Supporting Information

Controllable Fabrication of α-$Ni(OH)_2$ Thin Films with Preheating Treatment for Long-term stable Electrochromic and Energy Storage Applications

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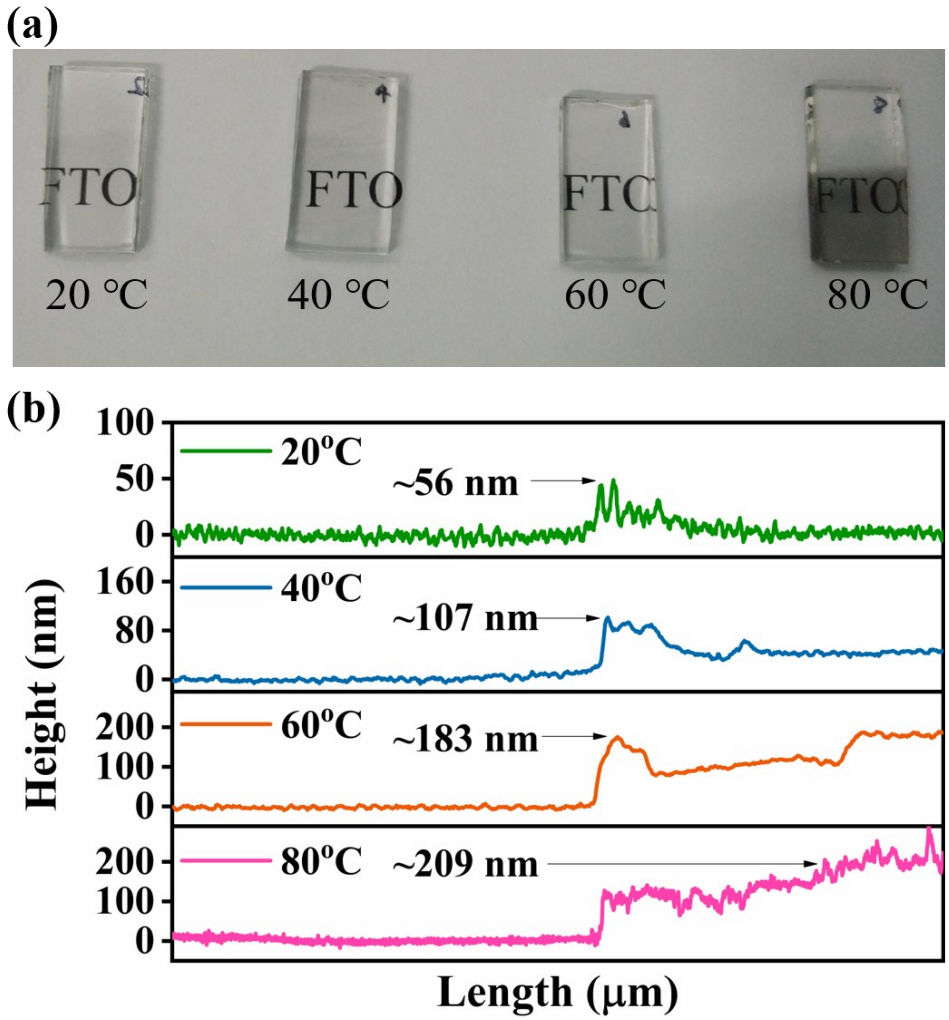

Figure S1. (a) The digital photos and (b) loading mass of $Ni(OH)_2$ deposited at 20 °C, 40 °C, 60 °C and 80 °C. (b) The thickness characterization of $Ni(OH)_2$ electrodes deposited under 20 °C, 40 °C, 60 °C and 80 °C.

