Supplementary Information

Porous nickel oxide nanotube arrays supported on carbon fiber paper: synergic effect on pseudocapacitive behavior

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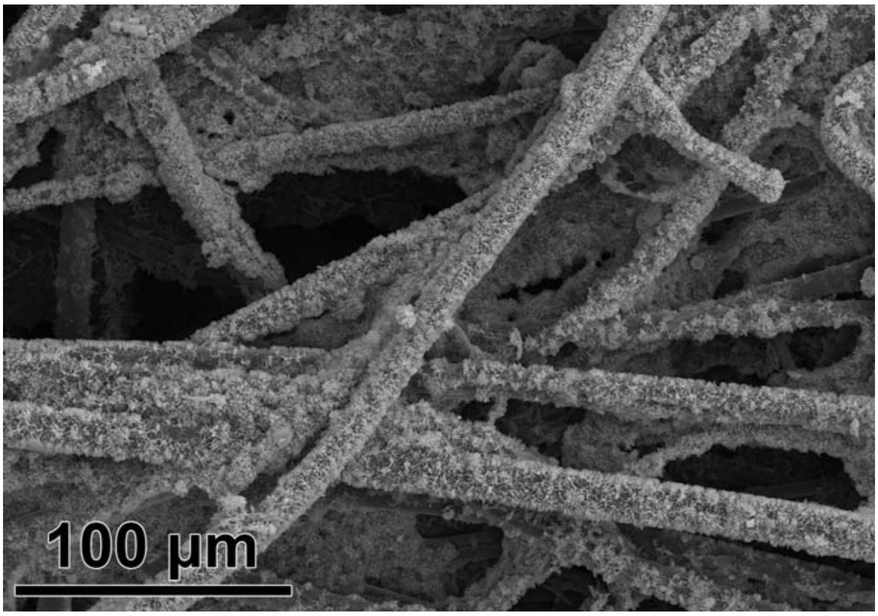

Fig. S1 SEM image of CFP/NiO-450 obtained after 2.5 h annealing under air.

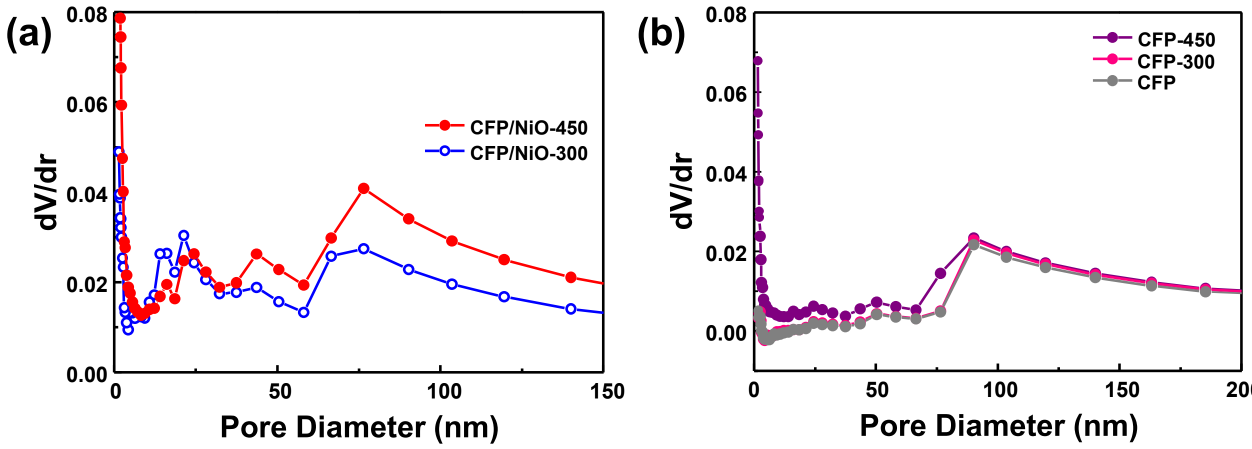

Fig. S2 Pore size distribution of (a) CFP/NiO-300 and CFP/NiO-450 and (b) CFP, CFP-300, and CFP-450.

