

Supplementary Information

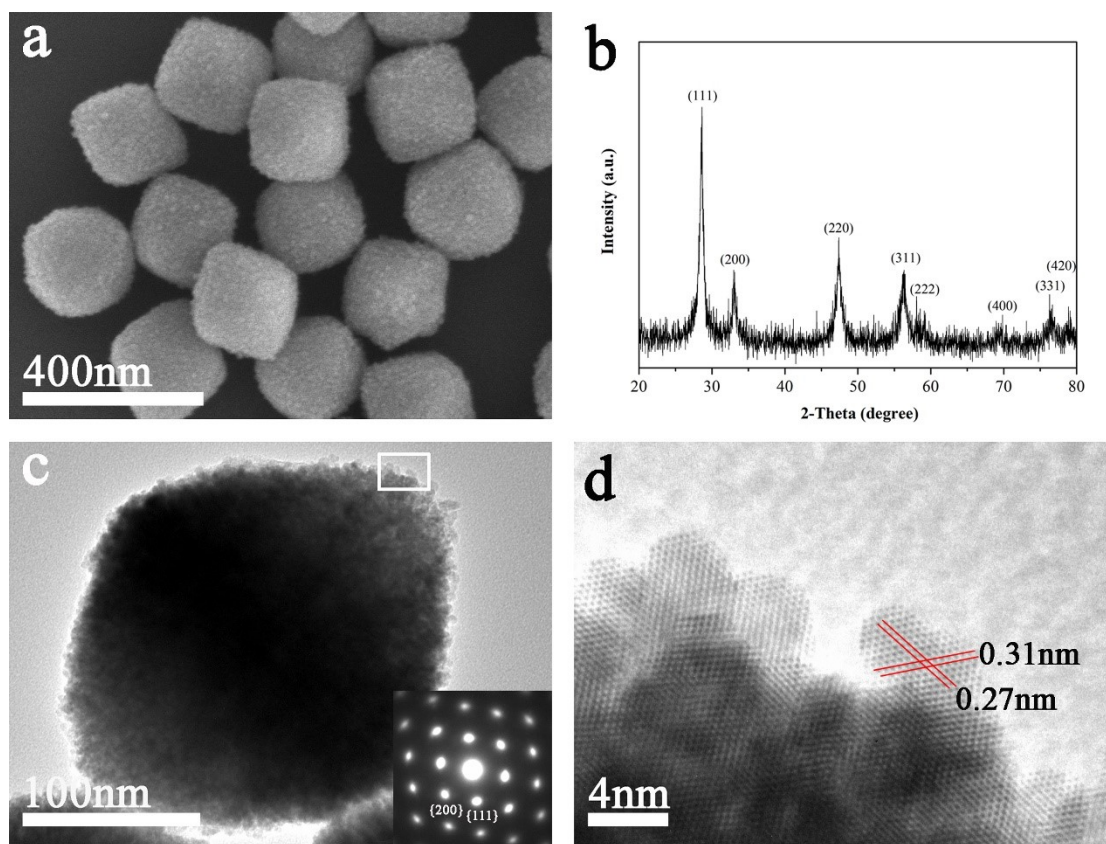


Fig. S1 Typical SEM image (a) and XRD pattern (b) of the hierarchical octahedral CeO_2 precursor synthesized by a hydrothermal method. (c) TEM image of a single precursor particle and corresponding SAED pattern (inset). (d) HRTEM image recorded from white-boxed region marked in c.

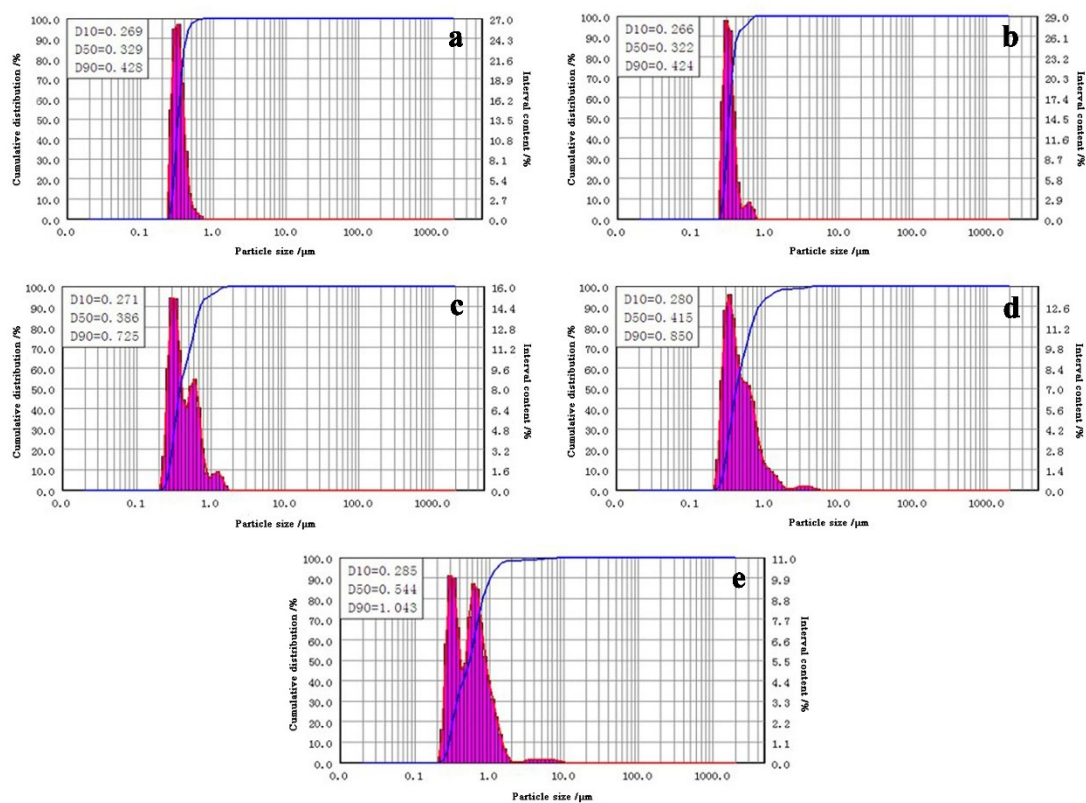


Fig. S2 The particle size distribution curves of calcined products Sample A-E (a-e).

