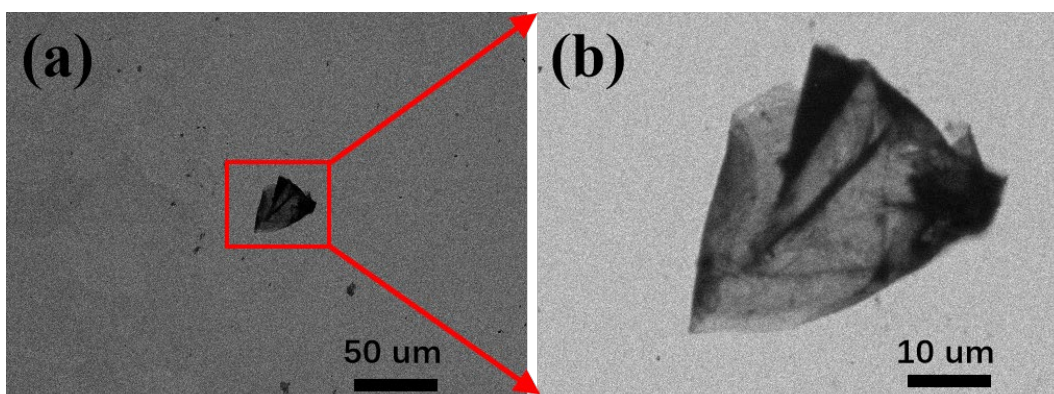
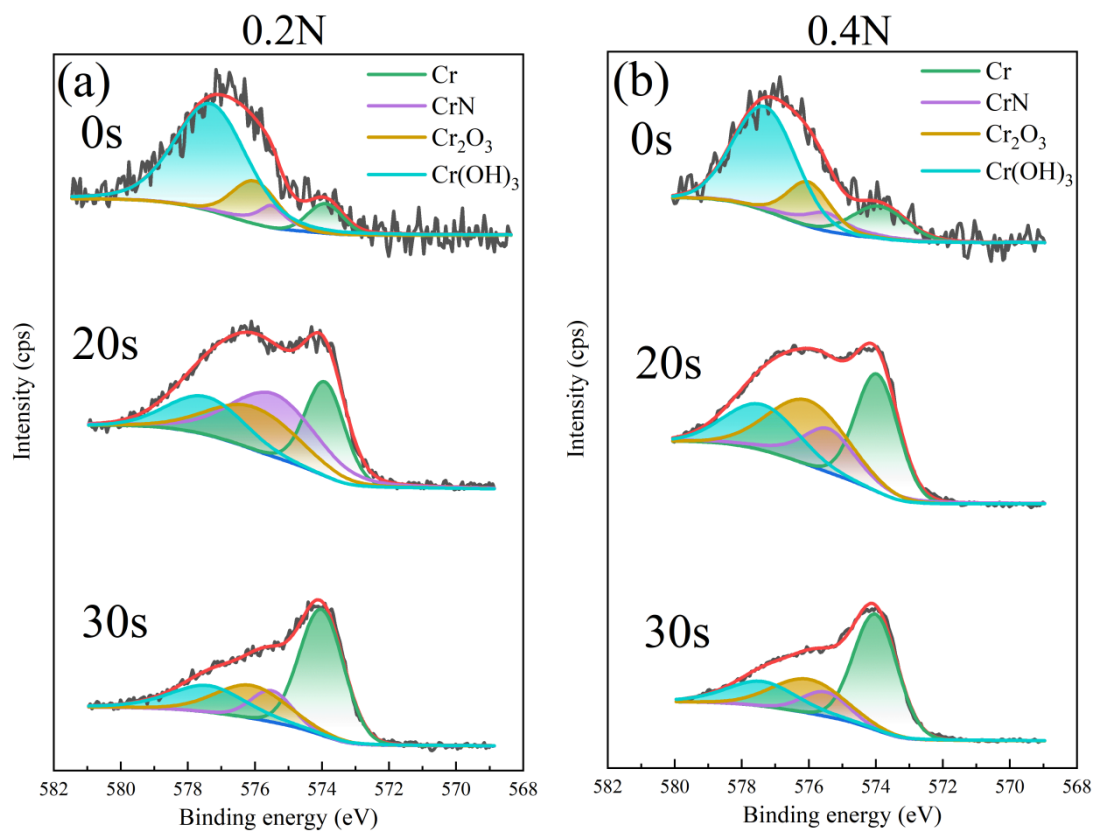


