

Supplementary Information

**Hexagonal plate-like Ni-Co-Mn hydroxide nanostructure for high energy
density of hybrid supercapacitors**

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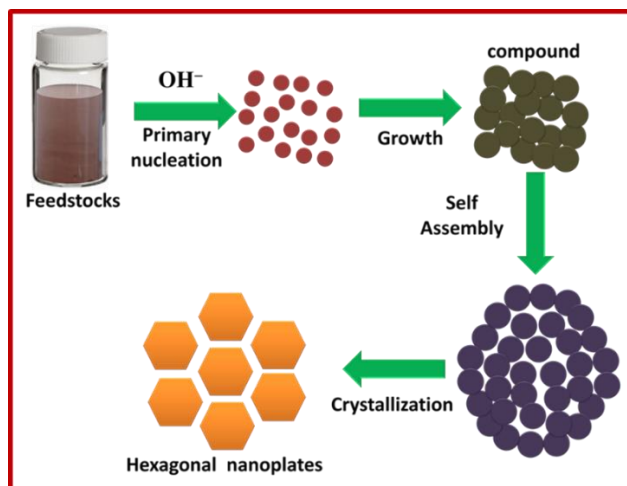


Figure S1. Schematic representation of the proposal growth mechanism of NCM hexagonal nanoplates.

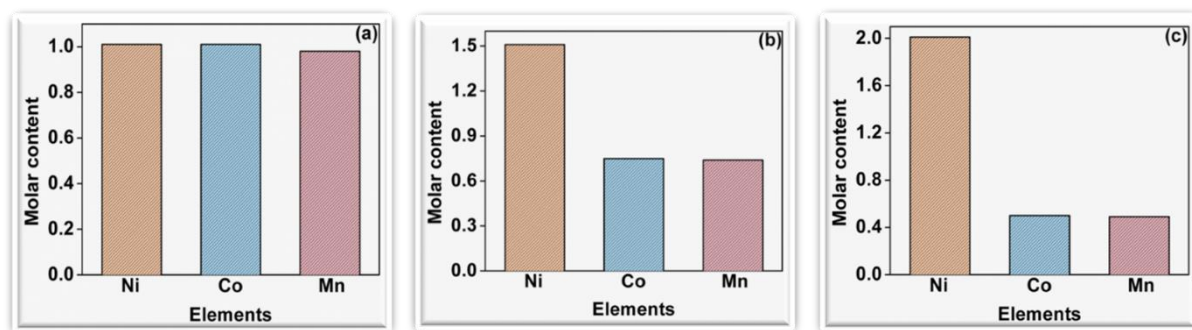


Figure S2. Histogram of ICP-AES of relative amounts of Ni, Co, and Mn in the (a) NCM12, (b) NCM15, and (c) NCM21 electrode materials.

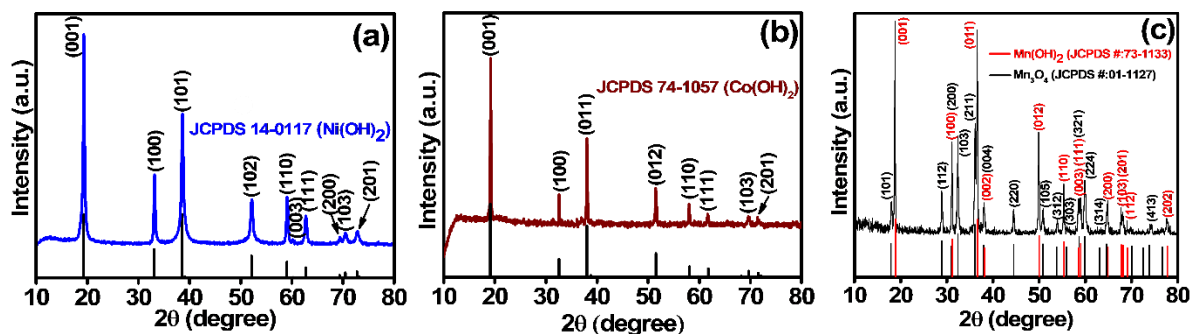


Figure S3. XRD patterns of (a) N, (b) C, and (c) M electrode materials.

