

Hydrogen Evolution Reaction on Ultra-Smooth Sputtered Nanocrystalline Ni Thin Films in Alkaline Media – From Intrinsic Activity to the Effects of Surface Oxidation

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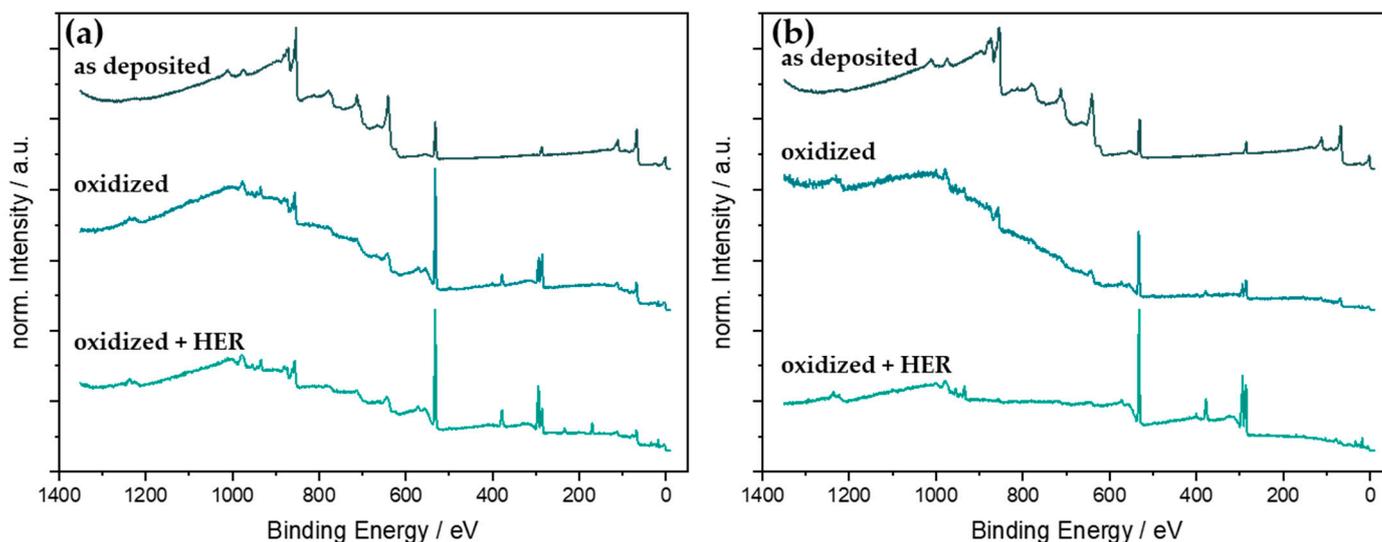


Figure S1. XPS survey spectra of Ni thin films of 50 nm (a) and 300 nm (b). The top row displays the spectra of the as-deposited thin films, followed by the presentation of the XPS survey after oxidation and after oxidation followed by three cycles of HER. Please note that the presented data is collected from separate samples.

