

Electronic Supplementary Information

Nanocrystalline $\text{Ce}_{1-x}\text{Sm}_x\text{O}_{2-\delta}$ ($x = 0.4$) solid solutions: structural characterization versus CO oxidation

Kuncham Kuntaiah,^a Putla Sudarsanam,^a Benjaram M. Reddy*^a and Ajayan Vinu^b

^aInorganic and Physical Chemistry Division, CSIR – Indian Institute of Chemical Technology, Uppal Road, Hyderabad – 500 607, India

^bAustralian Institute for Bioengineering and Nanotechnology (AIBN), Corner College and Cooper Rds (Bldg 75), the University of Queensland, Brisbane Qld 4072, Australia

*Author to whom correspondence should be addressed. Phone: +91 40 2719 1714. Fax: +91 40 2716 0921. E-mail: bmreddy@iict.res.in, mreddyb@yahoo.com

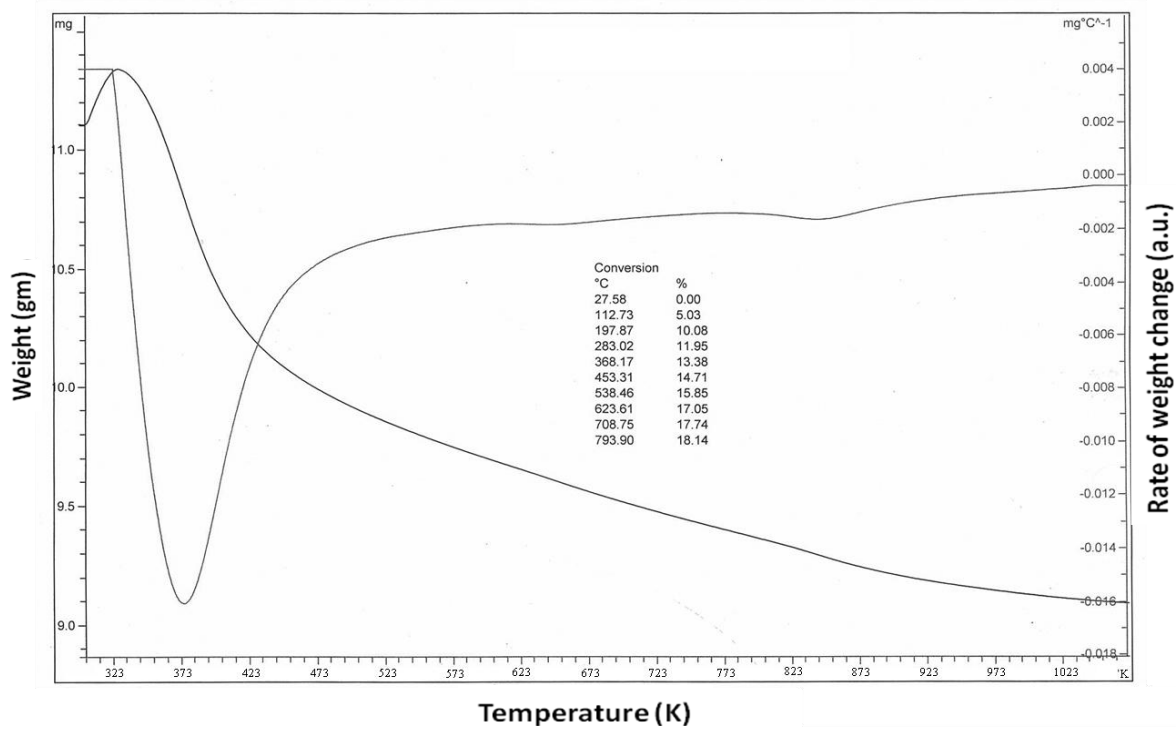


Fig. S1 TG-DTA study of oven dried CeO₂-Sm₂O₃ sample.