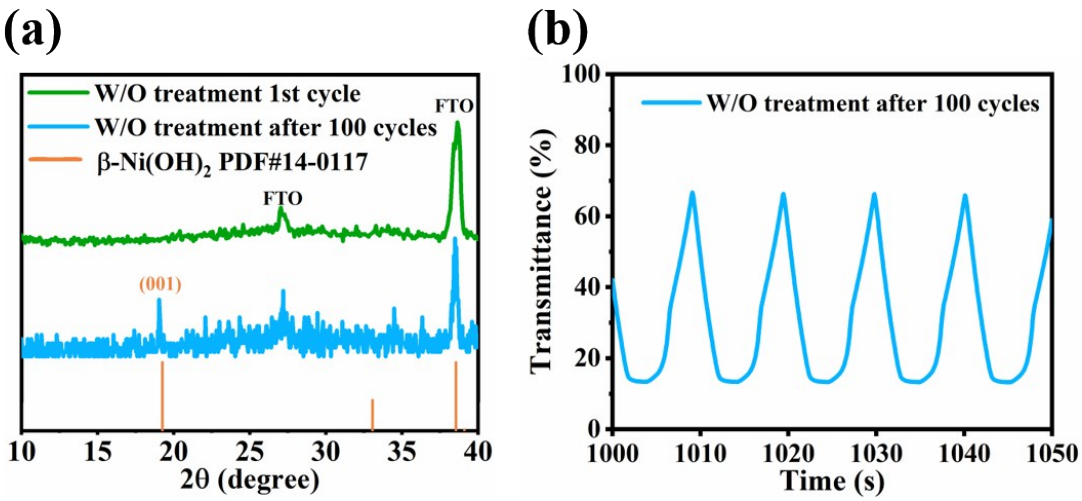

Figure S2 (a) XRD patterns of $Ni(OH)_2$ thin films which deposited at 40 °C after 100th cycling duration. (b) the corresponding transmittance spectrum.

