## Evolution of cobalt hydroxide from 2D microplatelets to 3D

## hierarchical structure mediated by precursor concentration

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Figure S1 SEM image of  $Co(OH)_2$  microplatelets with 0.05 mol L<sup>-1</sup> cobalt salt.



Figure S2 HRTEM images of Co(OH)<sub>2</sub> microplatelets from different orientations; the microplatelets were prepared with 0.05 mol  $L^{-1}$  cobalt salt.



Figure S3 SEM image of  $Co(OH)_2$  microplatelet with 0.1 mol L<sup>-1</sup> cobalt salt for 10 min reaction.



Figure S4 SEM image of  $Co(OH)_2$  microplatelets prepared under different cobalt concentrations, (a) 0.025 mol L<sup>-1</sup> (b) 0.01 mol L<sup>-1</sup>, showing smaller and thinner microplatelets formed under a lower salt concentration.