

Supplementary data

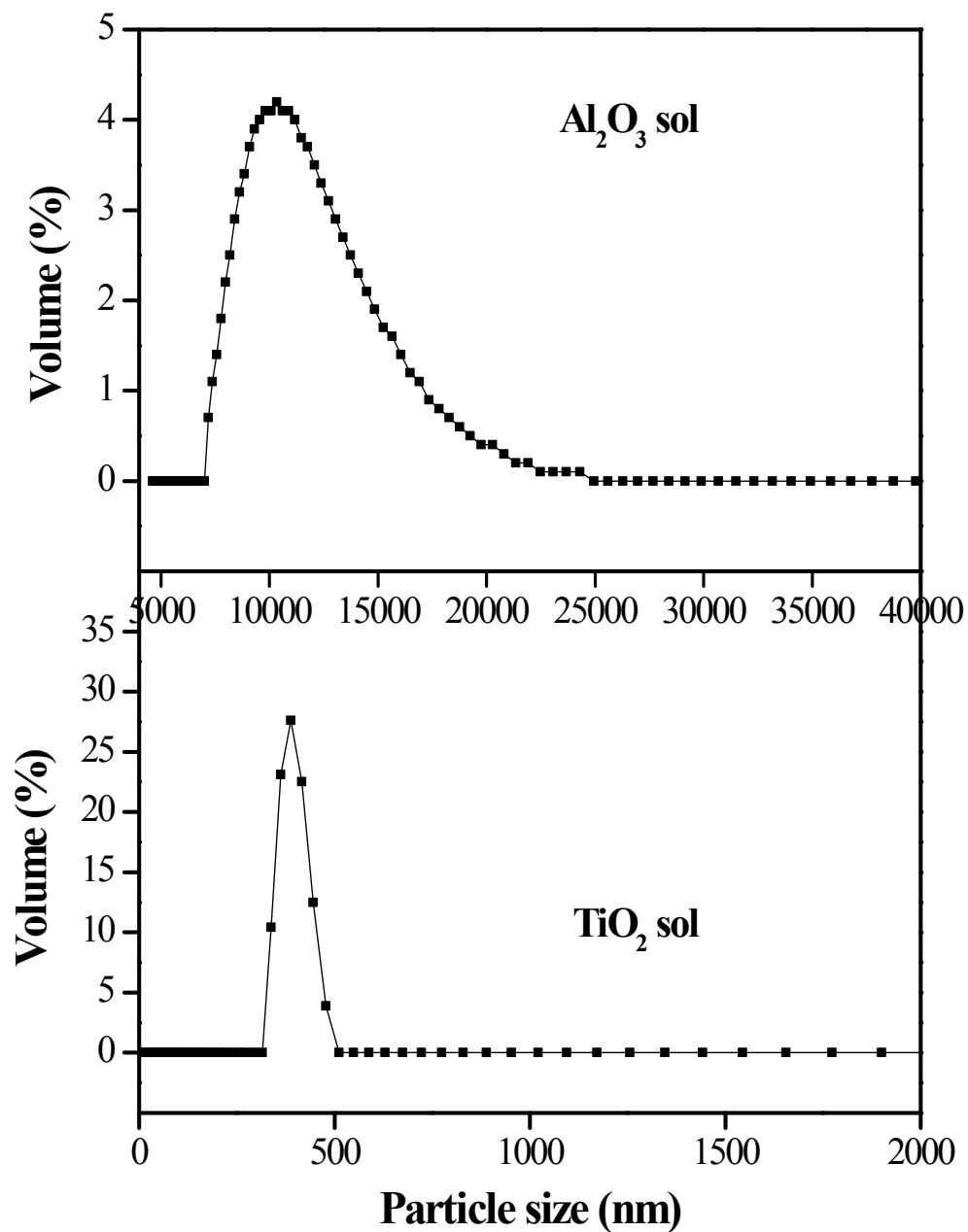
