

Supporting Information for

**Exploring the stability of Fe-Ni alloy
nanoparticles exsolved from double-
layered perovskites for dry reforming of
methane**

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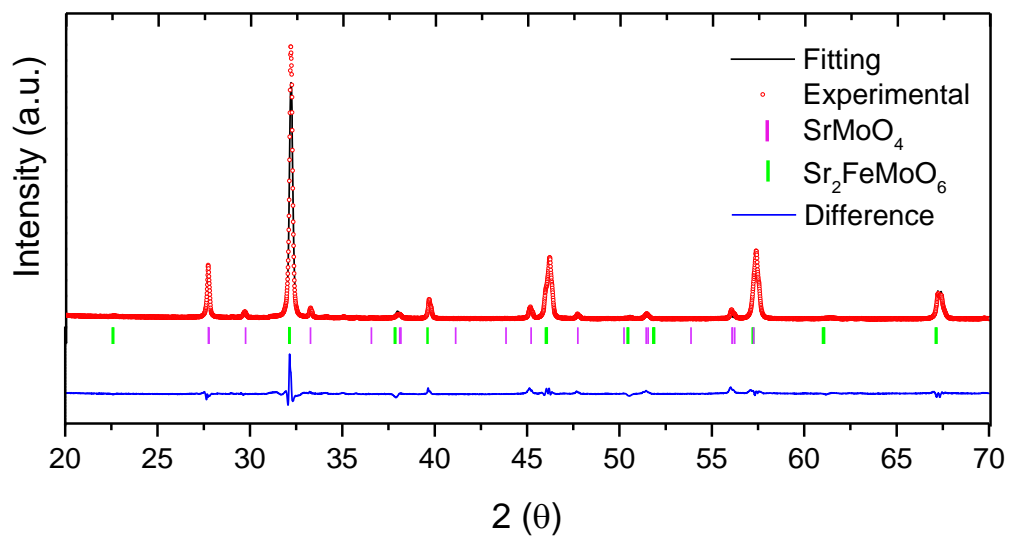


Figure S1. Rietveld refinement exemplified for $\text{Sr}_2\text{Fe}_{0.5}\text{Ni}_{0.5}\text{MoO}_{6-\delta}$ material as synthesized (calcination at 1100 °C in air). Due to Ni doping on B-site there is a shift from the observed data to the reference taken for the double perovskite, $\text{Sr}_2\text{FeMoO}_6$.

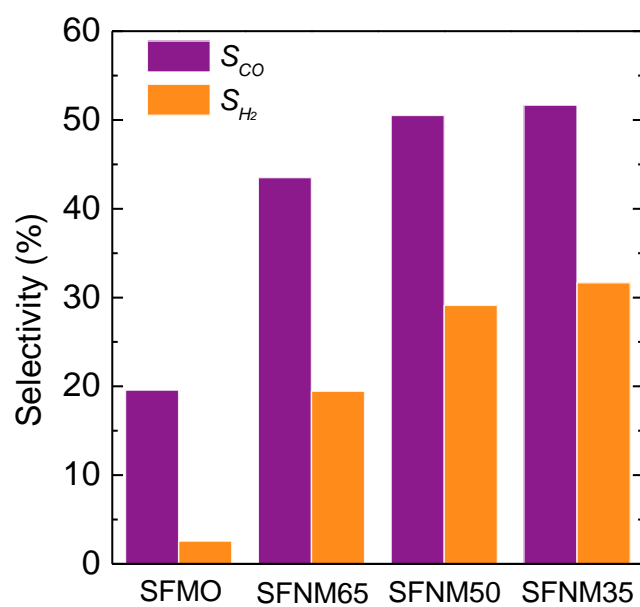


Figure S2. CO (S_{CO}) and H₂ selectivity (S_{H_2}) for the four materials, measured at 10h on stream. (T=850 °C)