

Supporting information

Selective oxidation of glycerol on morphology-controlled ceria nanomaterials

Miguel Tinoco,^a Susana Fernandez-Garcia,^a Alberto Villa,^b Juan M. Gonzalez,^c Ginesa Blanco,^a Ana B. Hungria,^a Lei Jiang,^d Laura Prati,^b Jose J. Calvino,^a Xiaowei Chen^{a,*}

a. Departamento de Ciencia de los Materiales, Ingeniería Metalúrgica y Química Inorgánica, Facultad de Ciencias, Universidad de Cádiz, Campus Río San Pedro, Puerto Real (Cádiz), E-11510, Spain.

Email: xiaowei.chen@uca.es; Tel: +34-956-012741

b. Dipartimento di Chimica, Università degli Studi di Milano, Milan, I-20133, Italy

c. Departamento de Física de la Materia Condensada, Facultad de Ciencias, Universidad de Cádiz, Campus Río San Pedro, Puerto Real (Cádiz), E-11510, Spain.

d. Heavy Oil State Laboratory and Center for Bioengineering and Biotechnology, China University of Petroleum (East China), Qingdao, 266580, China

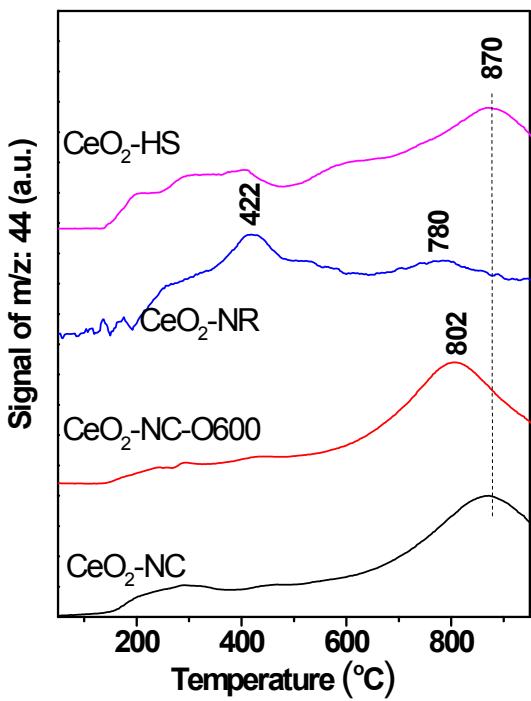


Figure S1 CO₂ evolution during CO-TPR over the ceria samples.

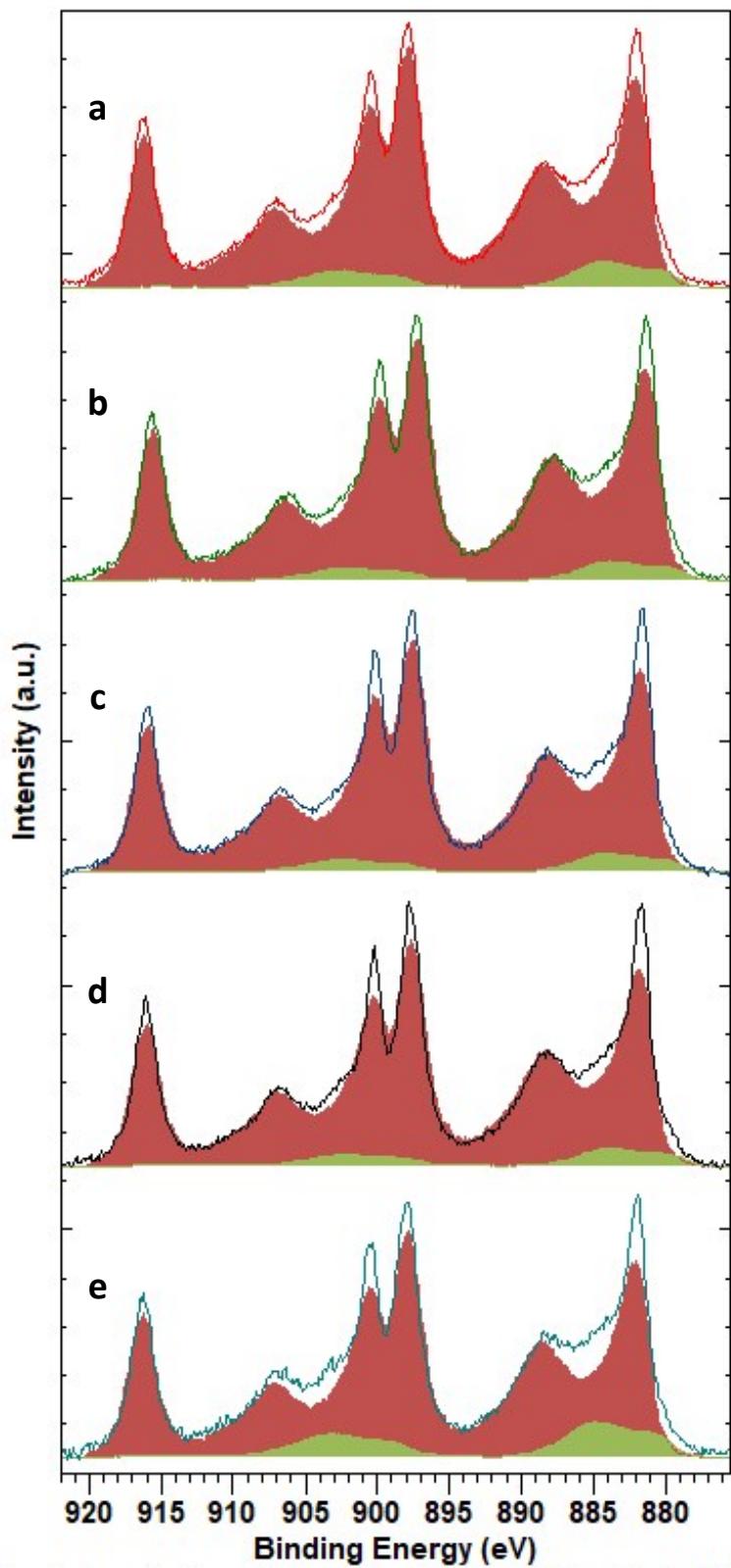


Figure S2 XPS spectra of Ce 3d core level of (a) $\text{CeO}_2\text{-NC}$, (b) $\text{CeO}_2\text{-NC-O600}$, (c) $\text{CeO}_2\text{-HS}$, (d) $\text{CeO}_2\text{-LS}$ and (e) $\text{CeO}_2\text{-NR}$. In red the contribution from Ce^{4+} ; in green the contribution from Ce^{3+} .