

Fig. 1. Charge–discharge of the Na/HC half cells using 1 M NaPF₆-EC/PC/DMC electrolyte with (a) in neat, (b) 1 wt% NaDFP

	Electrolyte	Additive	C1 Coulombic efficiency (%)	1st Discharge/Charge (mAh g ⁻¹)
a	1M NaPF ₆ EC:PC:DMC(45:45:10)	X	81.17	332/253
b	1M NaPF ₆ EC:PC:DMC(45:45:10)	1wt%NaDFP	79.62	291/217

Table 1. The first charge-discharge capacities and Coulombic efficiencies of the Na/HC cells with 1 M NaPF₆-EC/PC/DMC electrolytes with and without additives.

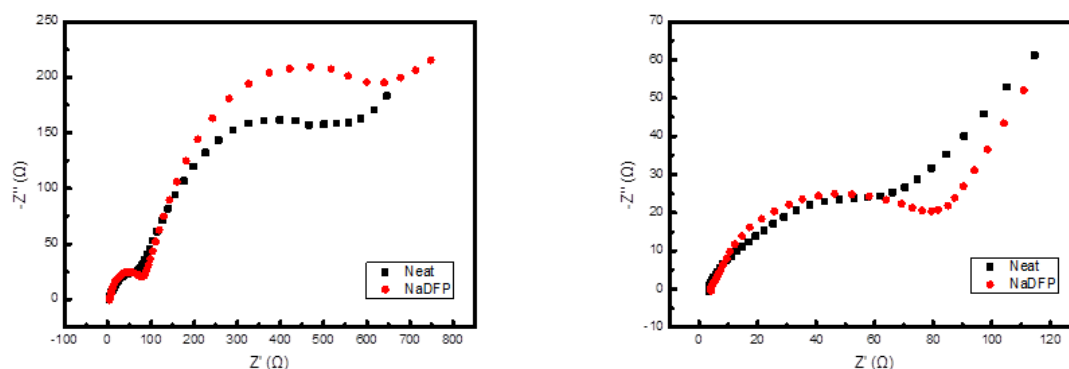


Fig. 2. Nyquist diagram of Na/HC half cells with 1 M NaPF₆-EC/PC/DMC electrolytes with and without additives.

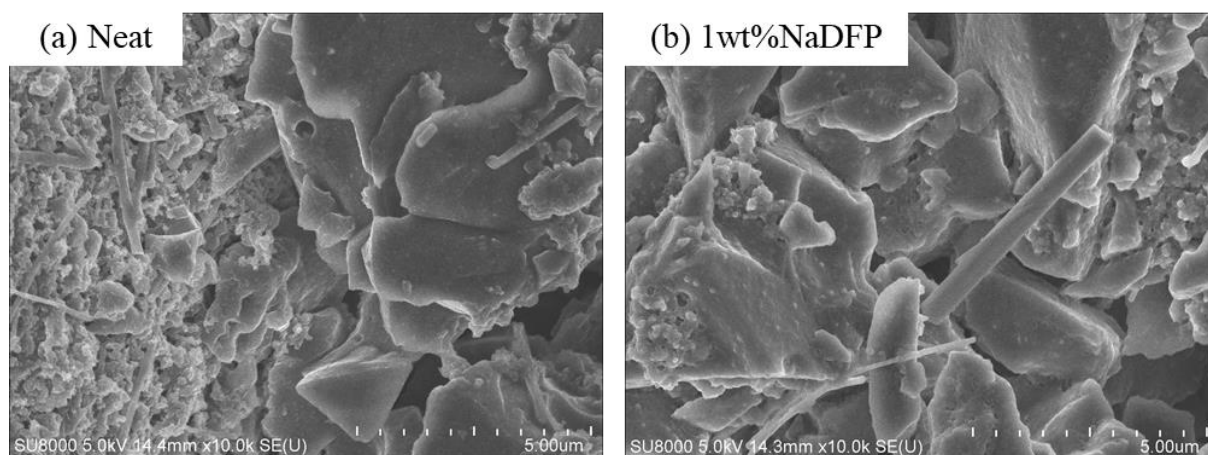


Fig. 3. Surface SEM images of the HC electrodes after 3 cycles in 1M NaPF₆-EC/PC/DMC (a) in neat and with (b) 1 wt% NaDFP