

Supporting Information:

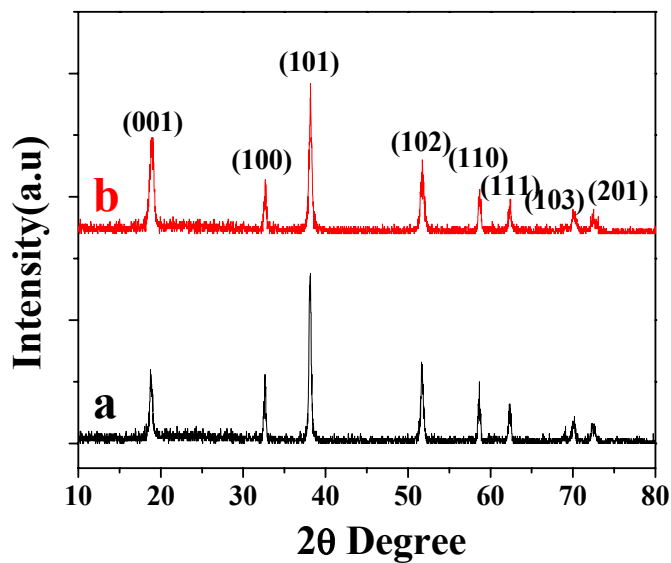


Figure S1. XRD patterns obtained with different reaction time (a) 2 h, (b) 4 h.

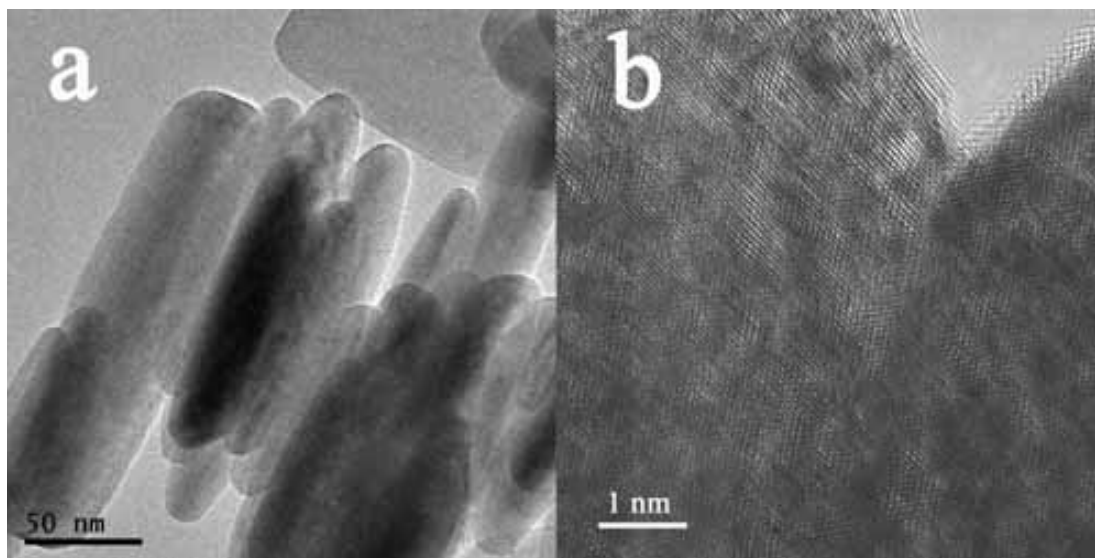


Figure S2. TEM images of (a) typical nanoplates, and (b) the interconnection between two nanoplates .

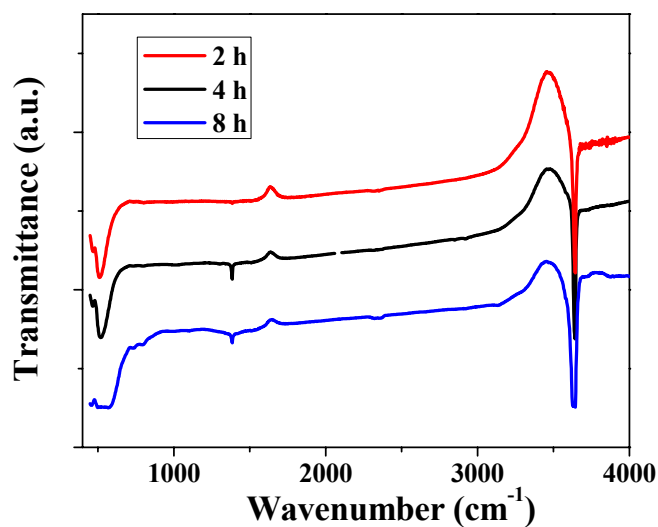


Figure S3. FTIR spectra of samples obtained with different reaction time (a) 2 h, (b) 4 h, (c) 8 h.

