

Supporting Information for:

**Synthesis of Mesoporous Ceria using Metal- and Halogen-Free Ordered
Mesoporous Carbon as a Hard Template**

by

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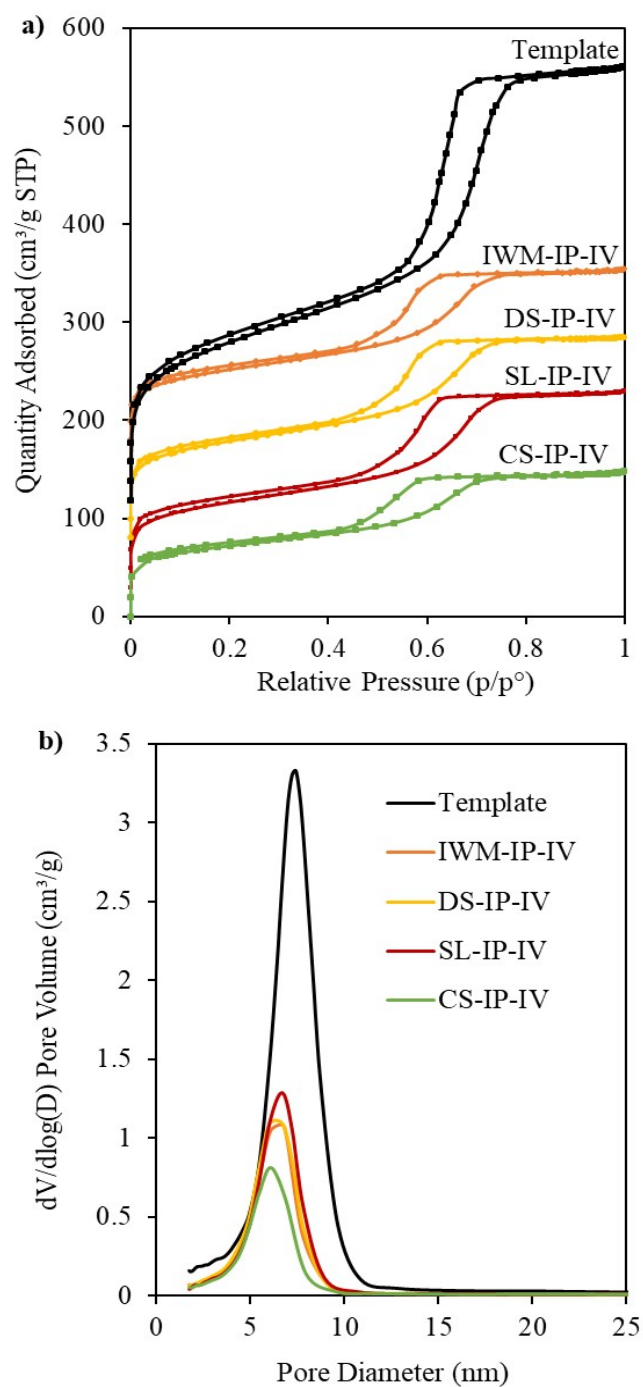


Figure S1. (a) Nitrogen physisorption isotherms and (b) Pore size distributions of OMC Template, IW-IP, DS-IP, SL-IP, and CS-IP.

Isotherm plots are shifted on the y-axis for clarity.

