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Supplementary Materials

Electrodeposition of $Co_xNiV_yO_z$ Ternary Nanopetals on Bare and rGO-Coated Nickel Foam for High-Performance Supercapacitor Application

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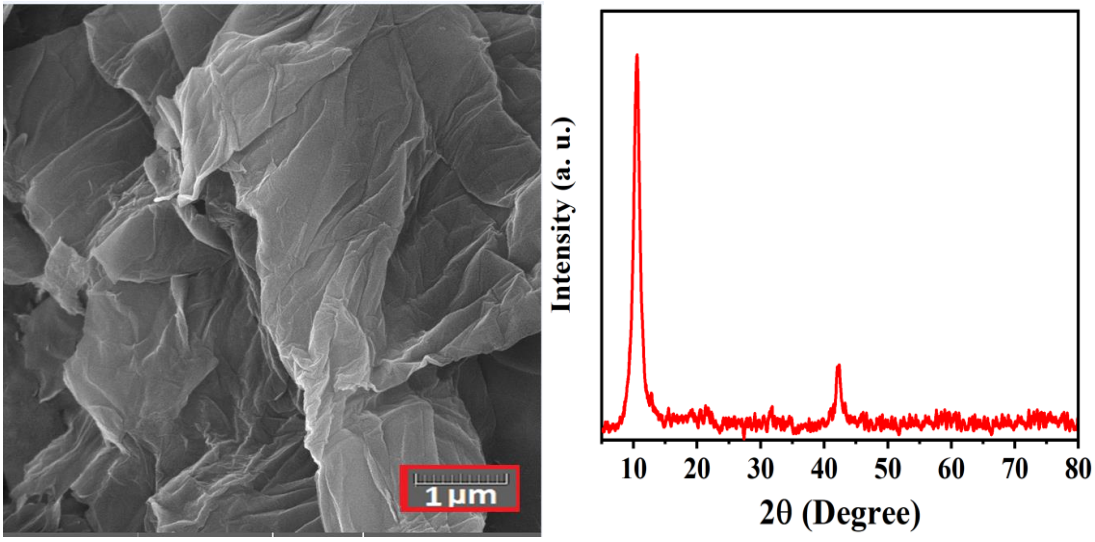

Figure S1. (left) FE-SEM image and (right) XRD pattern of synthesized graphene oxide using modified Hummers method.

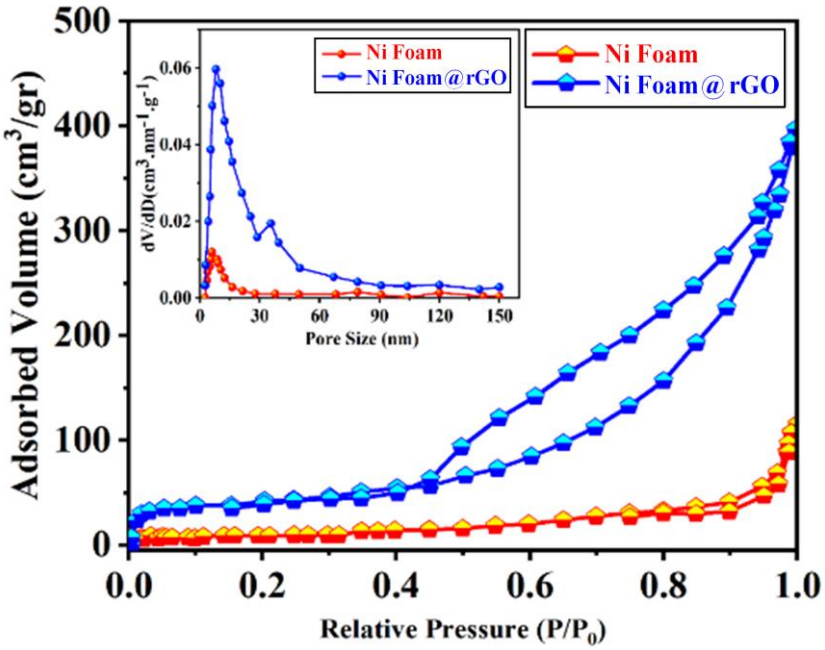

Figure S2. BET surface areas and corresponding distributions of Barrett–Joyner–Halenda (BJH) pore size of coated electrode materials onto Ni Foam and Ni Foam@rGO substrates.

