

**The Interaction of H₂O₂ with exchanged Titanium Oxide Systems
(TS-1, TiO₂, [Ti]-APO-5, Ti-ZSM-5)**

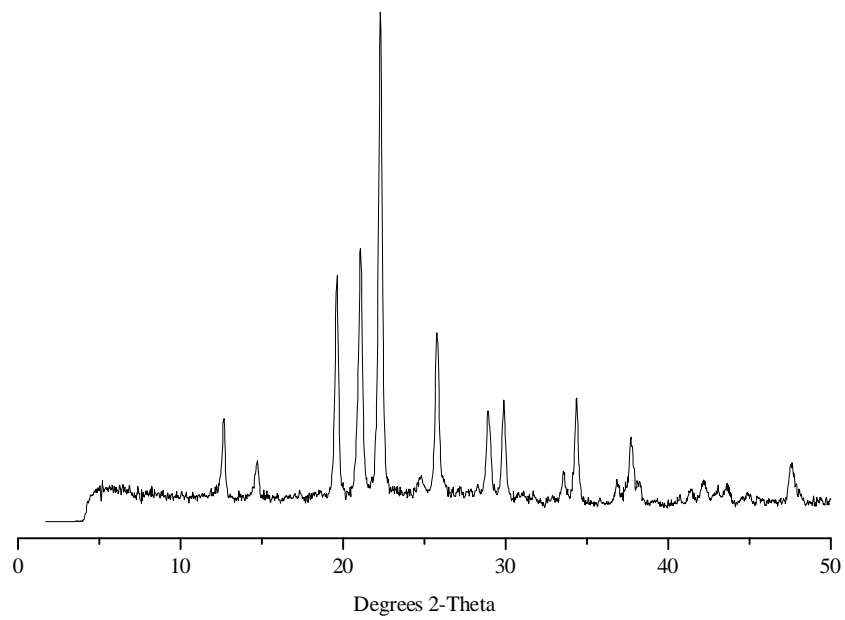
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SUPPLEMENTARY FIGURES

