

## Supplemental Materials

### New Ultrasonic Assisted Coprecipitation for High Surface Area Oxide Based Nanostructured Materials

Dereck N. F. Muche<sup>a</sup>, Flavio L. Souza<sup>a,b</sup>, Ricardo H. R. Castro<sup>a,\*</sup>.

<sup>a</sup> *Department of Materials Science & Engineering, University of California, Davis, CA 95616, United states*

<sup>b</sup> *Centro de Ciências Naturais e Humanas (CCNH), Universidade Federal do ABC, Av. dos Estados N°5001, Bangu, Santo André, São Paulo, Brazil, CEP 09210-580.*

Corresponding author: E-mail address: [rhrcastro@ucdavis.edu](mailto:rhrcastro@ucdavis.edu)

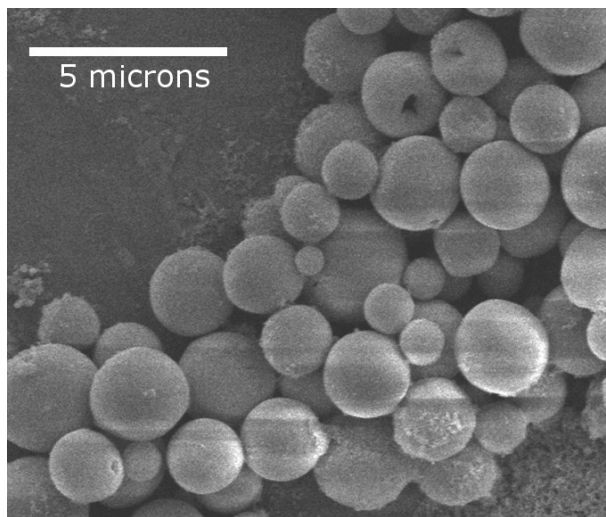


Figure 1S: As-precipitated hydroxide (before calcination to convert into oxide) for CeO<sub>2</sub> doped with Gd powder produced with UAAC.