

Supporting Information

***In-situ* hydrothermal fabrication of MnO₂@CoMoO₄@Ni
nanohybrid electrode and ultrahigh energy density of ASCs**

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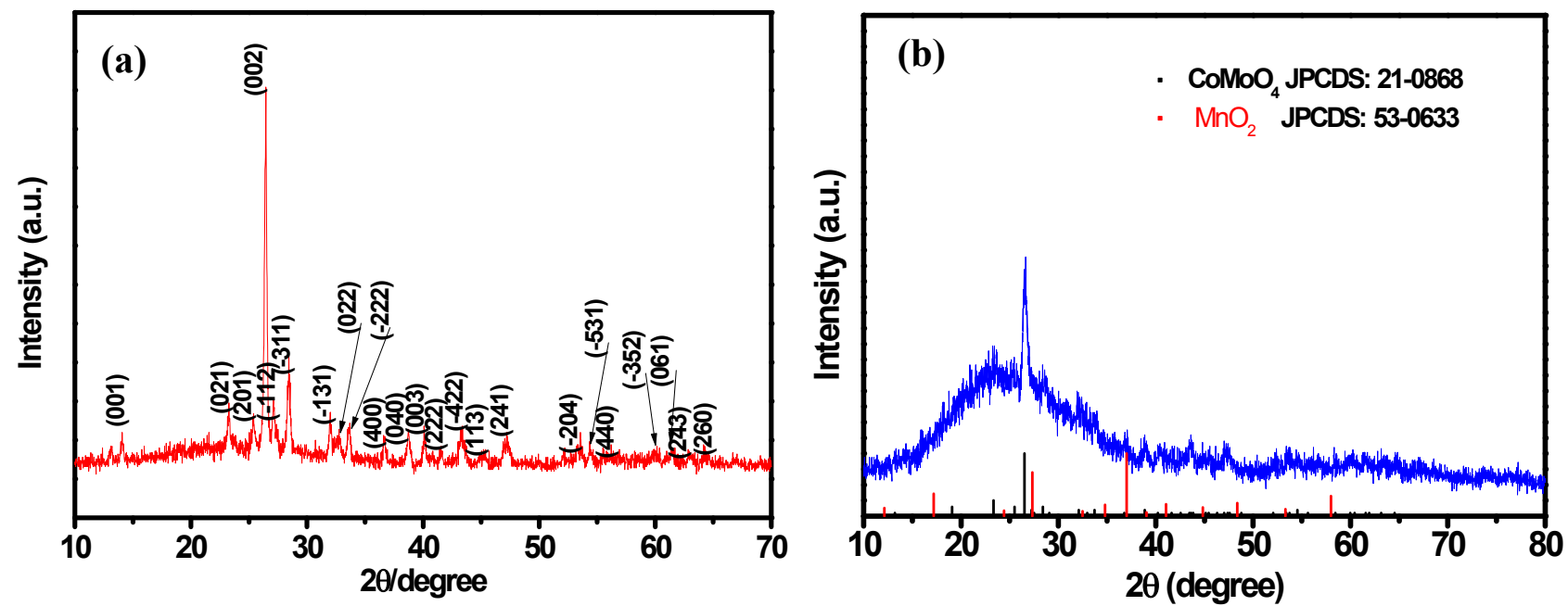


Fig. S1. XRD patterns of the samples: (a) CoMoO_4 ; (b) $\text{MnO}_2@\text{CoMoO}_4$

