Supplementary materials for:

Investigation of the phase transition to the Ruddlesden-Popper phase in La- or Nb-doped $Sr_2Fe_{1.5}Mo_{0.5}O_{6-\delta}$ double perovskites. Impact of lanthanum or niobium doping

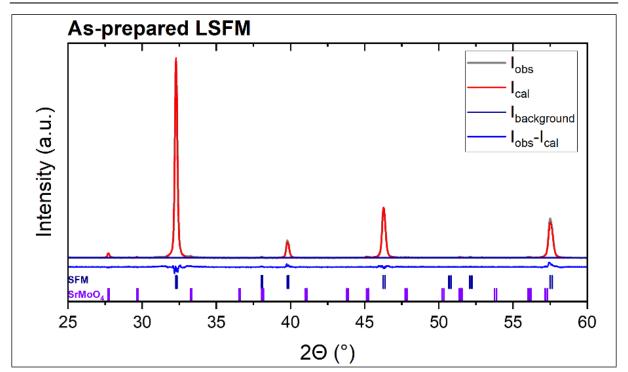
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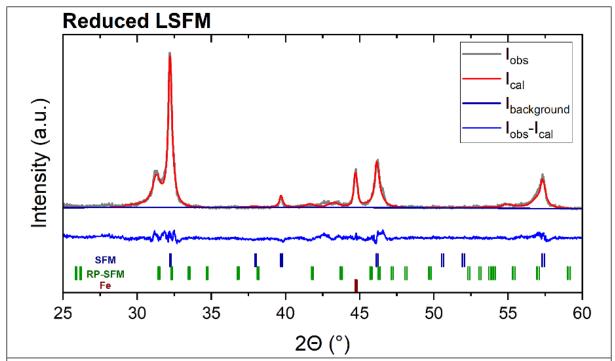


Fig. S1. Exemplary results of the Rietveld refinement obtained for as-prepared and reduced LSFM.

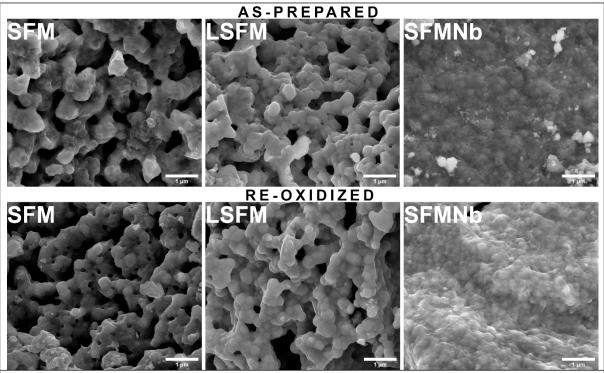
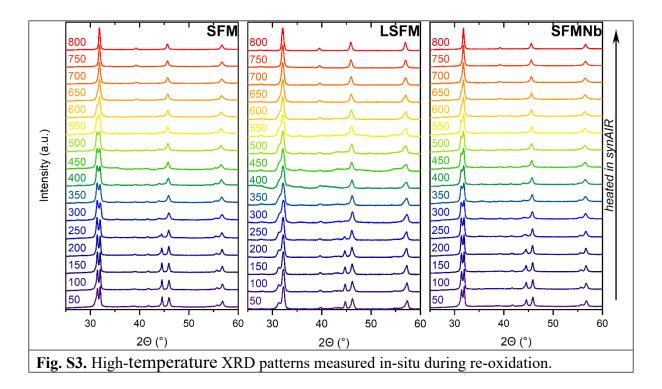


Fig. S2. SEM images of the SFM, LSFM, and SFMNb materials in as-prepared state (upper row) and in re-oxidized state (lower row).



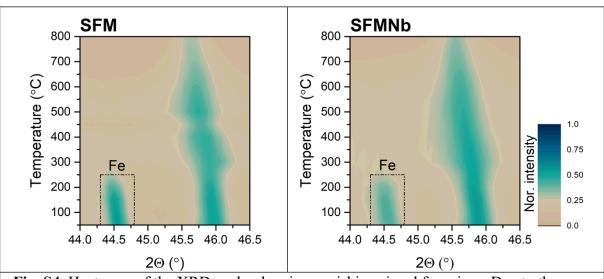


Fig. S4. Heatmaps of the XRD peaks showing vanishing signal from iron. Due to the poor scan quality in this range, LSFM is not shown.