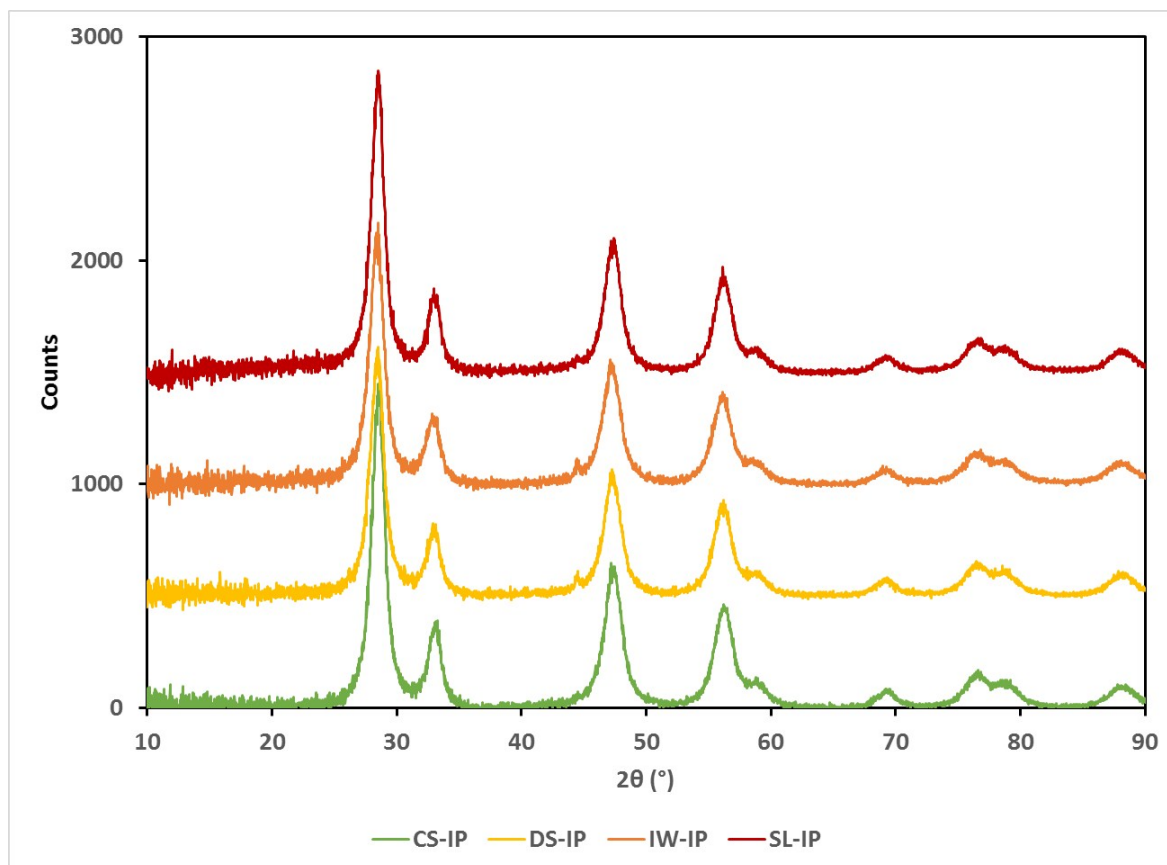
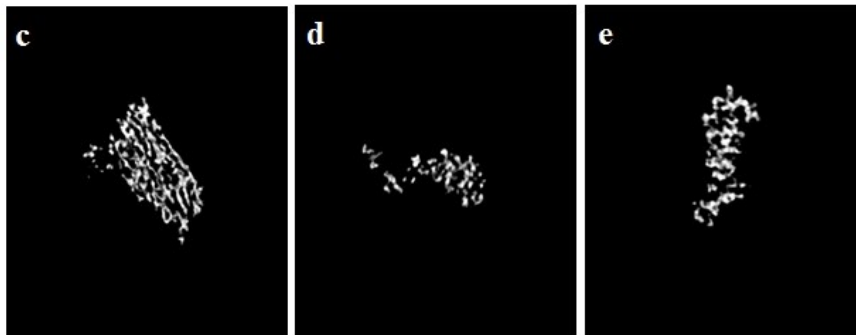
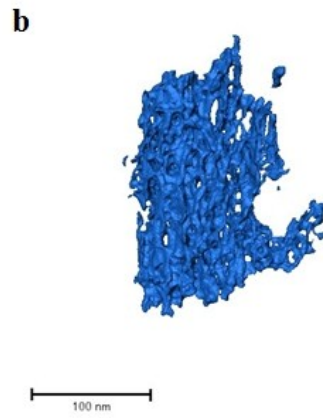
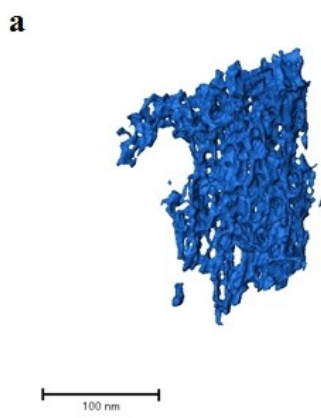
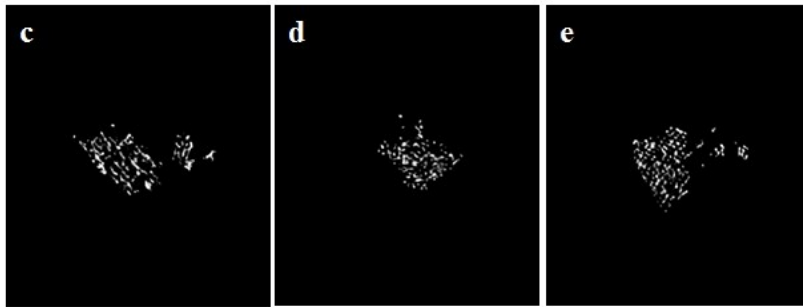
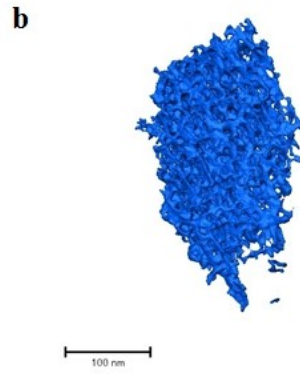
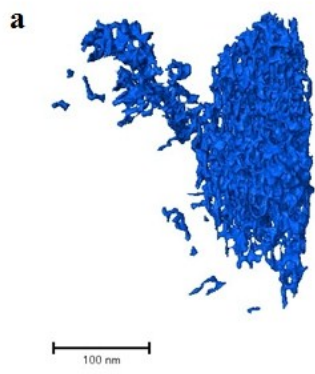
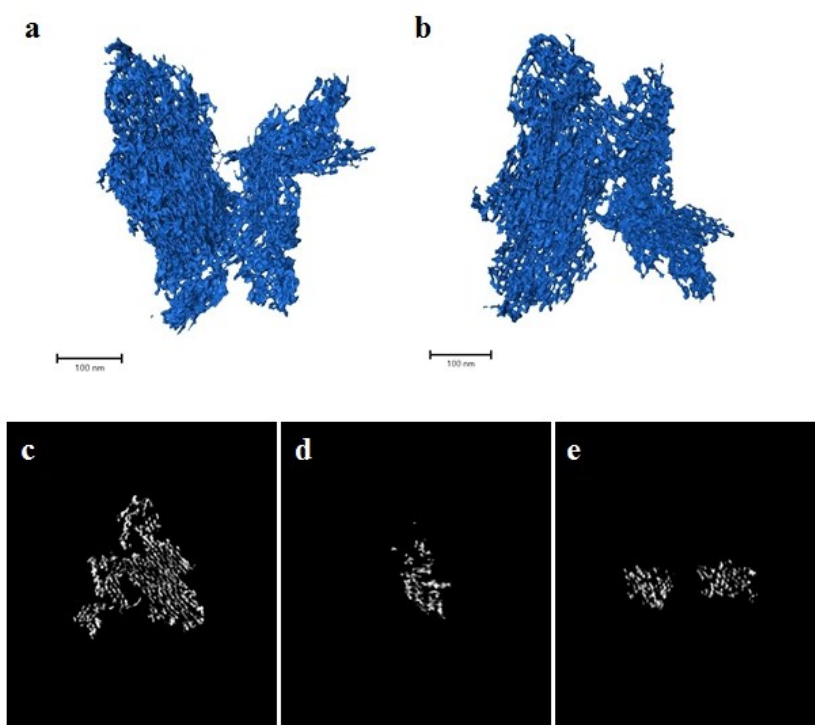


Figure S2. WAXRD patterns of the intermediate mesoporous ceria products (still containing OMC template): IW-IP, DS-IP, SL-IP, and CS-IP. Plots are shifted on the y-axis for clarity.

Table S1. Unit cell parameters of all Ceria samples calculated from WAXRD patterns

Sample ID	Unit cell parameter (nm)
SL	0.542
IW	0.542
DS	0.542
CS	0.542
350	0.539
400	0.544
500	0.542
600	0.544
800	0.539





Figures S3, S4, S5. Electron Tomography results corresponding to different SL-Ceria samples: (a,b) perspective views of the rendered volume obtained after reconstruction; (c-e) orthoslices through the reconstructed volume in directions parallel (c) and perpendicular (d,e) to the axes of the CeO₂ nanorods.