

Electronic Supplementary Information

Room Temperature Interfacial Reaction-Directed Synthesis of Hierarchically Porous Ceria from a Water-Soluble Precursor

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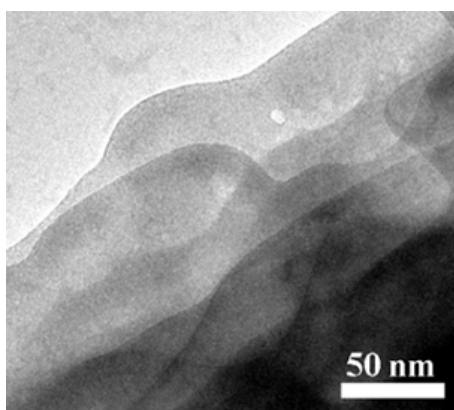


Fig. S1 TEM image of $\text{Ce}_2(\text{SO}_4)_3$ precursor under higher magnification.

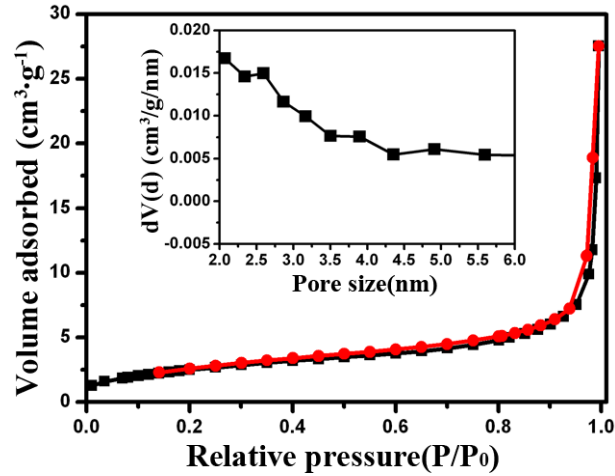


Fig. S2 Nitrogen adsorption-desorption isotherm and the corresponding BJH pore size distribution for the C-ceria sample.

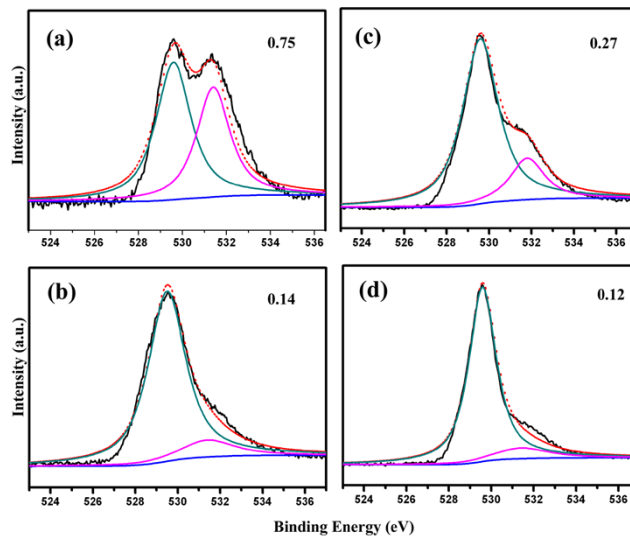


Fig. S3 O 1s XPS spectra of I-ceria (a), C-ceria (b), I-ceria/Au (c) and C-ceria/Au (d). In the O 1s XPS spectra, the O1s spectra can be fitted into O_{α} and O_{β} . The O_{β} peaks in I-ceria (a) and I-ceria/Au (c) are obviously stronger than those in C-ceria samples (b, d). The values in (a-d) figures are calculated from the area ratio (O_{β}/O_{α}).

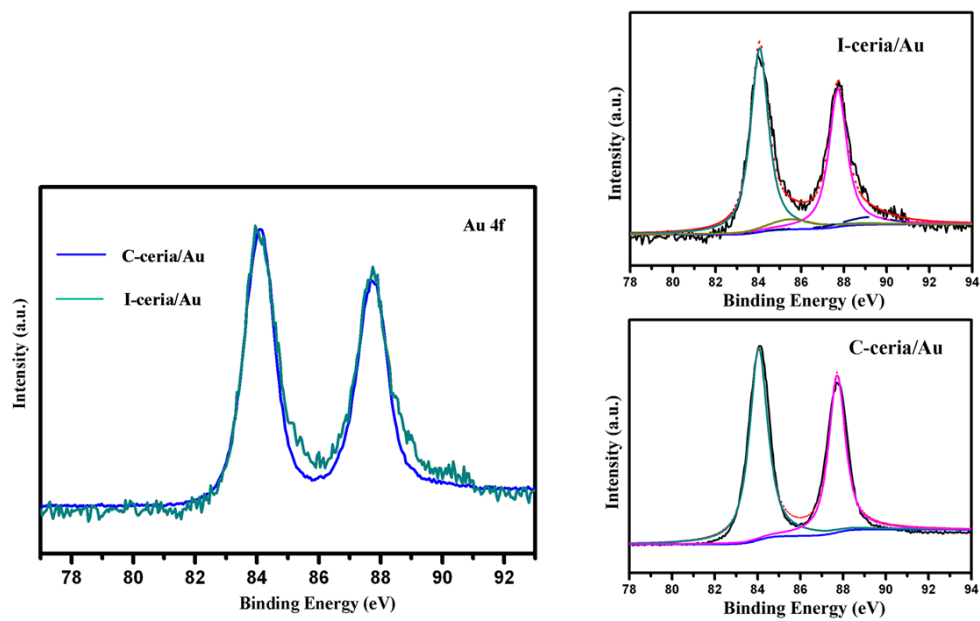


Fig. S4 (Left) Au 4f XPS spectra of I-ceria/Au and C-ceria/Au after normalization, and (Right) after fitting analysis.