Calcined [Ti]-APO-5



Calcined TS-1

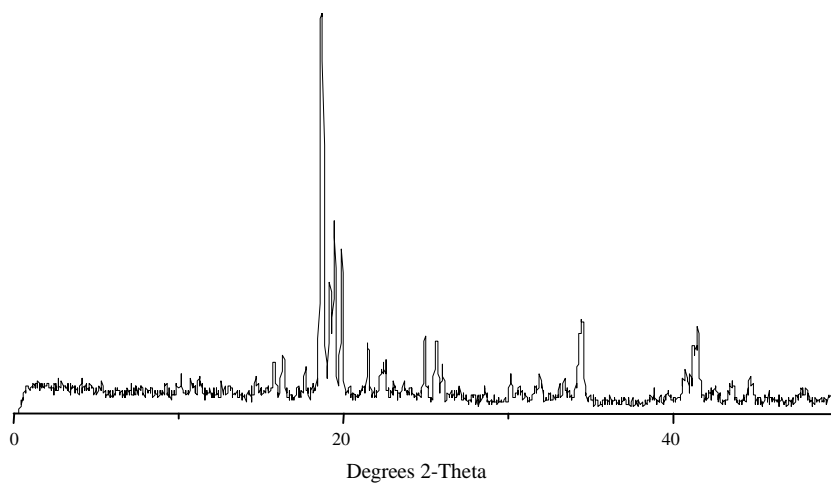


Figure 1; XRD patterns for the calcined [Ti]-APO-5 and TS-1 samples

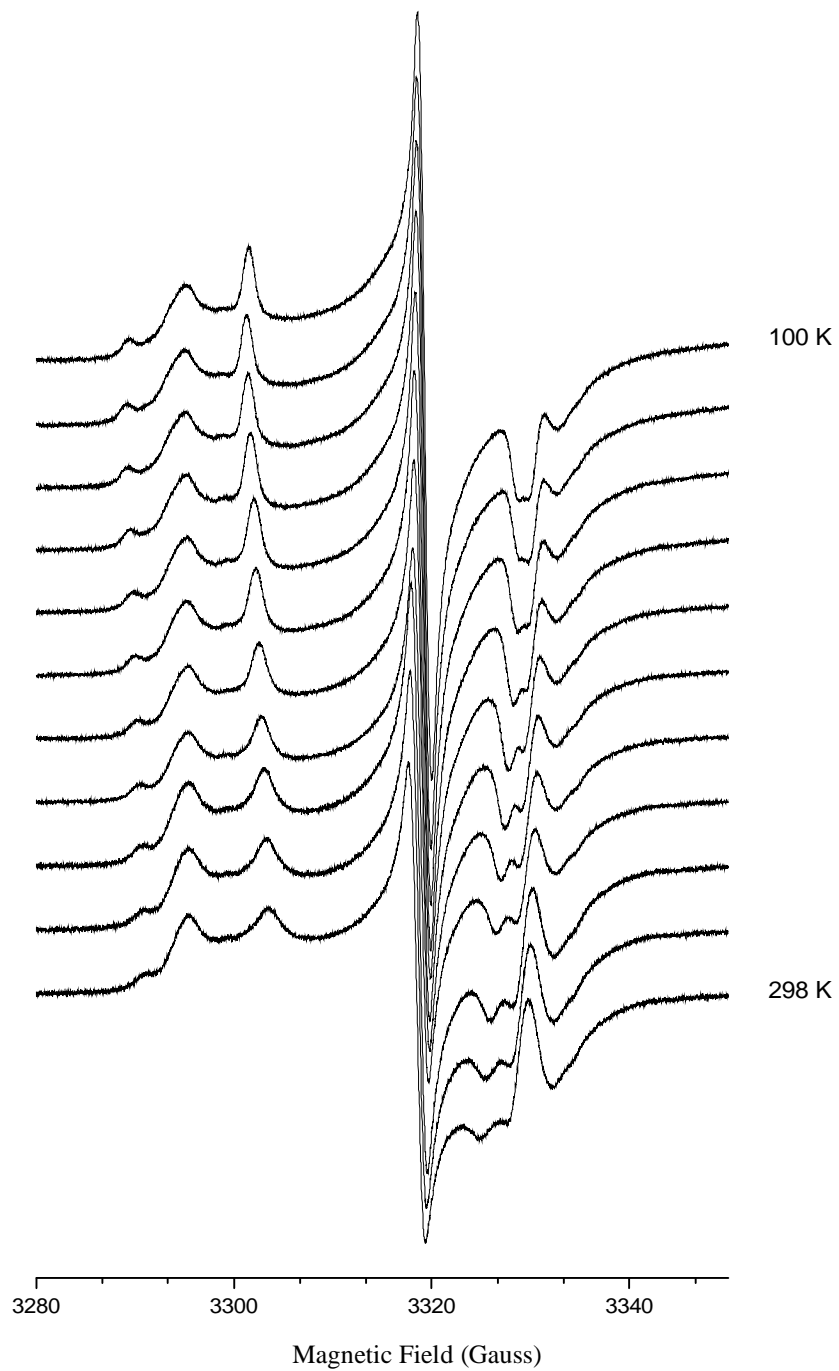


Figure 2; EPR spectra of O_2^- formed on thermally reduced TiO₂ (rutile)