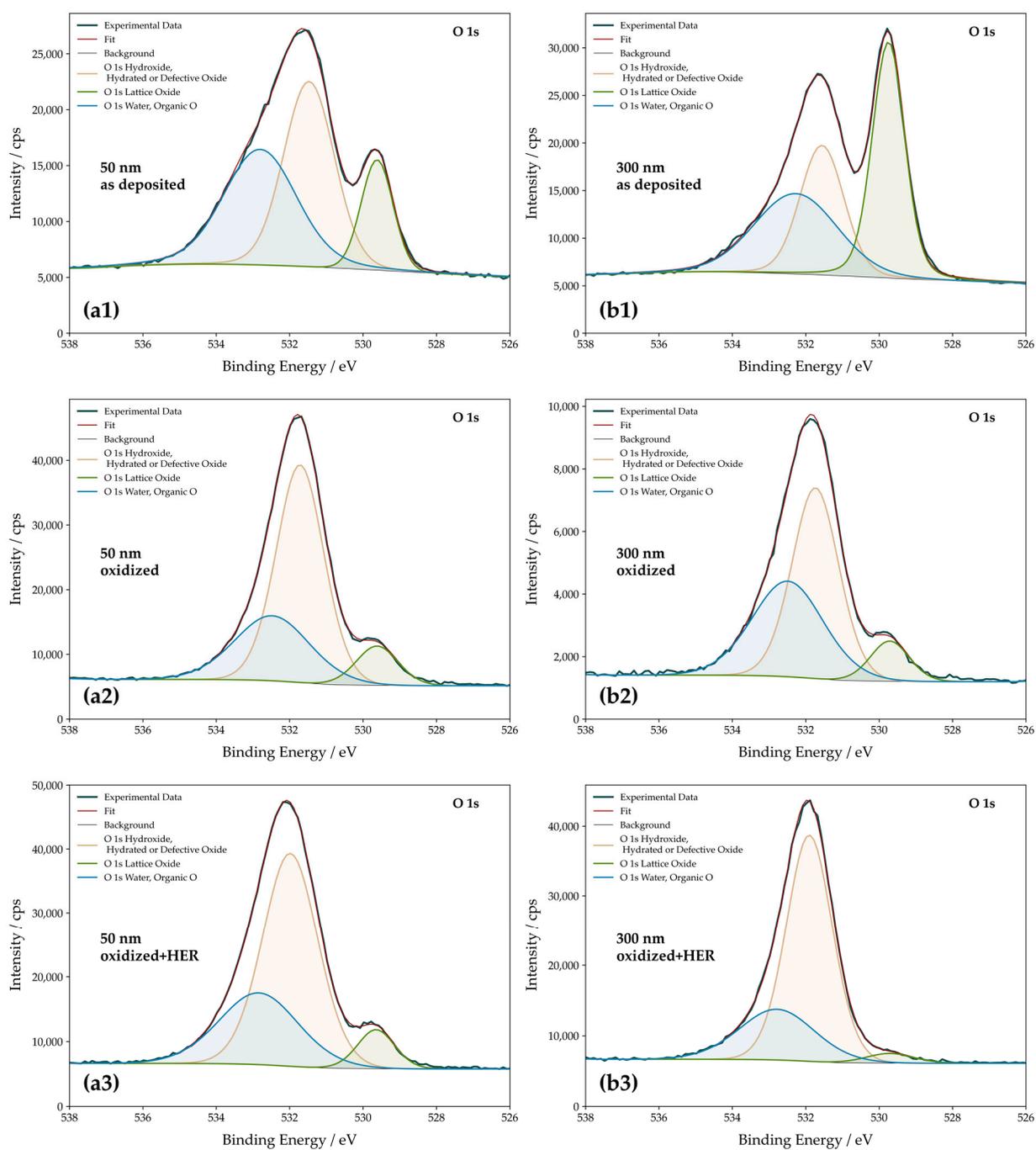


Figure S2. O 1s XPS of Ni thin films of 50 nm (a) and 300 nm (b). The top row displays the spectra of the as-deposited thin films (a1, b1), followed by the presentation of the XPS after oxidation (a2, b2) and after oxidation and three cycles of HER (a3, b3). Please note that the presented data is collected from separate samples.

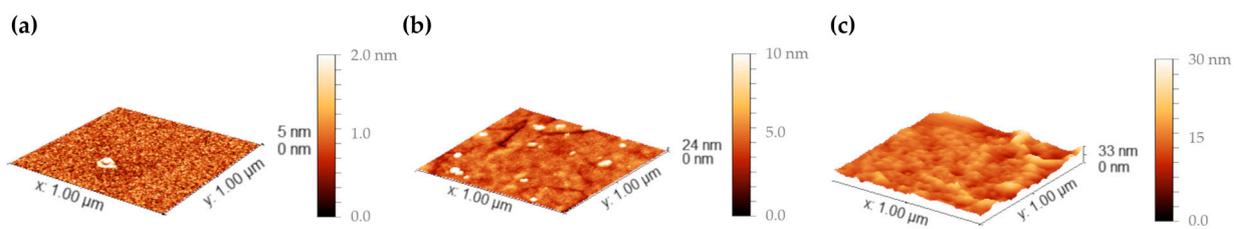


Figure S3. AFM topography images of Ni thin films (a) as-deposited on Si substrate, (b) as-deposited on Cu substrate, (c) after electrochemical oxidation followed by three HER cycles.