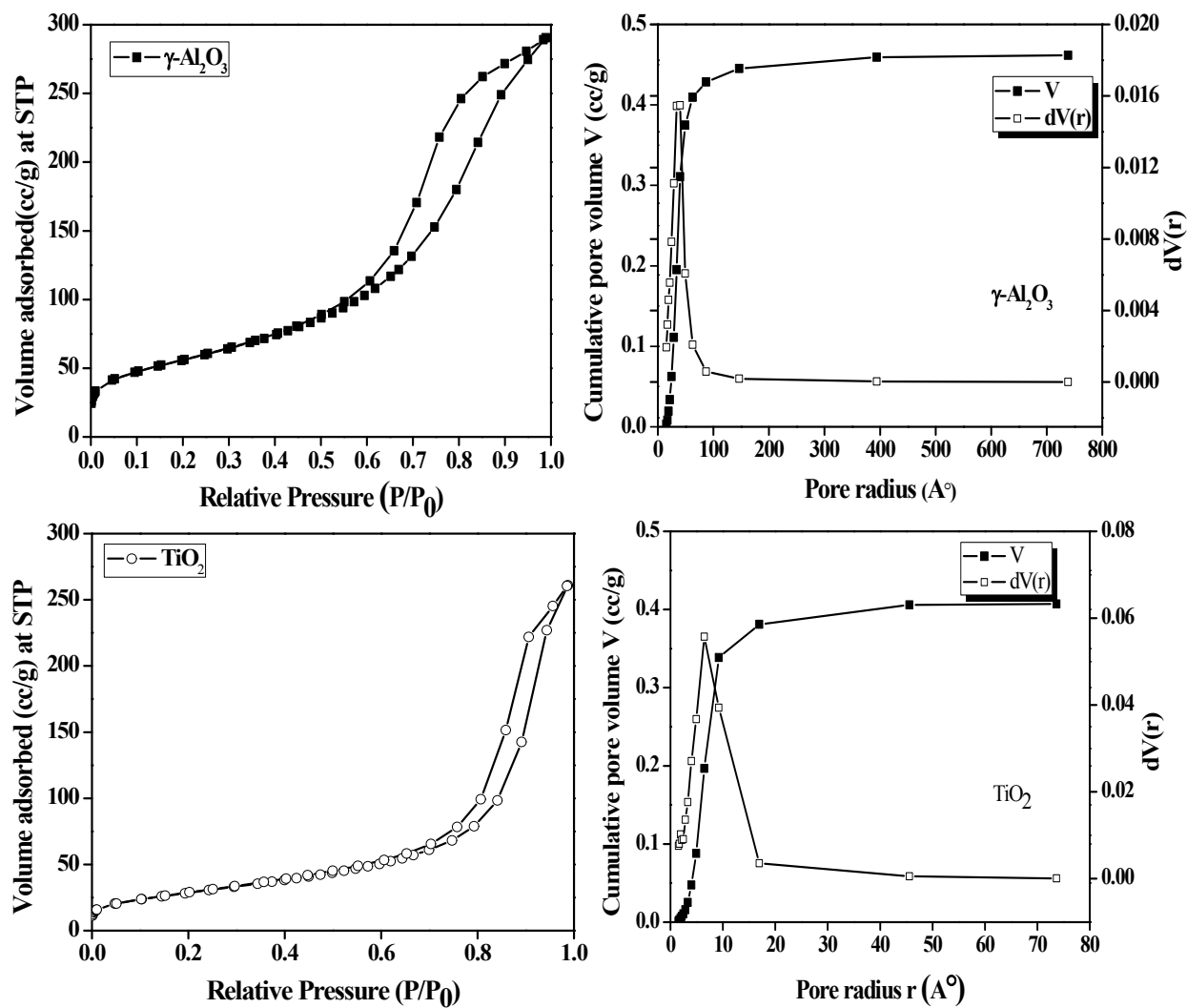