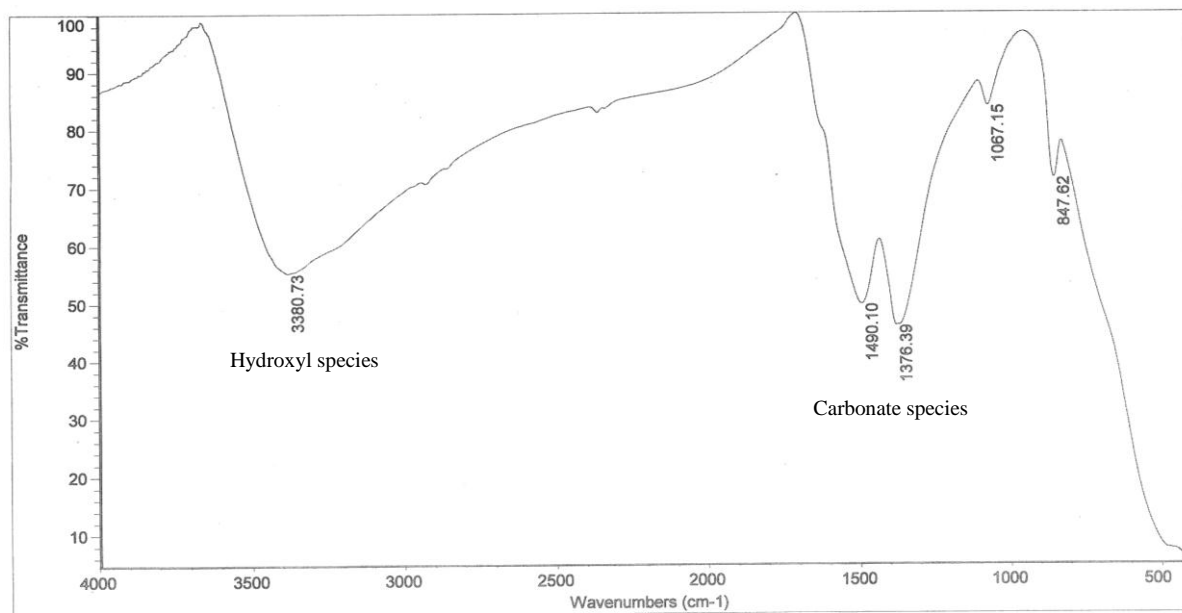


Fig. S2 FTIR analysis of $\text{CeO}_2\text{-Sm}_2\text{O}_3$ sample calcined at 773 K.

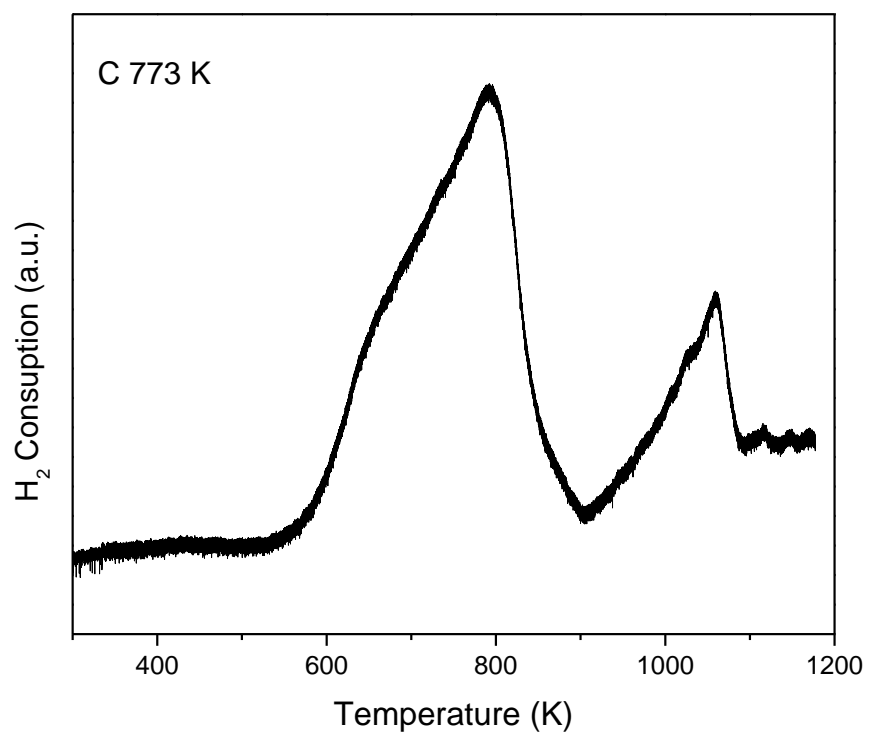


Fig. S3 H₂ consumption as a function of temperature for pure CeO₂ sample calcined at 773 K.