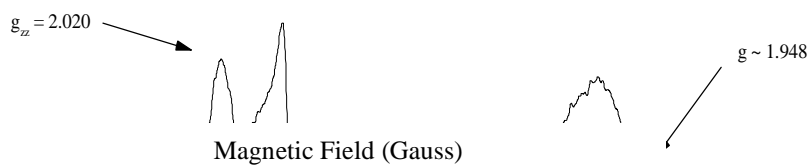
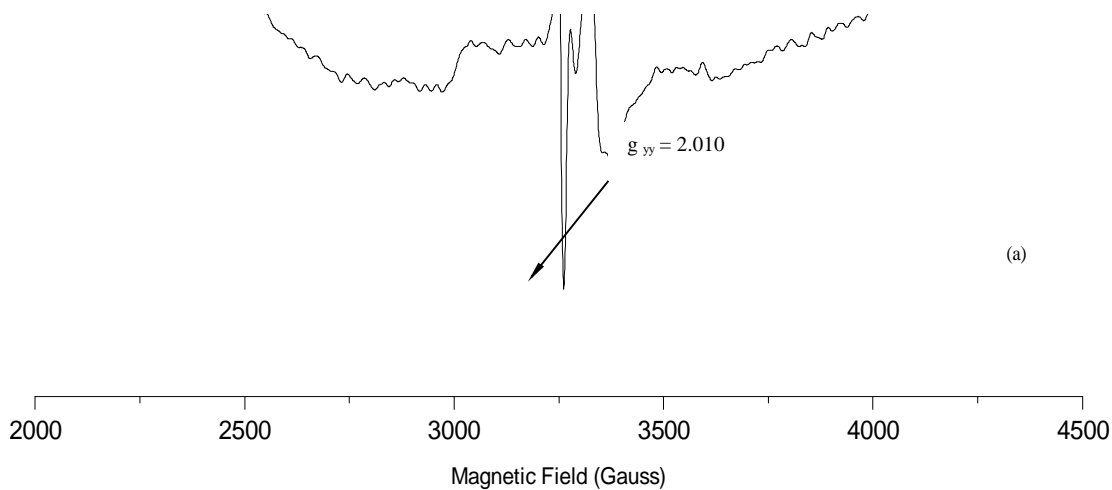
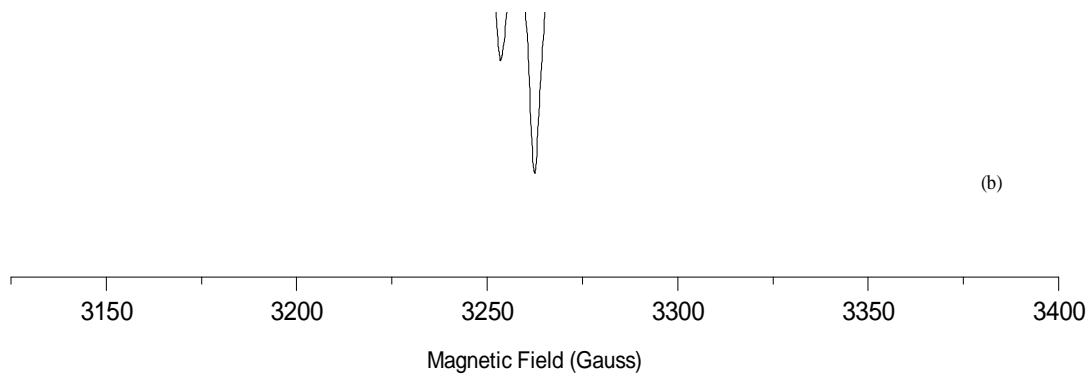


Figure 3; EPR spectra of CO reduced TS-1, after addition of O_2 . The signal due to unreacted Ti^{3+} centres is visible at $g = 1.948$.



EPR spectra of TS-1 (a) reduced by CO and (b) formation of O_2^- upon addition of O_2

