Supplementary Information for:

Cu Supported on Mesoporous Ceria: Water Gas Shift Activity at Low Cu Loadings through Metal-Support Interactions

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Figure S 1: CuO Particle size distribution for 5CuCe via HRTEM

Figure S 2: Arrhenius plot for mesoporous CeO\(_2\) (UCT CeO\(_2\)) and Cu/CeO\(_2\) catalysts, as well as 33\% Cu impregnated commercial CeO\(_2\). Normalized by surface area.
Figure S 3 Operando X-ray Diffraction plot for 10CuCe.
Figure S 4 Operando X-ray Diffraction plot for 3CuCe.
Figure S 5 Operando X-ray Diffraction plot for 1CuCe.
Figure S 6 Phase composition of 5CuCe on heating and cooling. From Rietveld model of XRD data.
Figure S 7 Phase composition of 10CuCe on heating. From Rietveld model of XRD data.

Figure S 8 Phase composition of 3CuCe on heating. From Rietveld model of XRD data.
Figure S 9 (a) Cu and CeO$_2$ lattice parameters from 10CuCe with H$_2$ production. (b) Cu and CeO$_2$ lattice parameters over temperature.

Figure S 10 (a) Cu and CeO$_2$ lattice parameters from 3CuCe with H$_2$ production. (b) Cu and CeO$_2$ lattice parameters over temperature.
Figure S 11 (a) CeO₂ lattice parameter from 1CuCe with H₂ production. (b) CeO₂ lattice parameter over temperature.

Figure S 12 In-situ DRIFTS: 10CuCe under WGS conditions.