Electronic Supplementary Information

Solvothermal synthesis of cobalt nickel layered double hydroxides with three-dimensional nano-petals structure for high-performance supercapacitors

Hailiang Chu, Ying Zhu, Tingting Fang, Junqiang Hua, Shujun Qiu*, Haidong Liu, Liyuan Qin, Qiuhong Wei, Yongjin Zou, Cuili Xiang, Fen Xu, Lixian Sun*

Guangxi Key Laboratory of Information Materials, Guangxi Collaborative Innovation Centre of Structure and Property for New Energy Materials, and School of Materials Science and Engineering, Guilin University of Electronic Technology, Guilin 541004, P. R. China.

* *Authors for correspondence*

Email: qiushujun@guet.edu.cn (S. Qiu)

sunlx@guet.edu.cn (L. Sun)

Tel.: +86-773-2216607

Fax: +86-773-2290129

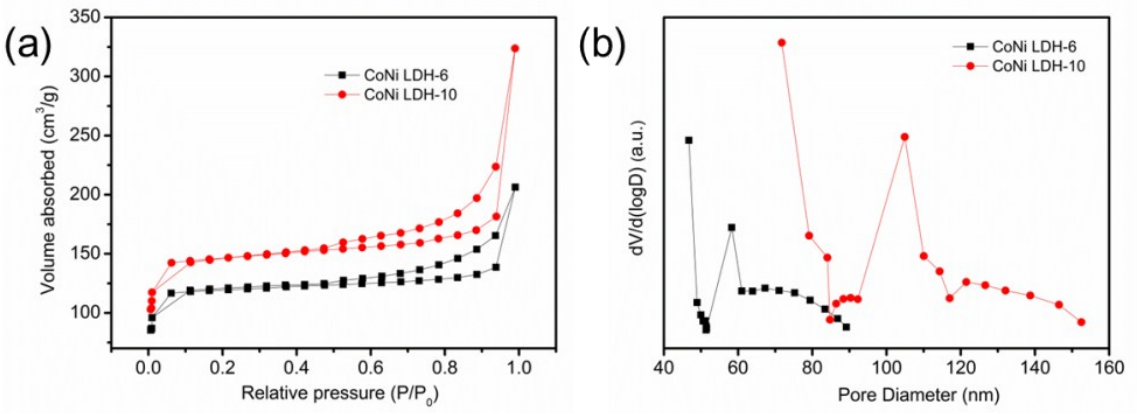

Figure S1. Nitrogen adsorption-desorption isotherms and the pore size distributions of CoNi LDH-6 and CoNi LDH-10.

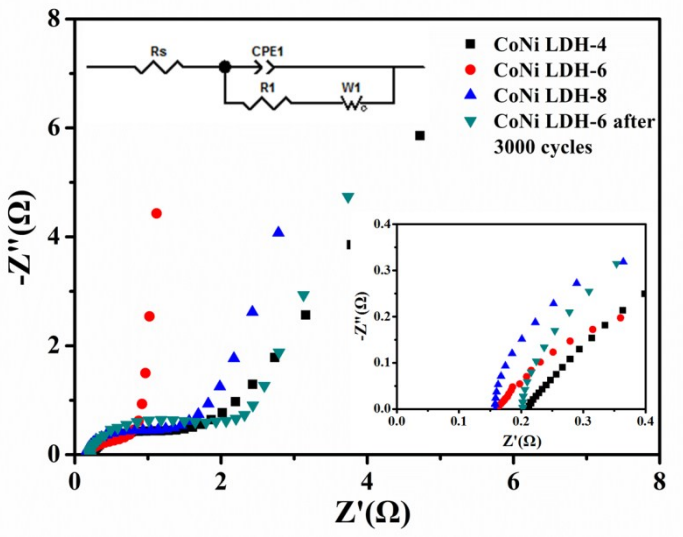

Figure S2. Nyquist plots of CoNi LDH-X.

Table S1 BET surface areas and pore parameters of CoNi LDHs.

Sample	S_{BET} (m^2 g^{-1})	Pore volume (cm^3 g^{-1})
CoNi LDH-6	400.0	0.32
CoNi LDH-10	490.9	0.50

Table S2 The content of Co and Ni of the as-synthesized CoNi LDHs by ICP-OES

Samples	**Co (wt.%)**	**Ni (wt.%)**	**Co:Ni (Atomic ratio)**
CoNi LDH-0	27.00	28.35	1:1.05
CoNi LDH-2	25.84	28.92	1:1.12
CoNi LDH-4	22.55	30.38	1:1.35
CoNi LDH-6	23.11	30.49	1:1.32
CoNi LDH-8	22.80	26.46	1:1.16
CoNi LDH-10	18.47	24.17	1:1.31