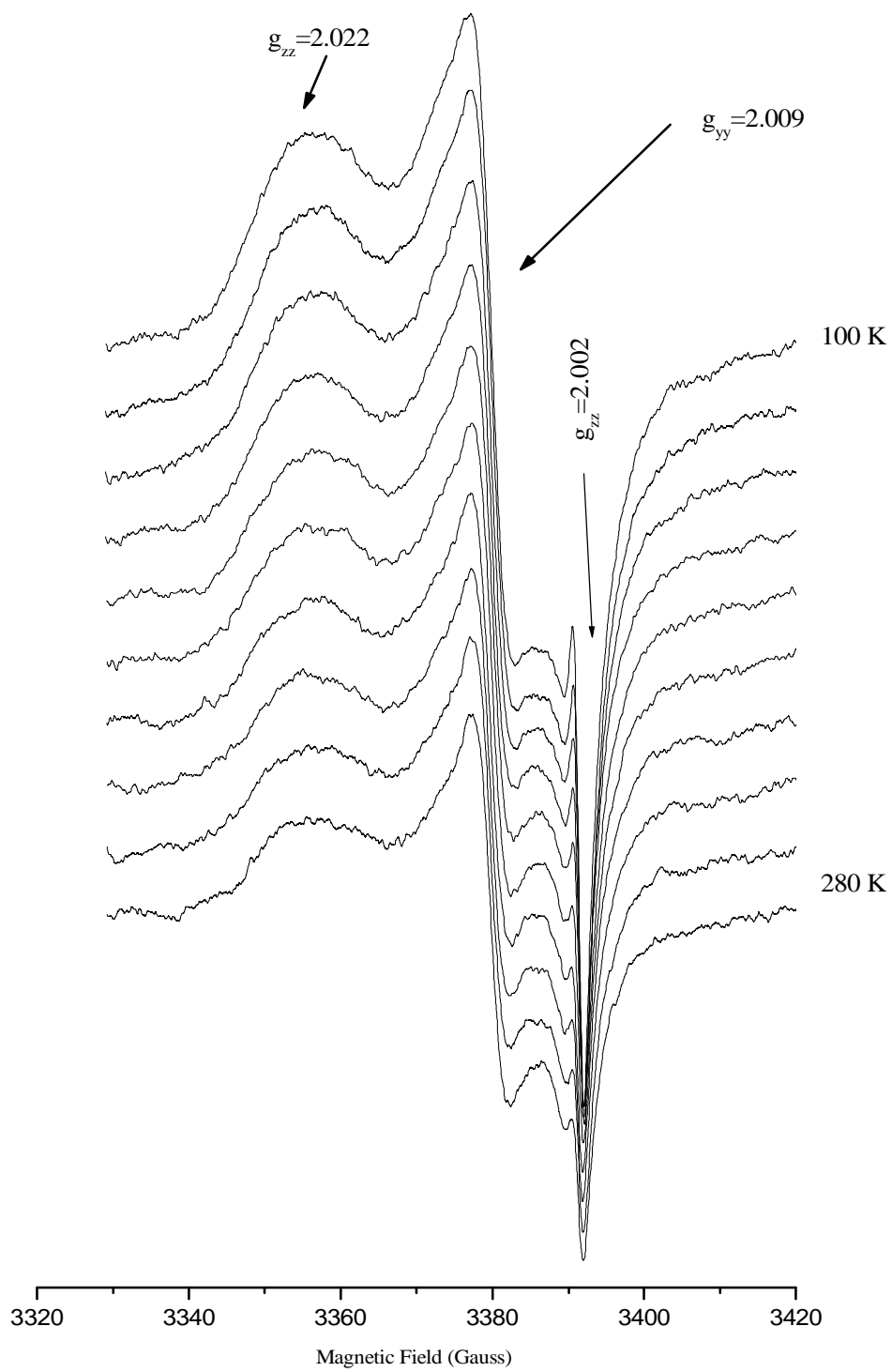


Figure 4; EPR spectra of 60 wt% H₂O₂ treated [Ti]-APO-5 *before* evacuation of the sample.

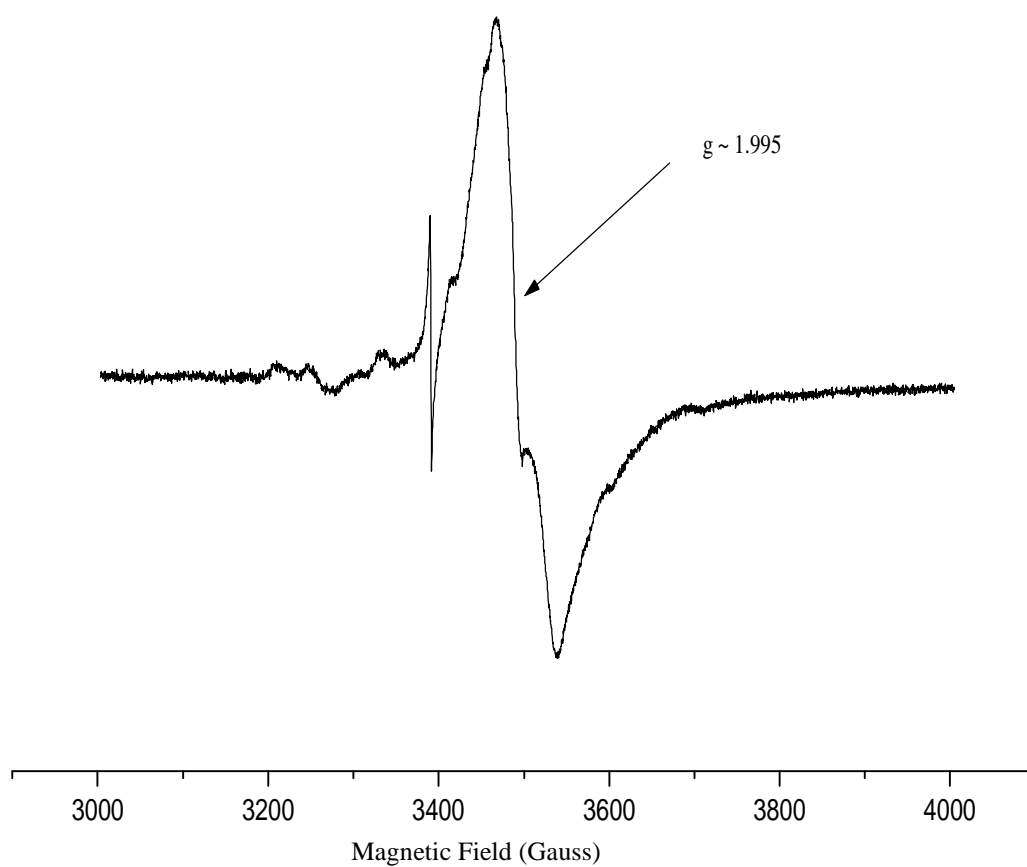


Figure 5; EPR spectra of CO reduced [Ti]-APO-5 *before* addition of molecular oxygen.

