Electronic Supporting Information for

## Effects of zinc and manganese ions in aqueous electrolytes on structure and electrochemical performance of Na<sub>0.44</sub>MnO<sub>2</sub> cathode material

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Figure S1 XRD patterns of the  $Na_{0.44}MnO_2$  electrode at the original state (a) and at the discharge state after 20 cycles(b) at the current density of 100mA/g in 1 M  $Na_2SO_4$  + 0.5M ZnSO<sub>4</sub> mixed aqueous electrolytes.

The XRD pattern of the  $Na_{0.44}MnO_2$  electrode after 20 cycles at the current density of 100mA/g in 1 M  $Na_2SO_4 + 0.5M$  ZnSO<sub>4</sub> mixed aqueous electrolytes was shown in the Figure S1. As can be seen, some characteristic diffraction peaks of  $Na_{0.44}MnO_2$  are evidently weakened, indicative of a great change in the crystal structure of  $Na_{0.44}MnO_2$ .