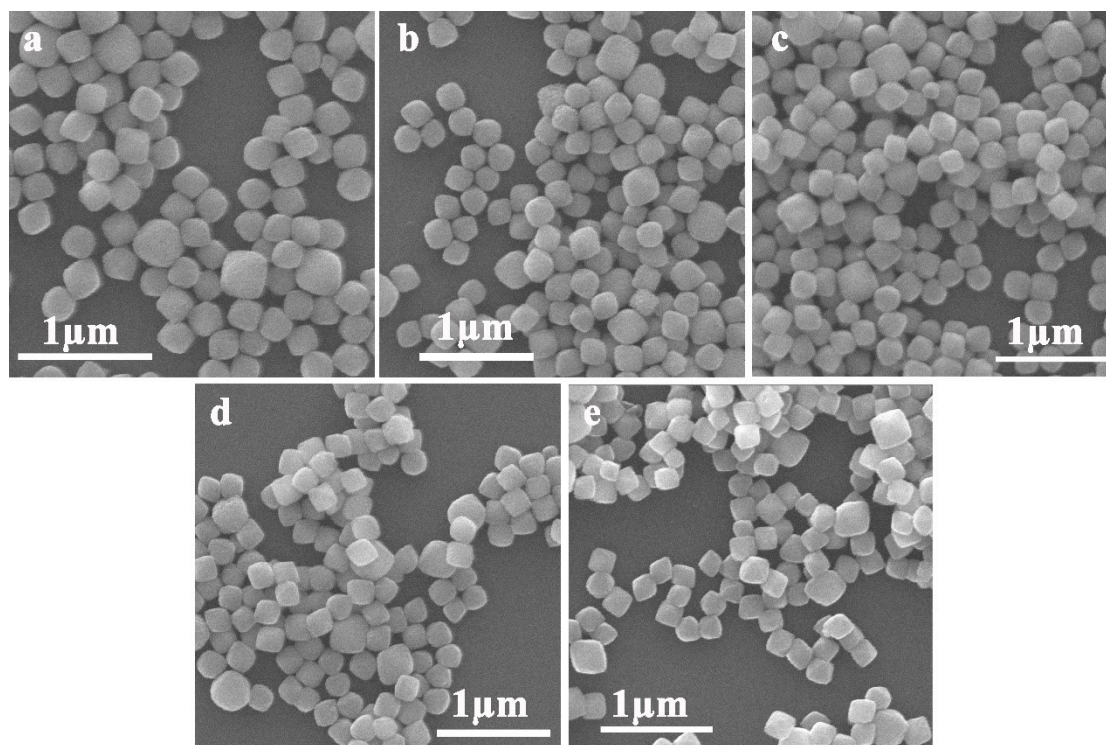


Fig. S3 Low-magnification SEM images of the calcined products Sample A-E (a-e).

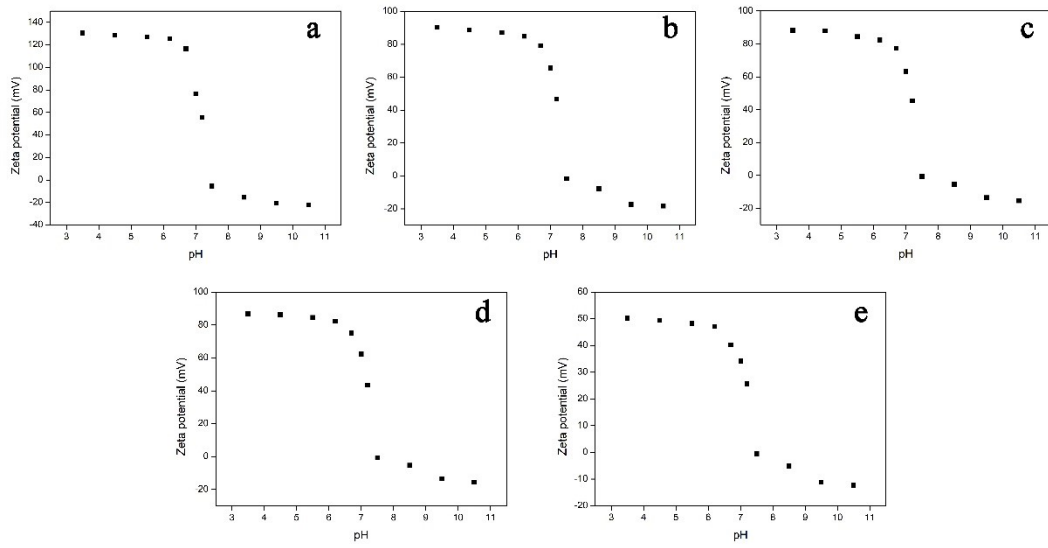


Fig. S4 Zeta potential vs pH curves of the calcined products Sample A-E (a-e).



Fig. S5 Digital photo of polishing slurries prepared with the products calcined at 500, 600, 700, 800 and 900 °C (Sample A-E).