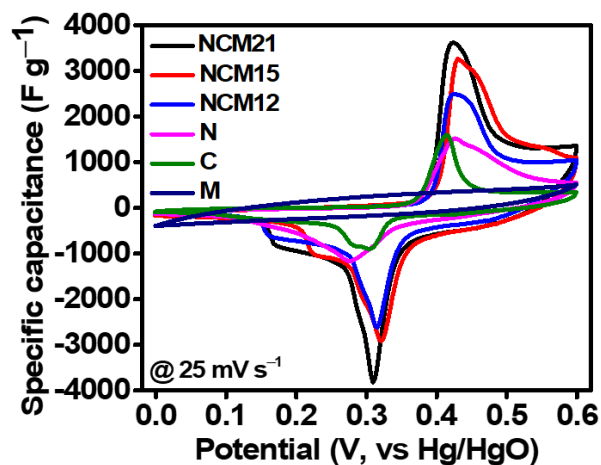


Figure S4. CV curves of NCM21, NCM15, NCM12, N, C, and M at a scan rate of 25 mV s^{-1} .

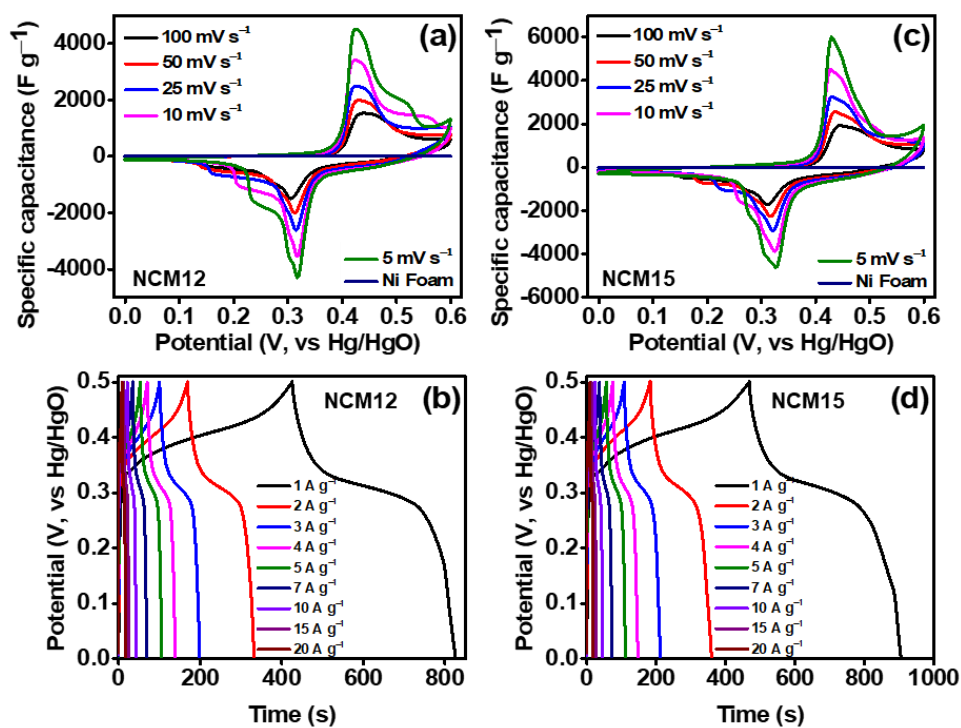


Figure S5. CV and GCD curves of (a-b) NCM12 and (c-d) NCM15 electrode materials.

