Supplementary Material for

Interlaced NiMn-LDH Nanosheets Decorated NiCo$_2$O$_4$ Nanowire Arrays on Carbon Cloth as Advanced Electrodes for High-performance Flexible Solid-state Hybrid Supercapacitors

Hanchun Xia,[a] Geng Li,[a] Haoran Cai,[a] Xiaolong Li,[a] Peiheng Sun,[a] Peijia Wang,[a] Jiajie Huang,[a] Liang Wang,[a] Desuo Zhang,[c] Yefeng Yang*[a] and Jie Xiong[b]

[a]*Department of Materials Engineering, College of Materials and Textile, Zhejiang Sci-Tech University, Hangzhou 310018, China*

[b]*MOE Key Laboratory of Advanced Textile Materials and Manufacturing Technology, Zhejiang Sci-Tech University, Hangzhou 310018,China*

[c]*National Engineering Laboratory for Modern Silk, College of Textile and Clothing Engineering, Soochow University, Suzhou 215123, China*

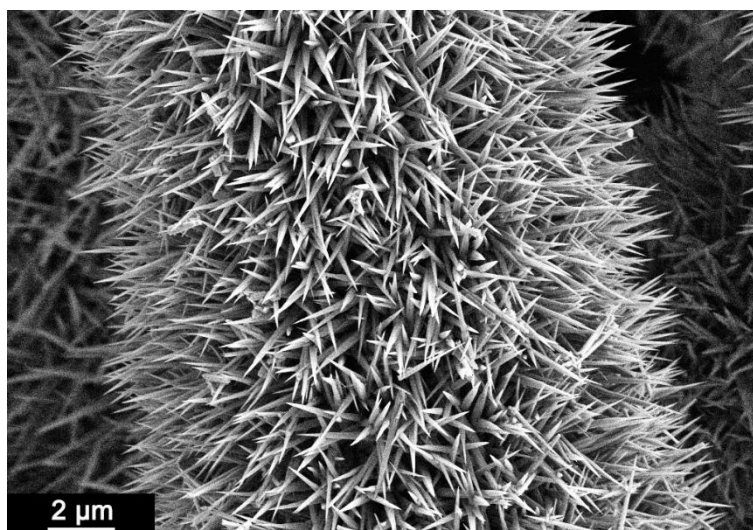Email address: yangyf@zstu.edu.cn (Dr. Y. Yang)

Tel: +86-571-8684 5569

Figure S1. Typical SEM image of NiCo precursorNWAs on carbon cloth.

Table S1. The calculated mass loading of NiMn-LDH shell and $NiCo_2O_4$@NiMn-LDH at different reaction times for the growth of NiMn-LDH.

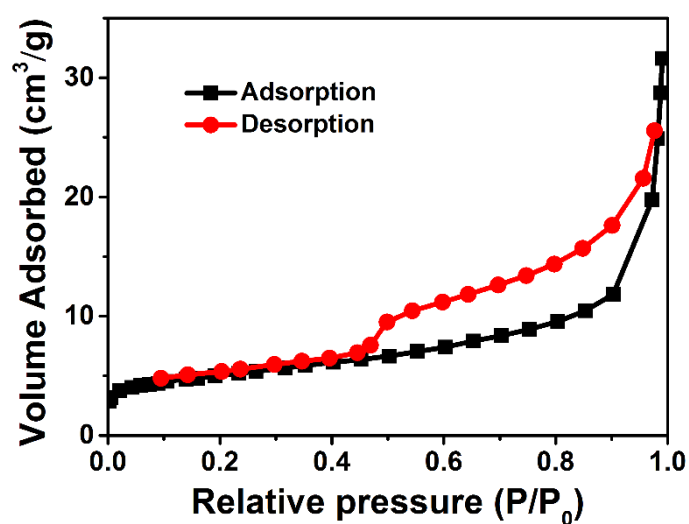| Electrode materials	Reaction time of shell materials (h)	Total mass loading (mg/cm²)	Mass loading of NiMn-LDH shell (mg/cm²)
$NiCo_2O_4$@NiMn-LDH (4h)	4	1.2	0.4
$NiCo_2O_4$@NiMn-LDH (8h)	8	1.5	0.7
$NiCo_2O_4$@NiMn-LDH (15h)	15	2.4	1.6