Fig. S1 Particle size distribution of synthesized sols ( $\text{TiO}_2$  and  $\text{Al}_2\text{O}_3$ )



**Fig. S2**  $\text{N}_2$  adsorption and desorption isotherms and BJH pore size distributions of  $\text{TiO}_2$  and  $\gamma\text{-Al}_2\text{O}_3$  powders

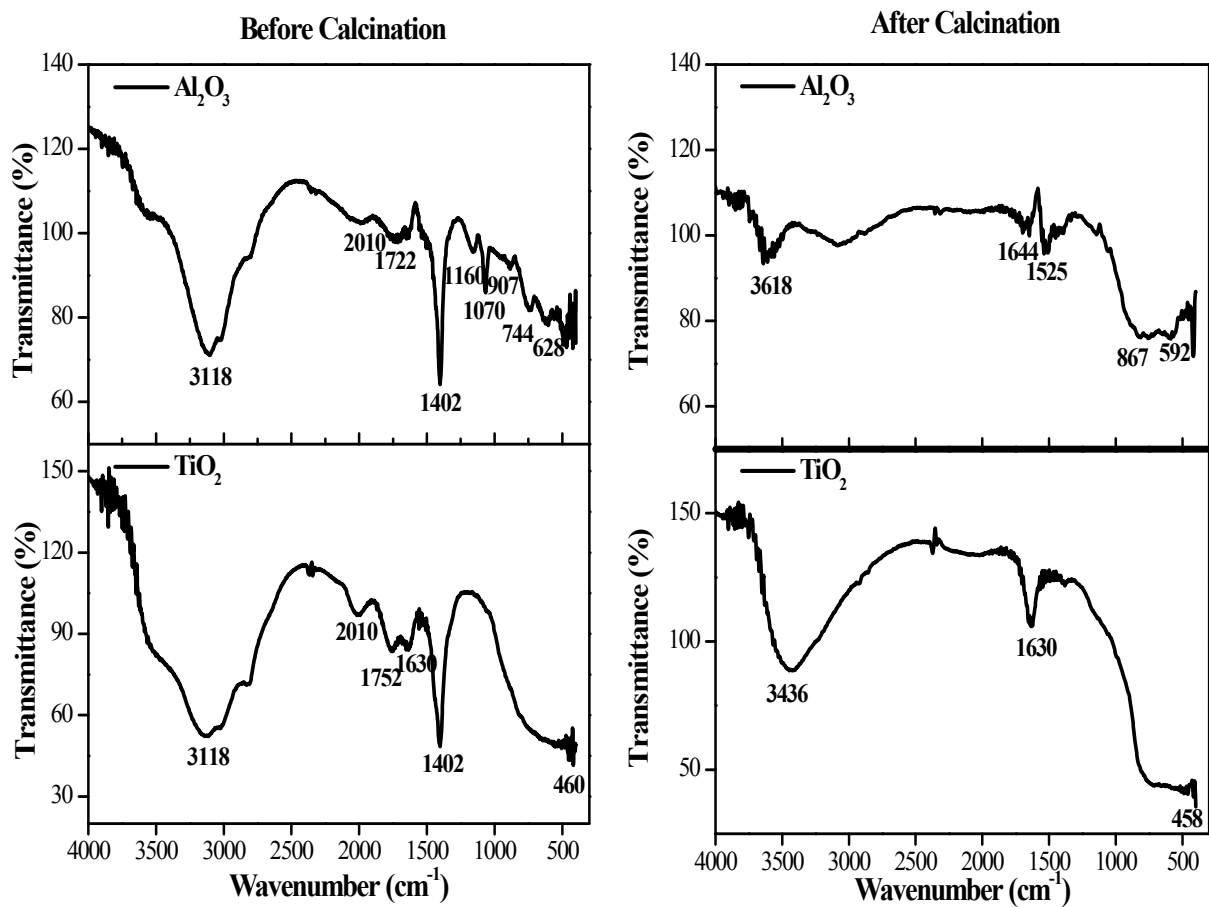


Fig. S3 FTIR analysis of  $\text{TiO}_2$  powder and  $\gamma\text{-Al}_2\text{O}_3$  powder