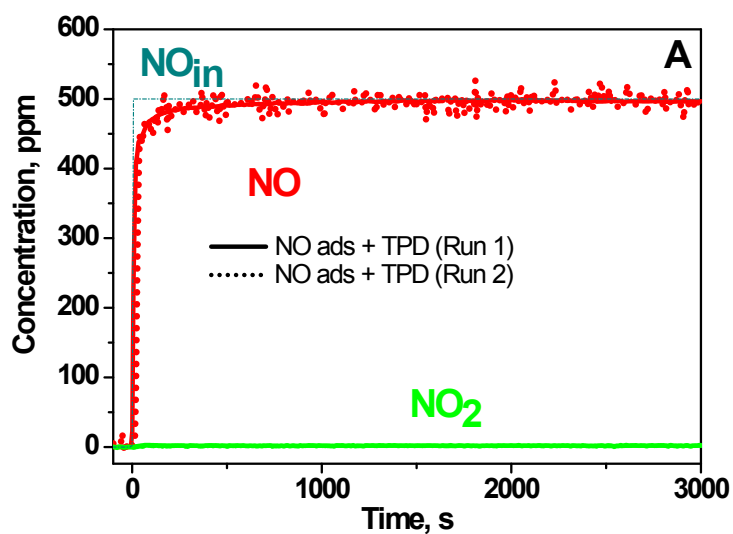


Figure S4- Reproducibility experiments: Fe-Ba-MM samples.  $NO+O_2$  isothermal adsorption at 120 °C.  $Q=120\text{ cm}^3/\text{min}$  (STP); feed:  $O_2=8\%$ ;  $H_2O=8\%$ ;  $CO_2=0\%$ ;  $NO=500\text{ ppm}$ . (A) Adsorption phase (B) TPD phase.