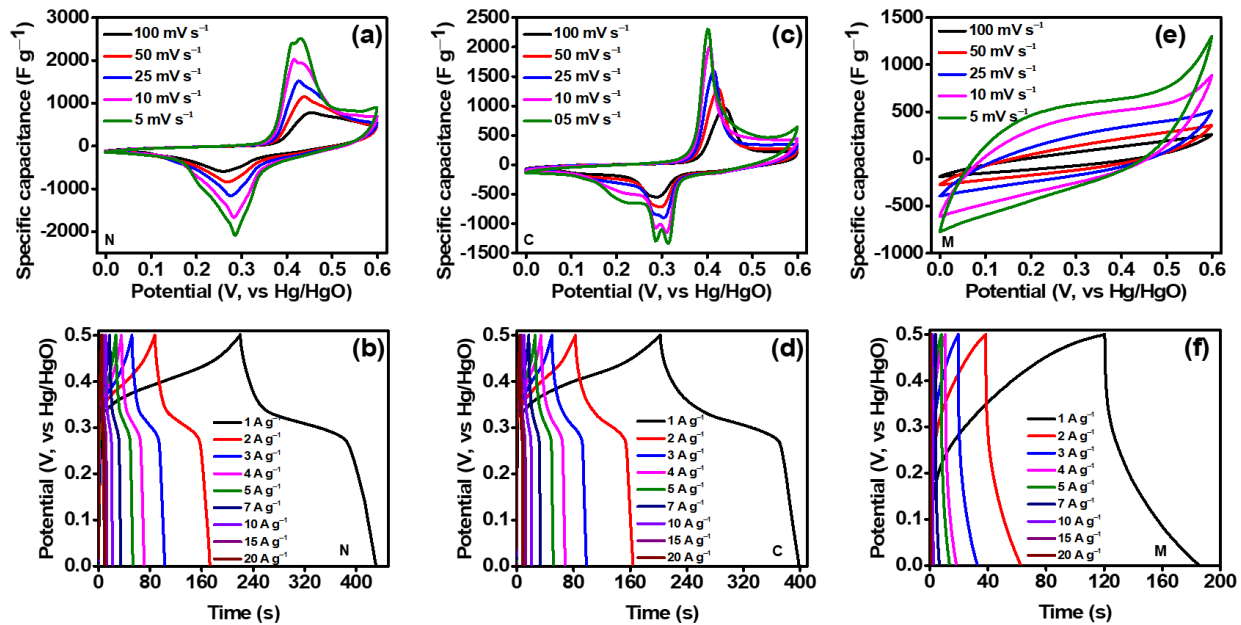


Figure S6. CV and GCD curves of (a-b) N, (c-d) C, and (e-f) M electrode materials.

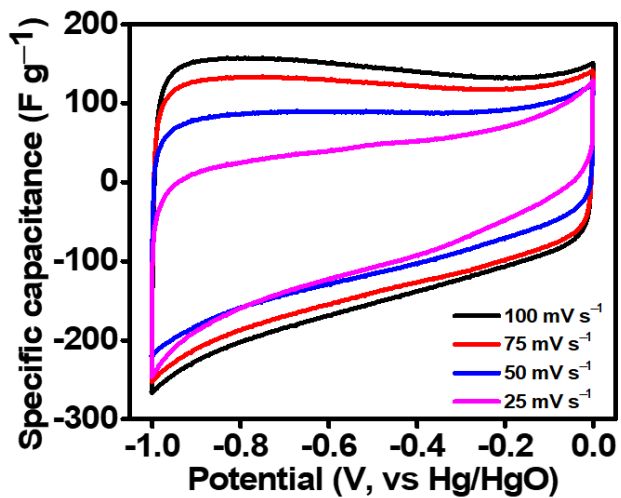


Figure S7. CV curves of activated carbon at different scan rates.

Table S1. Comparison of the energy density (ED) vs power density (PD) performance of present work with previous literature reports using two electrode device configurations

Sl. No.	ED (W h kg⁻¹)	PD (W kg⁻¹)	Materials	Reference
1	35.6	699.9	RGO-MNCO//RGO	06
2	30	416	CC/GPs/NCMTH //CC/GPs	13
3	22.02	350	NCMO//AC	14
4	40	750	FNCN//RGO	15
5	36.7	346.4	PCNS@CNMO//AC	25
6	35.5	750	ZMCO//AC	33
7	35.6	187.6	ZNCO//AC	34
8	26.2	511.8	ZCO@NCOH//AC	35
9	42.56	726.17	Ni-rich NCM21//AC	Present work