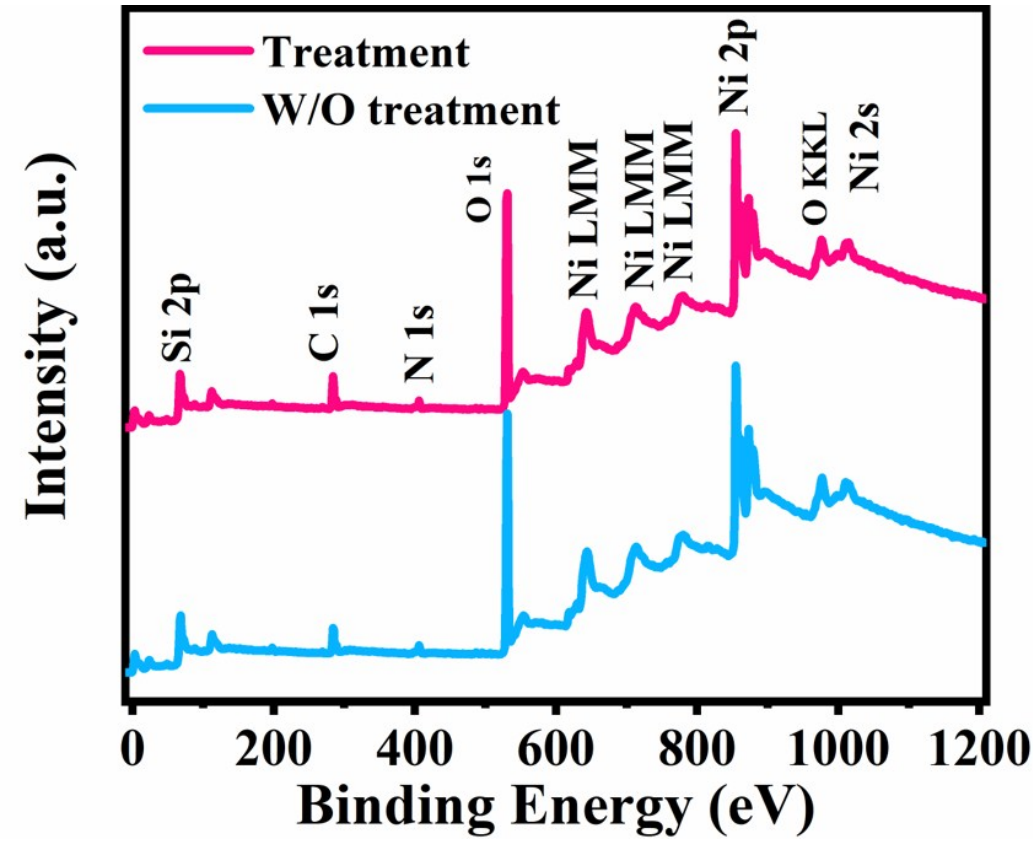

Figure S3. Survey scan XPS of the treated and untreated $Ni(OH)_2$ EES electrodes.

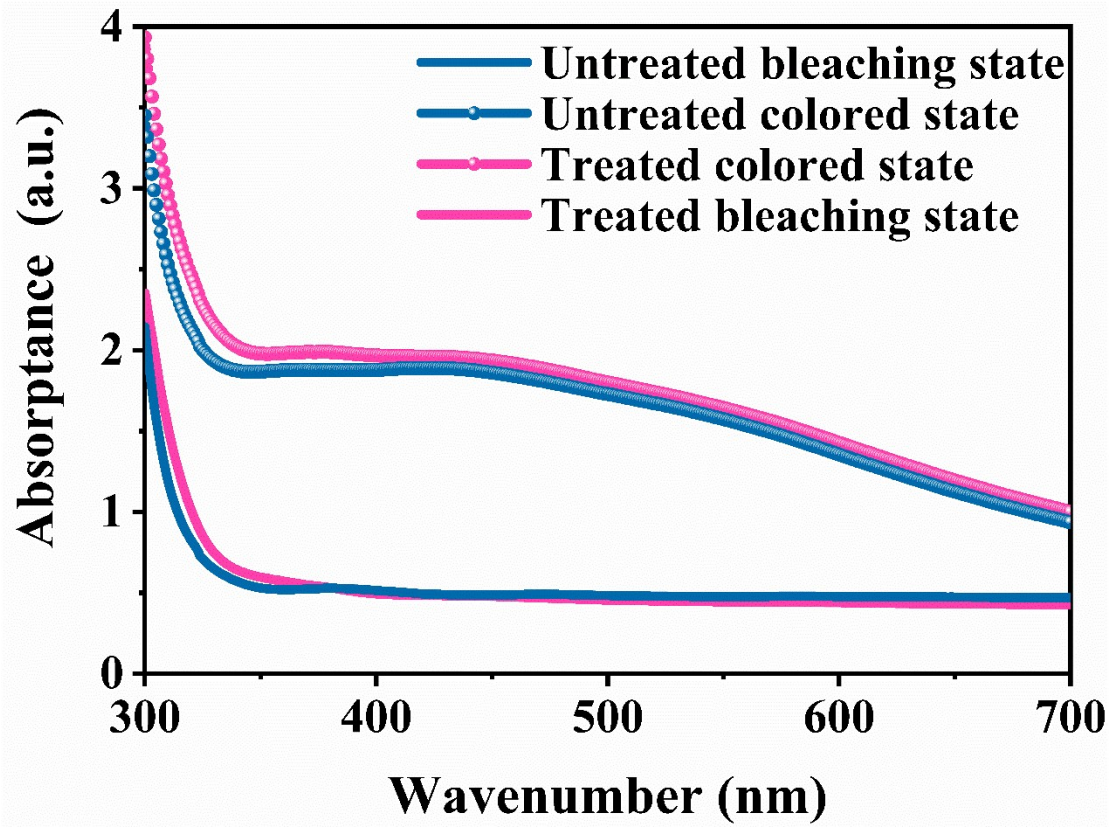

Figure S4. The corresponding absorption spectra of $Ni(OH)_2$ electrodes.