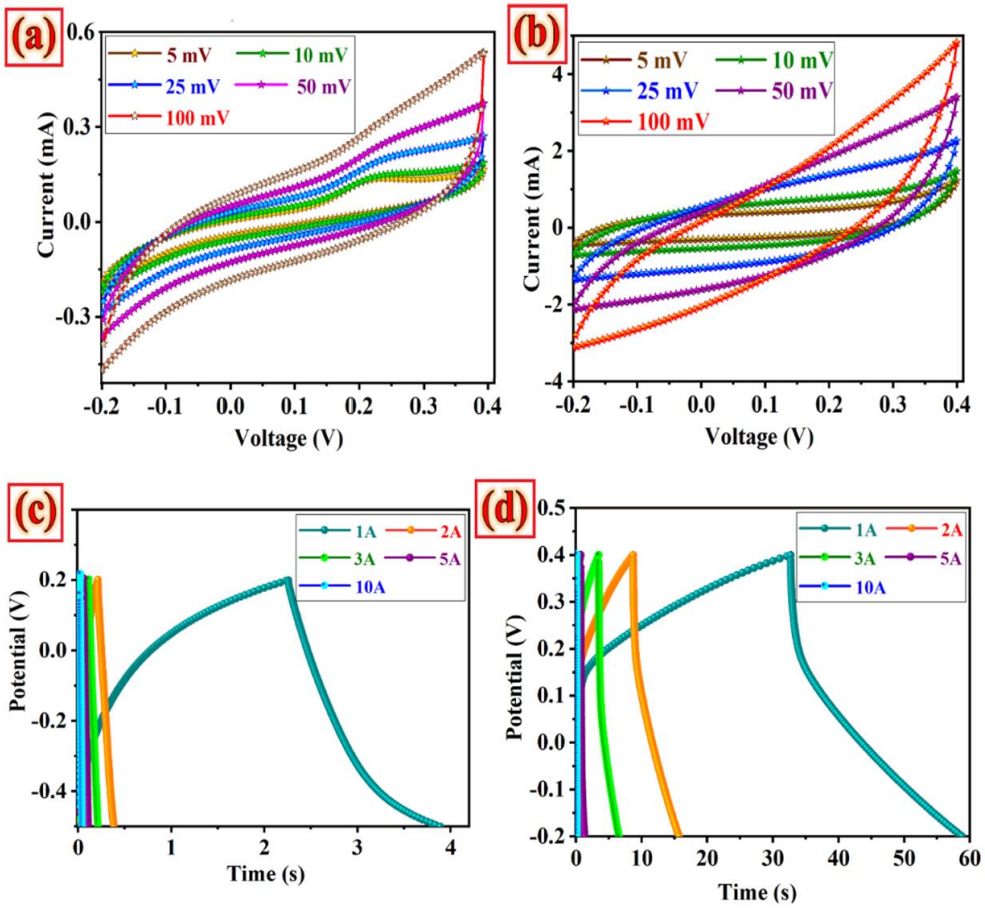

Figure S3. CV curves of typical (**a**) Ni Foam substrate, (**b**) Ni Foam@rGO substrate tested in KOH electrolyte (1.0 M) at scan rates ranging from 5 to 100 mV s^{-1}. Galvanostatic charging-discharging (GCD) curves of a typical (**c**) Ni Foam substrate, (**d**) Ni Foam@rGO substrate at current density ranging from 2 to 150 A g^{-1} in KOH electrolyte (1.0 M).

Table S1. Calculated specific capacitance values of bare, and rGO-coated nickel-foam substrate from GCD tests.

Current density /A.g^{-1}		1	2	3	5	10
Specific capacitance	Ni Foam	2.63	0.48	0.47	0.35	0.18
	Ni Foam@rGO	39.88	23.26	15.4	5.16	1.0

Table S2. Calculated specific capacitance values of $Co_xNiV_yO_z$-based electrodes deposited on bare and rGO-coated nickel-foam substrate from GCD tests.

Current density/A.g^{-1}		2	5	10	15	20	30	50	75	100	150
Specific capacitance	Ni Foam	300.31	281.85	263.42	157.92	110.57	99.00	72.14	26.73	5.71	2.14
	Ni Foam@rGO	701.08	613.42	584.28	503.57	444.85	348.85	237.85	157.50	25.71	17.14