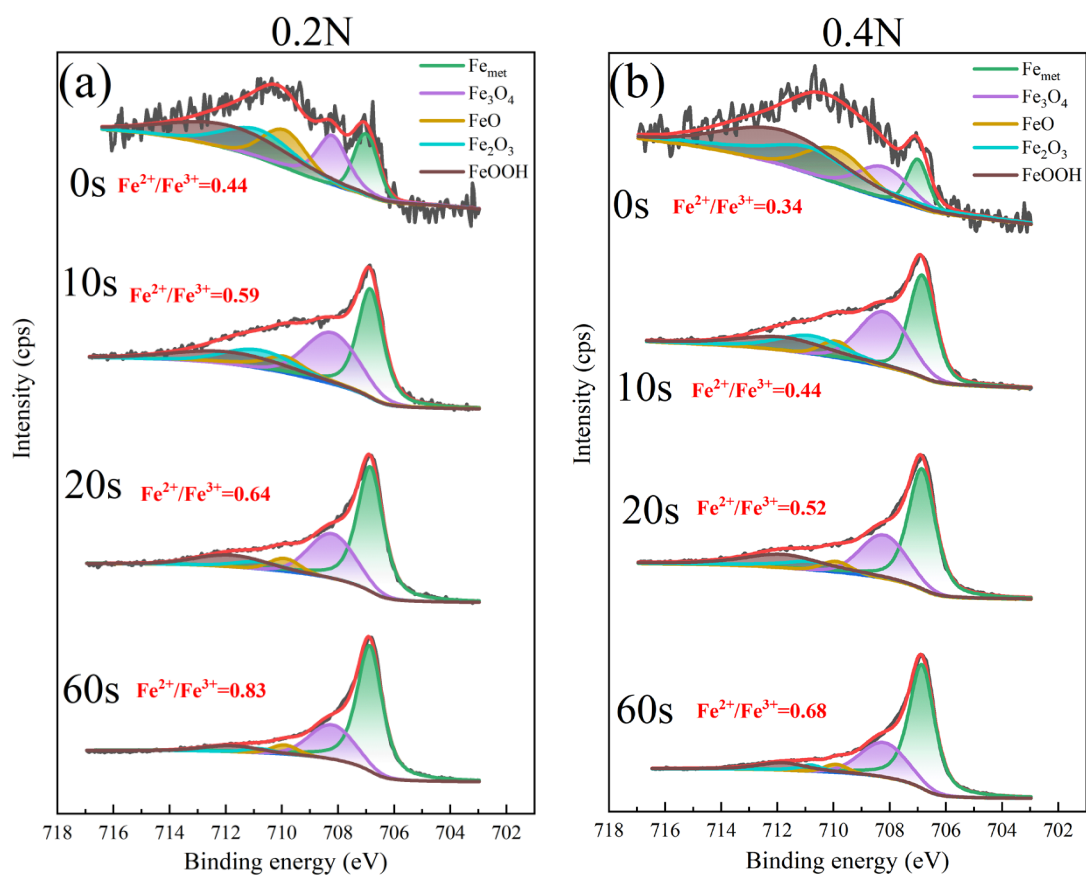
**Fig. S1.** The OM observation of 0.2N (a) and 0.4N (b) hot-rolled alloys.



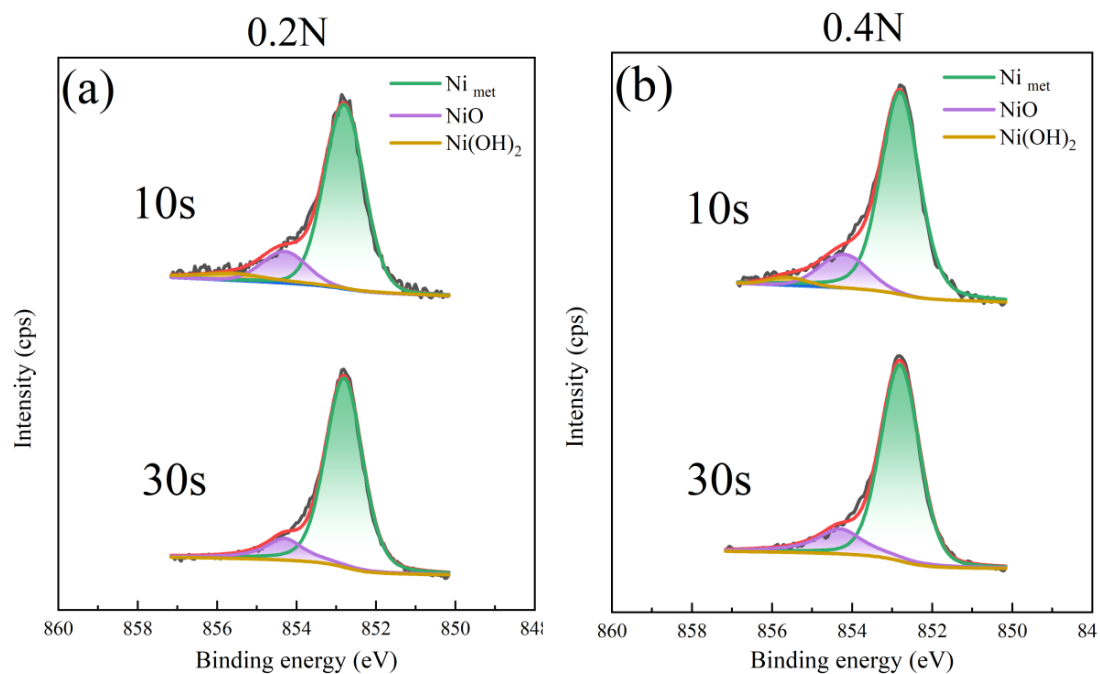
**Figure S2.** Corrosion morphology after potentiodynamic polarization test in 3.5% NaCl with pH=1.



**Figure S3.** The change of Cr 2p spectra of 0.2N-ST (a) and 0.4N-ST (b) samples with sputtering time.



**Figure S4.** The change of Fe 2p spectra of 0.2N-ST (a) and 0.4N-ST (b) samples with sputtering time.



**Figure S5.** The change of Ni 2p spectra of 0.2N-ST (a) and 0.4N-ST (b) samples with sputtering time.