Supporting Information

Controllable Fabrication of $\alpha$-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 100$^{th}$ 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.