Supplementary

The Detection of Monoclinic Zirconia and Non-Uniform 3D Crystallographic Strain in a Re-Oxidized Ni-YSZ Solid Oxide Fuel Cell Anode

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Figure S1. Full profile analysis using the Rietveld method for the mean diffraction pattern extracted from the 3D-XRD-CT dataset.



Figure S2. Simulated diffraction patterns for NiO, YSZ, ZrO2 and Ni.



Figure S3. Composition by weight calculated from XRD.



Figure S4. Correlation of transmission X-ray microscopy (TXM) and diffraction computed tomography (XRD-CT).

It should be noted that the 2D and 3D data cannot be directly compared as the regions of interest differed slightly. The 3D data was obtained from a volume encompassing the entire top of the sample, whereas the 2D data was collected as a line-scan raster through the sample height.