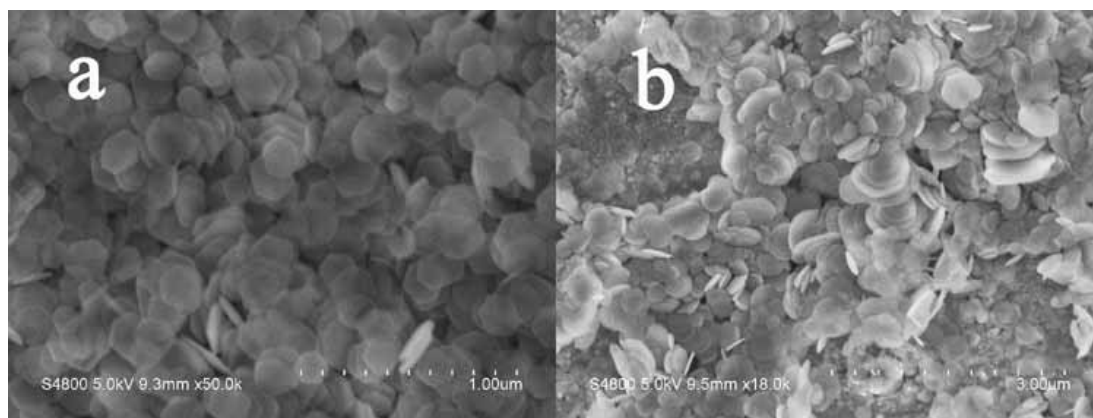


Figure S4. SEM images of samples obtained with different reaction conditions (a) 10 ml 0.02M NiCl₂ and 10 ml 2M NaOH, 160 °C, 8 h; (b) 10 ml 0.02M NiCl₂ and 10 ml 0.0002M NaOH, 160 °C, 8 h.

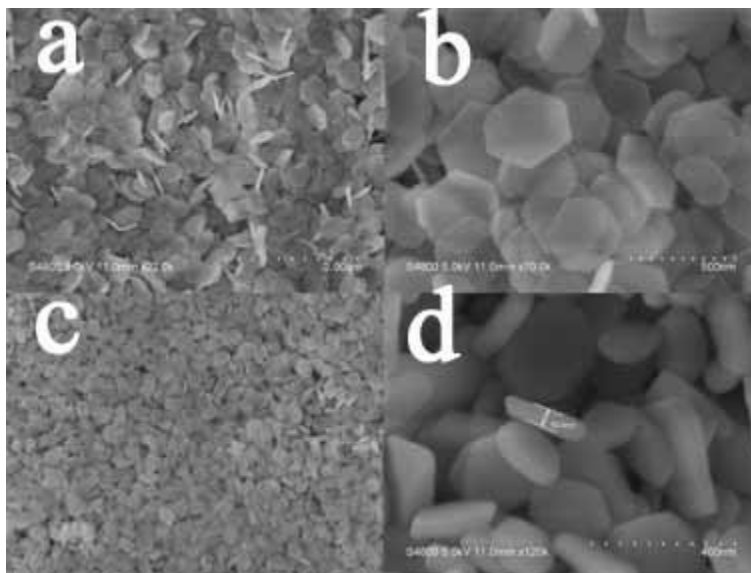


Figure S5. SEM images of (a), (b) Ni(OH)₂ nanoslices and (c), (d) Ni(OH)₂ nanoplates

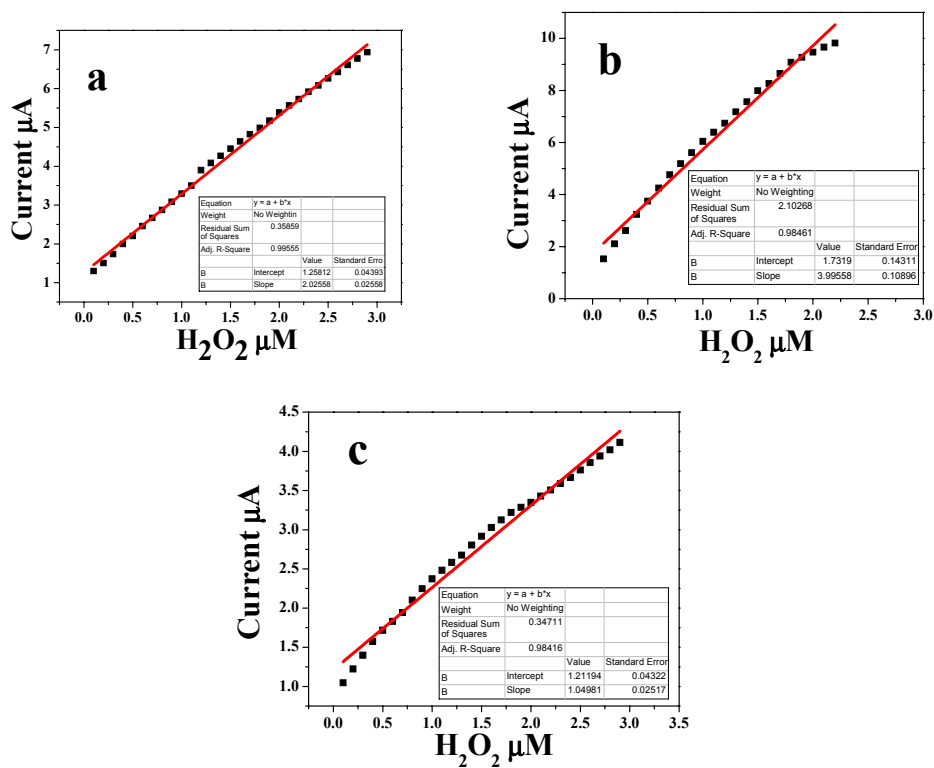


Figure S6. Linear response for H₂O₂ concentrations with different modified electrode (a) Ni(OH)₂ nanocolumns/GCE; (b) Ni(OH)₂ nanoplates /GCE; (c) Ni(OH)₂ nanoslices/GCE