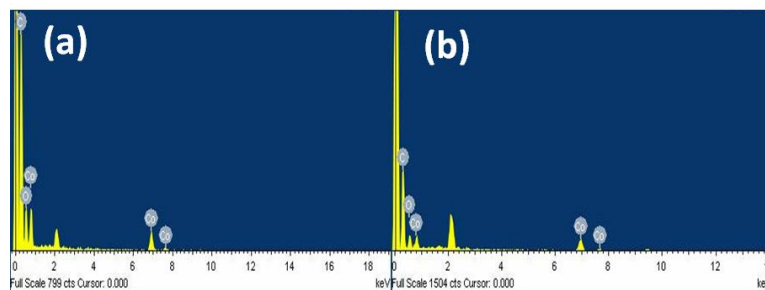
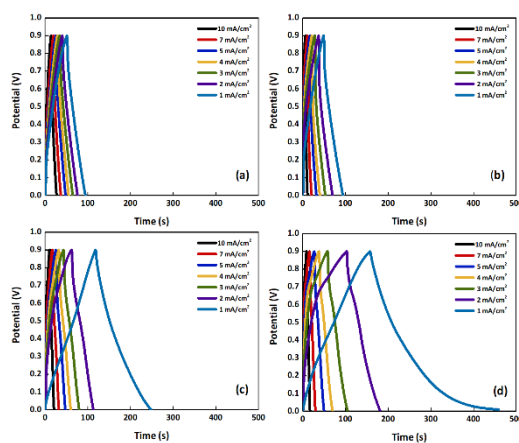


## Supporting information



S1. SEM-EDX analysis of (a)  $\text{Co}_3\text{O}_4/\text{CNF}$  (b)  $\text{Co}_3\text{O}_4/\text{CNF-FeN@GnP}$



S2. GCD curves of (a) CNF, (b) CNF-FeN@GnP, (c)  $\text{Co}_3\text{O}_4/\text{CNF}$ , and (d)  $\text{Co}_3\text{O}_4/\text{CNF-FeN@GnP}$  at different current density (1, 2, 3, 4, 5, 7, 10  $\text{mA}/\text{cm}^2$ )