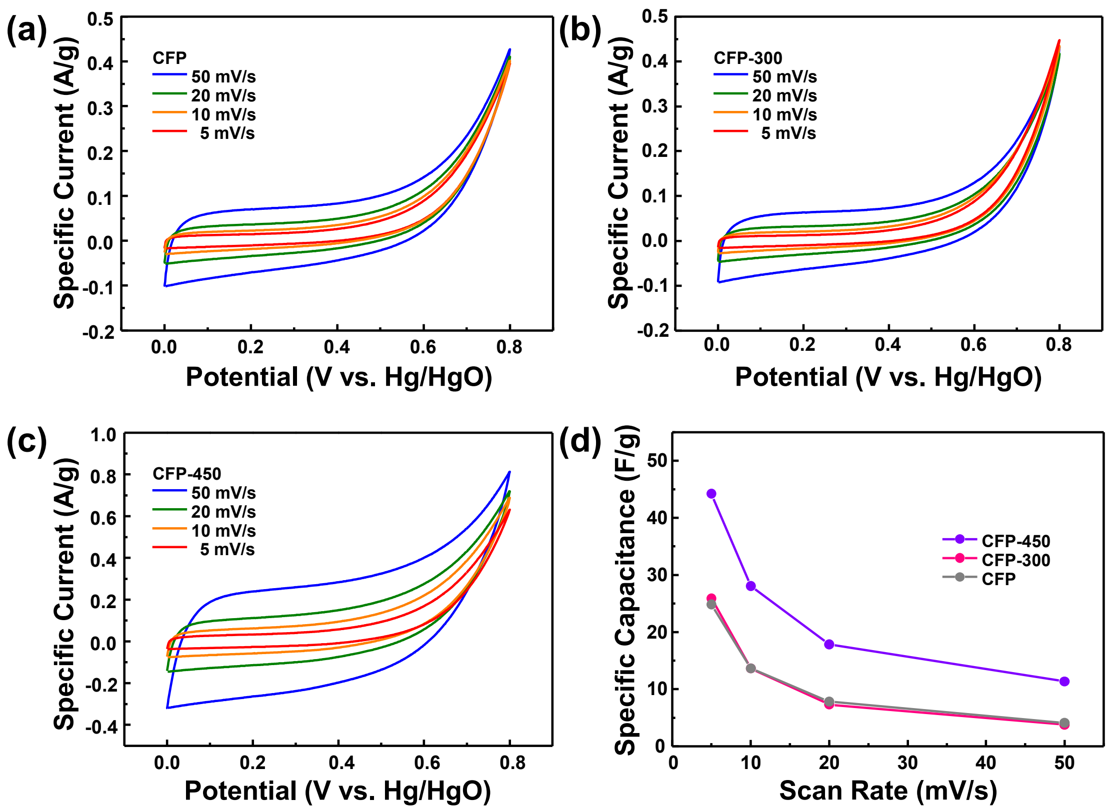

Fig. S3 Cyclic voltammograms of (a) CFP, (b) CFP-300, (c) CFP-450 at various scan rates; (d) gravimetric capacitances at different scan rates.

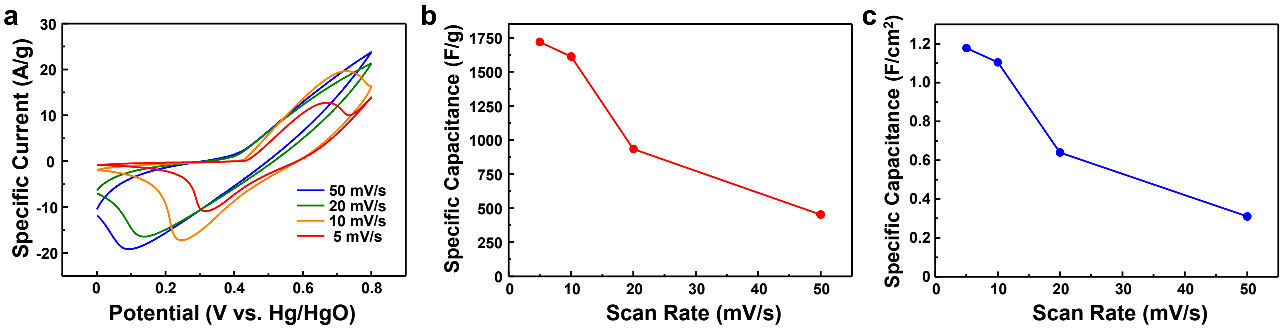

Fig. S4 (a) Cyclic voltammograms, (b) gravimetric capacitances, and (c) areal capacitances of CFP/$Ni(OH)_2$ at different scan rates.

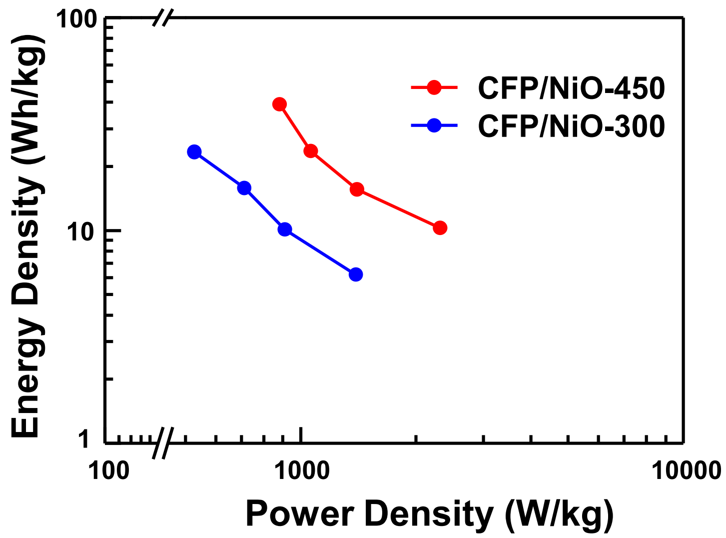

Fig. S5 Ragone plot of CFP/NiO-300 and CFP/NiO-450.

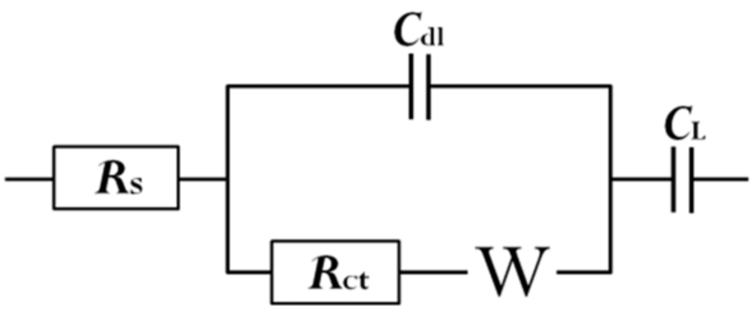

Fig. S6 Equivalent circuit employed to fit the EIS spectra. R_s: ohmic serial resistance, R_{ct}: charge-transfer resistance, W: diffusive resistance (Warburg impedance), C_{dl}: double-layer capacitor, and C_L: limit capacitor.

Table S1 Resistances of NiO electrodes obtained from EIS analysis (A_w is the Warburg coefficient).

	CFP/NiO-300	CFP/NiO-450
R_s (Ω)	4.25	3.98
R_{ct} (Ω)	2.04	1.84
A_w (Ω/$s^{1/2}$)	8.79	2.79