Evolution of cobalt hydroxide from 2D microplatelets to 3D hierarchical structure mediated by precursor concentration

J.P. Cheng$^{1,2,*}$, M. Li$^{1}$, W.F. Zhang$^{1}$, J.S. Wu$^{2,*}$, F. Liu$^{1}$, X.B. Zhang$^{1}$

$^{1}$ Department of Materials Science and Engineering, State Key Laboratory of Silicon Materials, Key Laboratory of Advanced Materials and Applications for Batteries of Zhejiang Province, Zhejiang University, Hangzhou 310027, China

$^{2}$ Department of Materials Science and Engineering, Northwestern University, Evanston, Illinois 60208, United States.

*Corresponding author. E-mail address: chengjp@zju.edu.cn; jinsong-wu@northwestern.edu

Figure S1 SEM image of Co(OH)$_2$ microplatelets with 0.05 mol L$^{-1}$ cobalt salt.
Figure S2 HRTEM images of Co(OH)$_2$ 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$^{-1}$ 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$^{-1}$ (b) 0.01 mol L$^{-1}$, showing smaller and thinner microplatelets formed under a lower salt concentration.