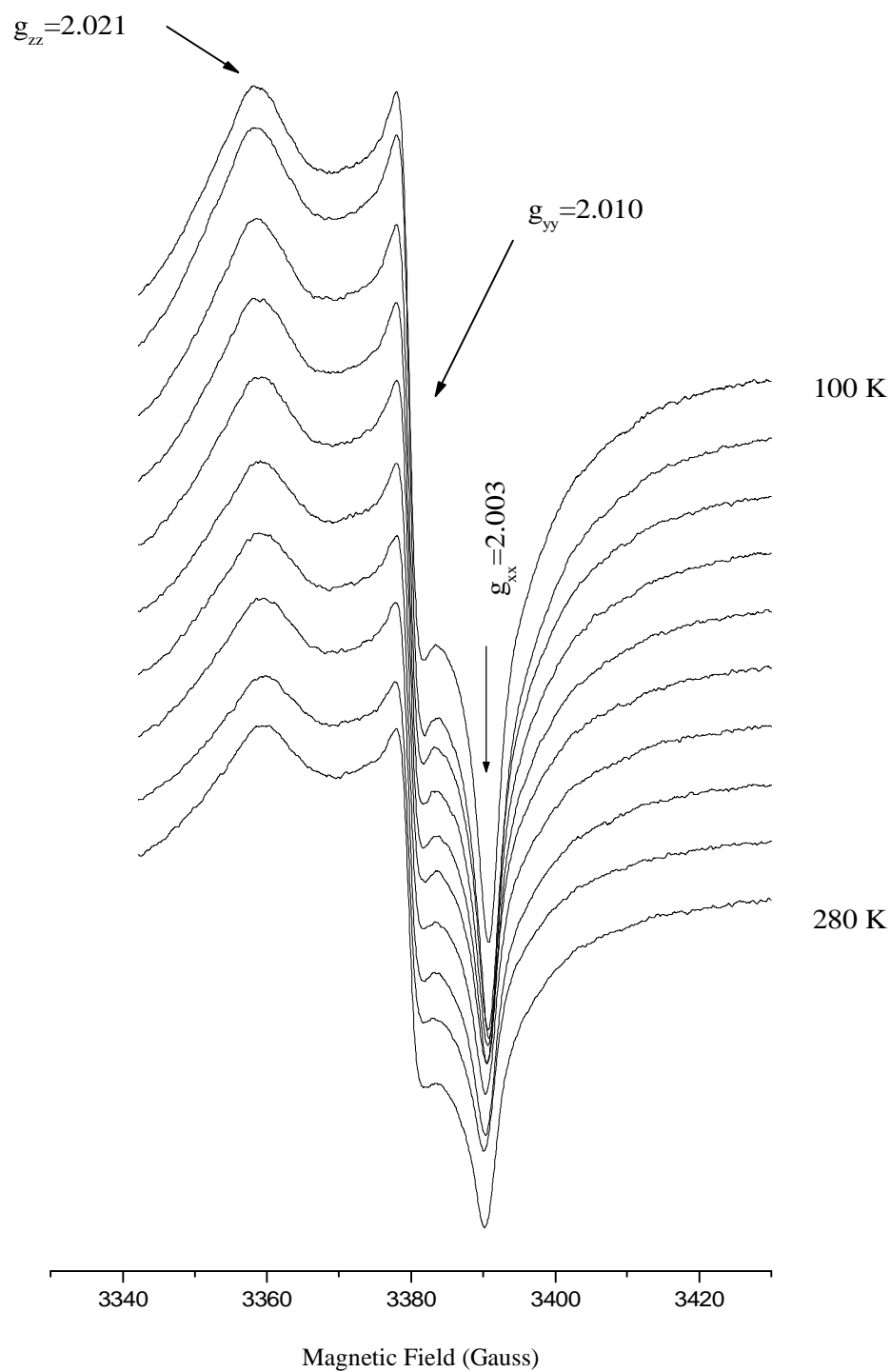


Figure 6; EPR spectra of 60 wt% H₂O₂ treated Ti-ZSM-5 after evacuation at 298K for 1 hour.