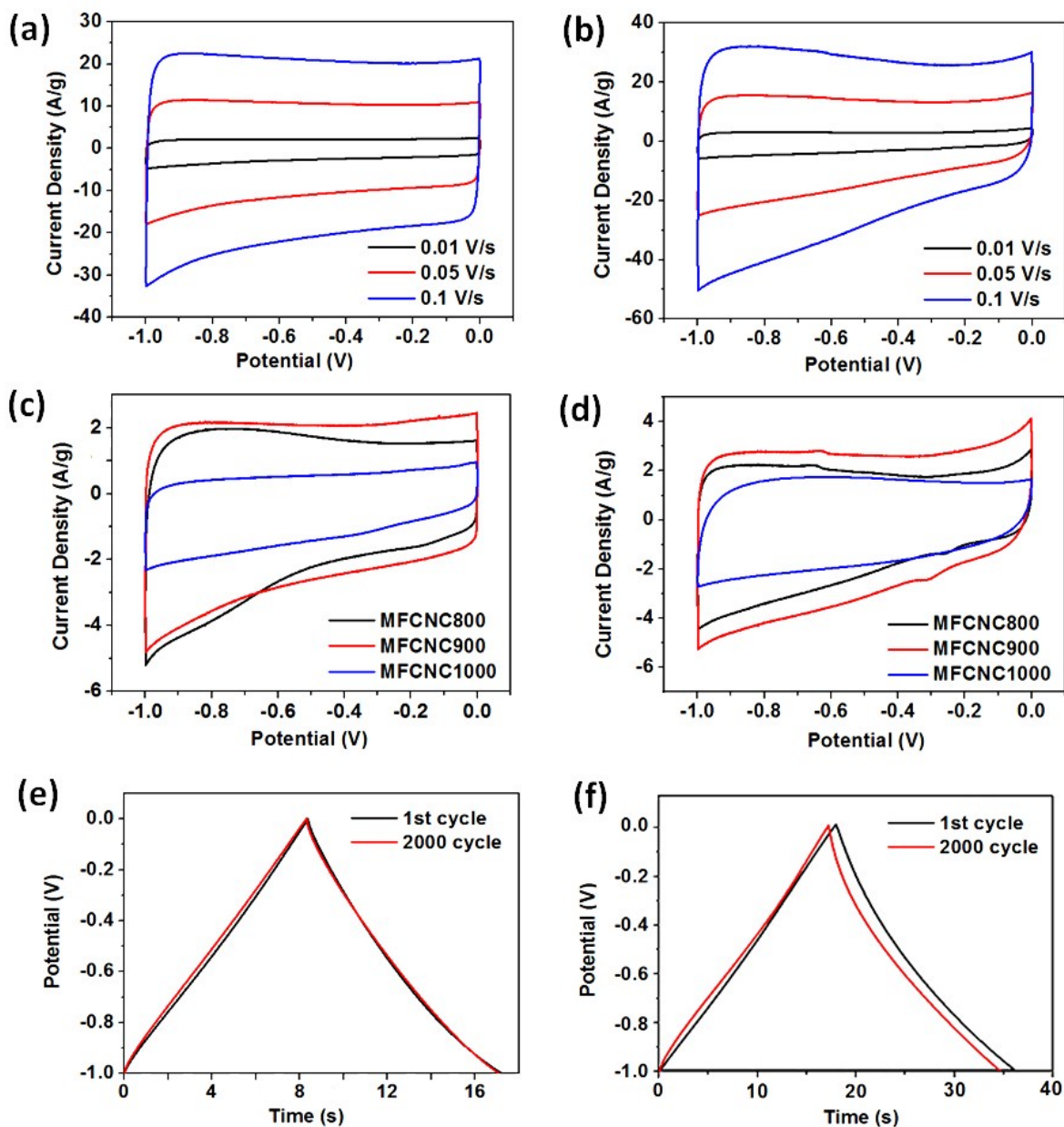


## Electronic Supplementary Information (ESI)



**Fig. S1** (a) Cyclic voltammetry curves for MFCNC900 with the scan rate of 0.01 V/s, 0.05 V/s and 0.1 V/s using 2M KCl as the electrolyte; (b) Cyclic voltammetry curves for MFCNC900 with the scan rate of 0.01 V/s, 0.05 V/s and 0.1 V/s using 6M KOH as the electrolyte; (c) Cyclic voltammetry curves for MFCNC800 MFCNC900 MFCNC1000 with the same scan rate of 0.01 V/s using 2M KCl as the electrolyte; (d) Cyclic voltammetry curves for MFCNC800 MFCNC900 MFCNC1000 with the same scan rate of 0.01 V/s using 6M KOH as the electrolyte (e) Stability test in 2M KCl electrolyte for MFCNC900 at 20 A/g charge/discharge rate for 2000 cycles and (f) Stability test in 6M KOH electrolyte for MFCNC900 at a 20 A/g charge/discharge rate over 2000 cycles.

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**Table S1** Summary of capacitance performance of MFCNC 800 MFCNC900 MFCNC1000 in neutral, alkaline and acidic electrolytes.

Capacitance in various electrolytes (F/g)

Scan Rate (V/s)	2M KCl			6M KOH			1M H <sub>2</sub> SO <sub>4</sub>		
	MFCNC 800	MFCNC 900	MFCNC 1000	MFCNC 800	MFCNC 900	MFCNC 1000	MFCNC 800	MFCNC 900	MFCNC 1000
0.01	214.2	237.2	96.5	213.3	289.5	160.4	287.3	328.5	177.5
0.05	199.4	202.4	81.8	189.4	258.4	122.2	240.4	286.1	134.7
0.1	179.5	192.4	76.9	179.0	255.5	101.0	221.0	272.0	120.7
0.2	160.9	183.0	72.8	169.3	243.3	79.8	203.8	261.2	110.6
0.4	150.0	176.0	68.8	158.8	231.0	61.6	182.3	250.9	98.6

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