Figure S2. N_2 adsorption-desorption isotherms of the $NiCo_2O_4$@NiMn-LDH (8 h) for the calculation of specific surface area with the BET method.
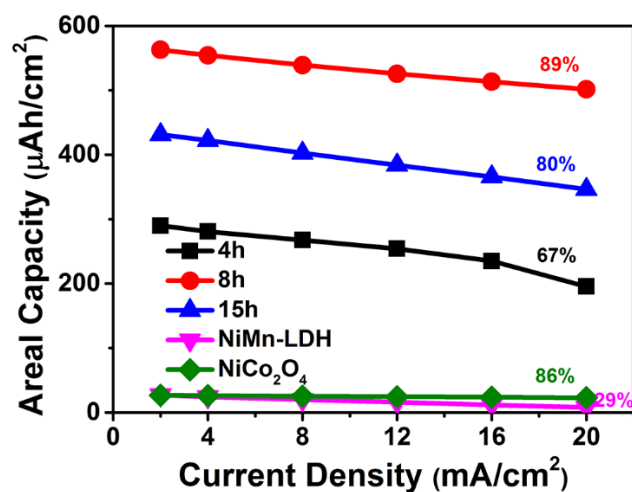
Figure S3. Specific capacities of the NiCo$_2$O$_4$, NiMn-LDH and NiCo$_2$O$_4$@NiMn-LDH electrodes as a function of current density.
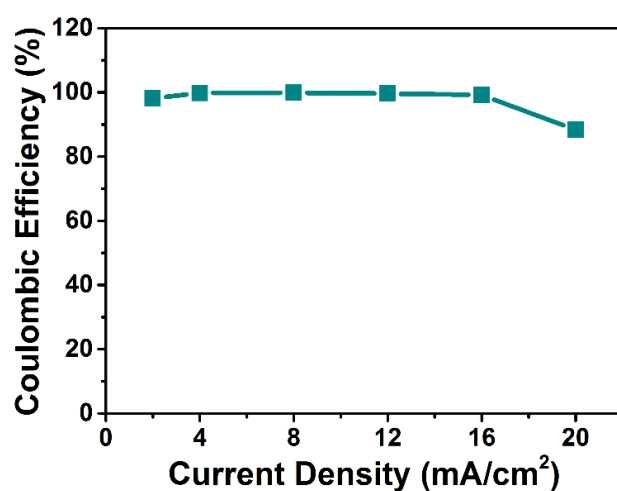

Figure S4. The variation of coulombic efficiency for the NiCo$_2$O$_4$@NiMn-LDH (8 h) electrode as the current density.
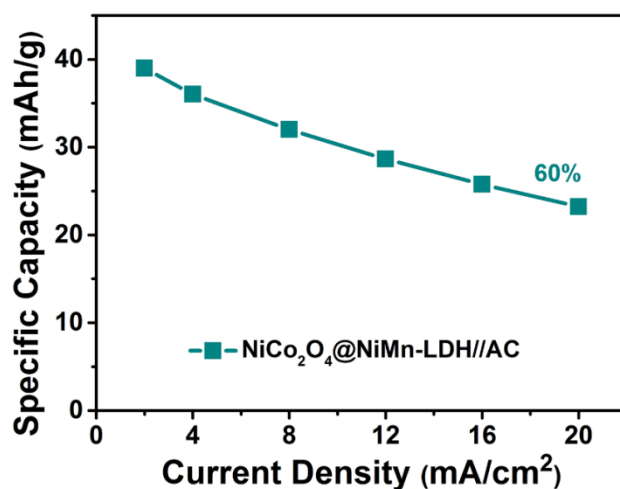

Figure S5. Specific capacities of the NiCo$_2$O$_4$@NiMn-LDH//AC as a function of current density.

Figure S6. The photograph of two assembled flexible solid-state HSC devices connected in series as the power for the calculator.