

Supplementary information

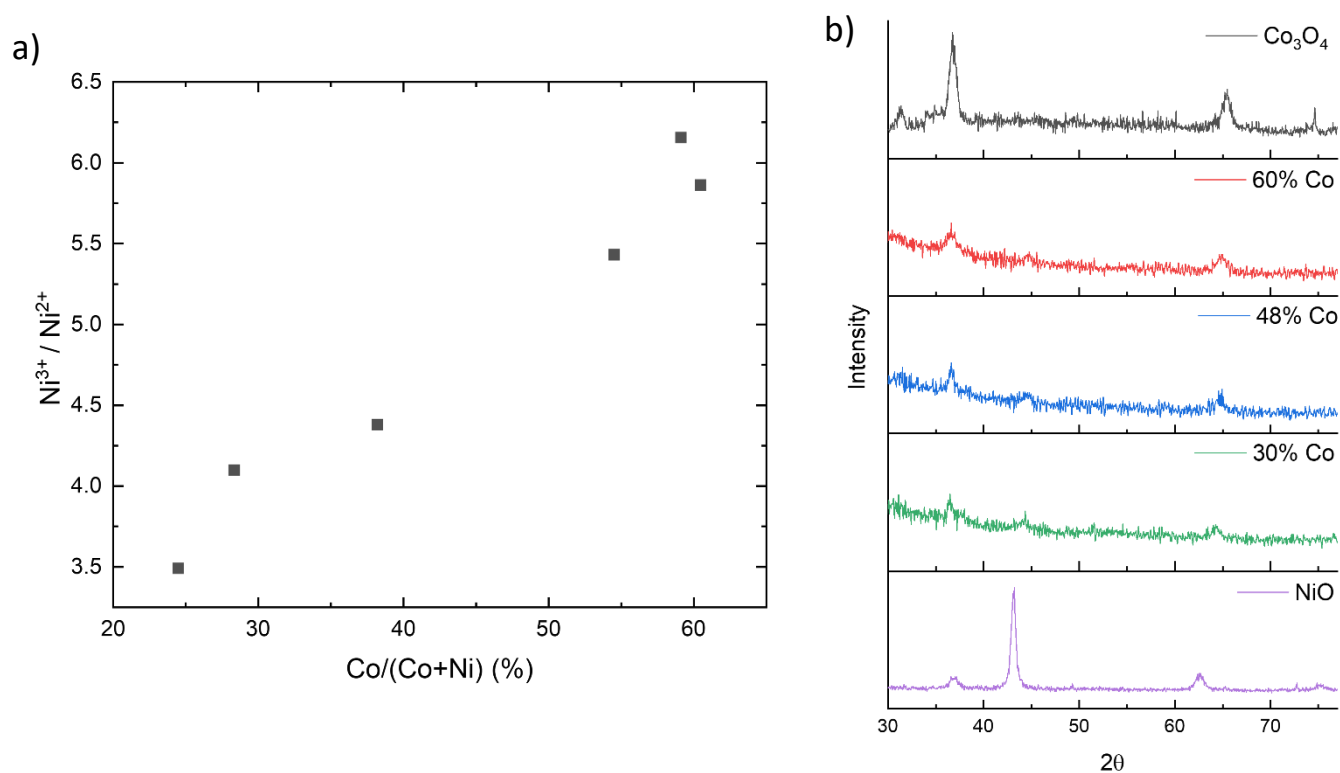


Figure 2 (a) Ni^{3+} -to- Ni^{2+} oxidation state ratio as a function of the relative cobalt content in the film, as determined by x-ray spectroscopy. (b) Preliminary grazing incidence x-ray diffraction measurements at 1° for different Co concentrations. The main peaks in the parent NiO and Co_3O_4 have been identified with Miller indices.

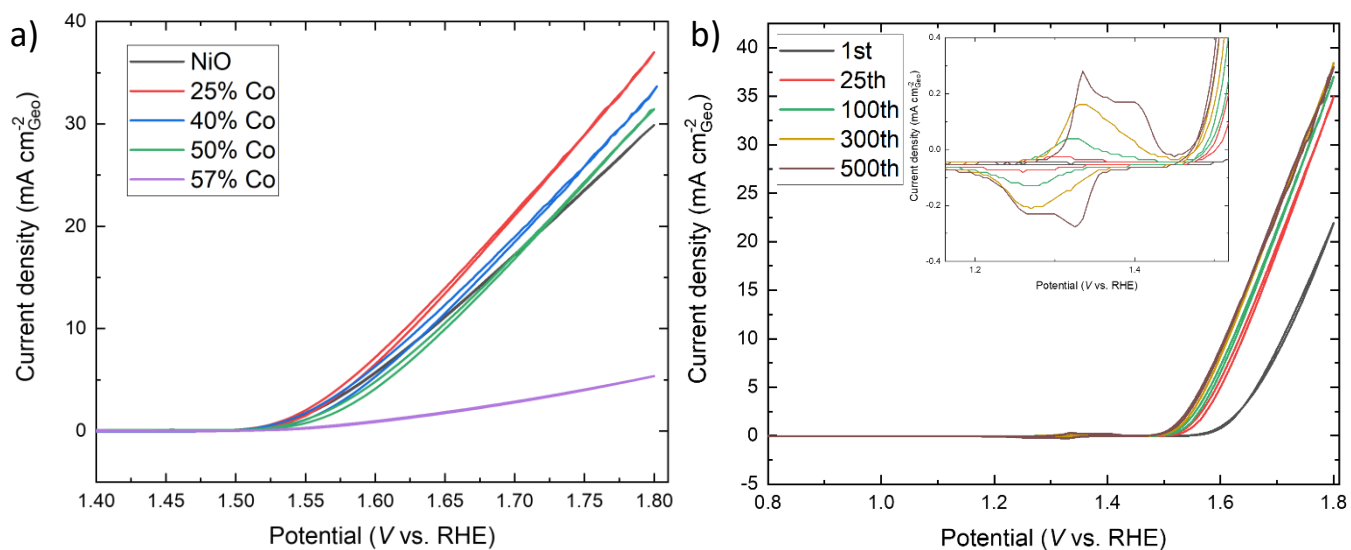


Figure 1 Cyclic voltammograms of ~ 30 nm-thick cobalt nickel oxide films in 1M KOH from 0.8-1.8 V vs RHE, indicating (a) the OER profile after 100 cycles for samples with different cobalt concentrations and (b) the activation of the 25% cobalt concentration sample. The inset shows the non-catalytic wave, witnessing the activation of the cobalt nickel oxide resulting in a lowered onset potential.