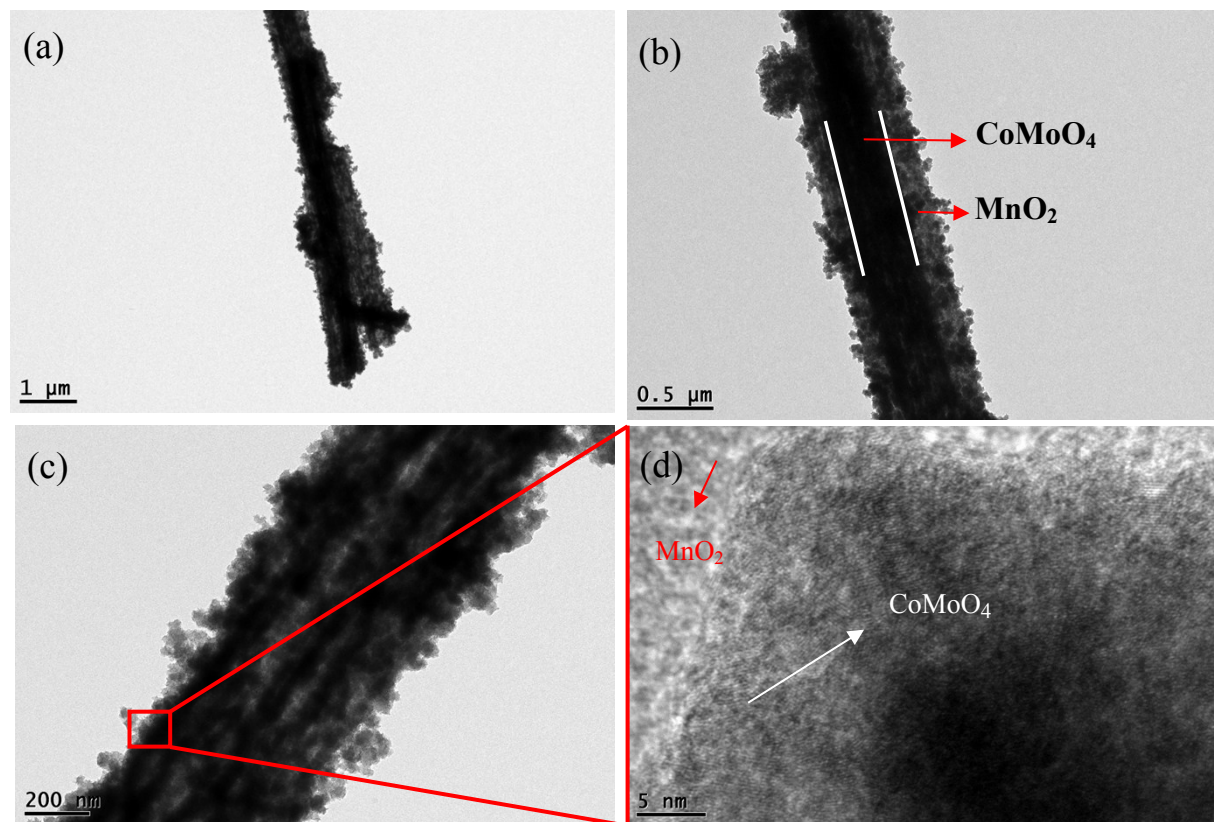


Fig. S2. HRTEM images of $\text{MnO}_2@\text{CoMoO}_4$ hybrid nanostructures ripped off from nickel foam: (a-c) TEM; (d) Lattice fringe images

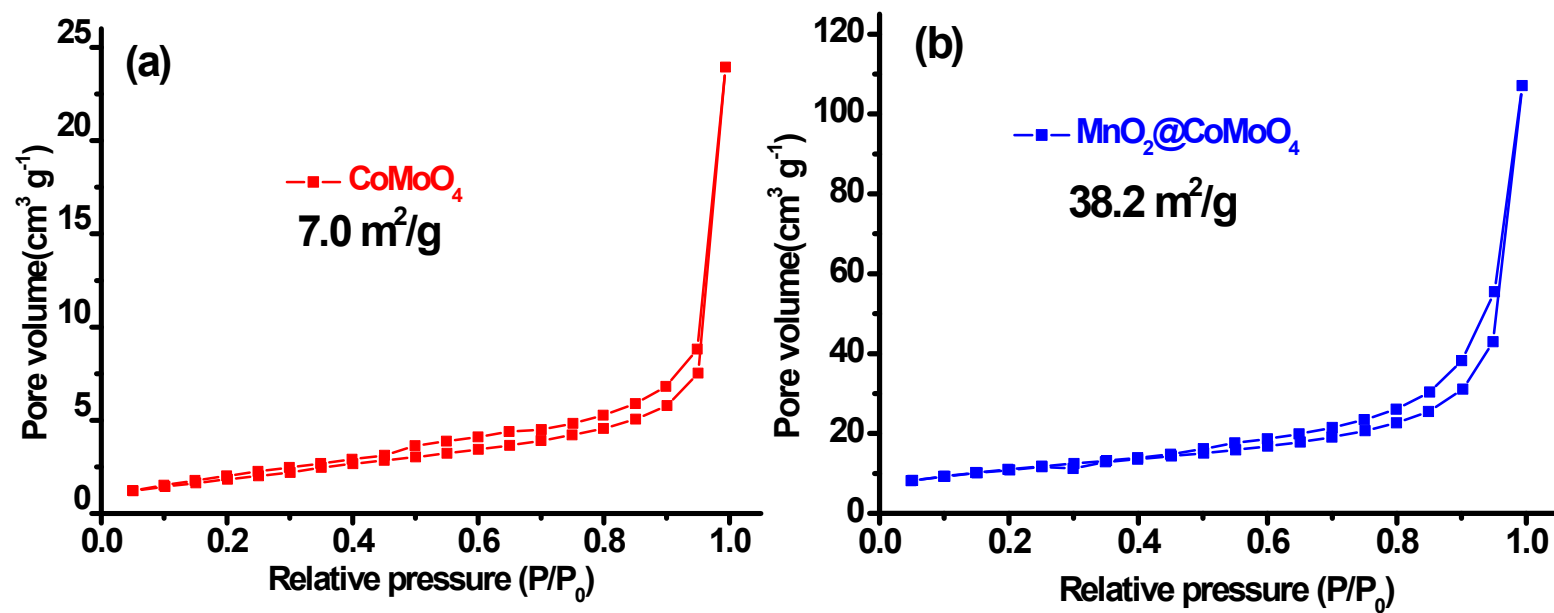


Fig. S3. N₂ sorption isotherms: (a) CoMoO₄ nanowires; (b) MnO₂@CoMoO₄ hybrid nanostructures

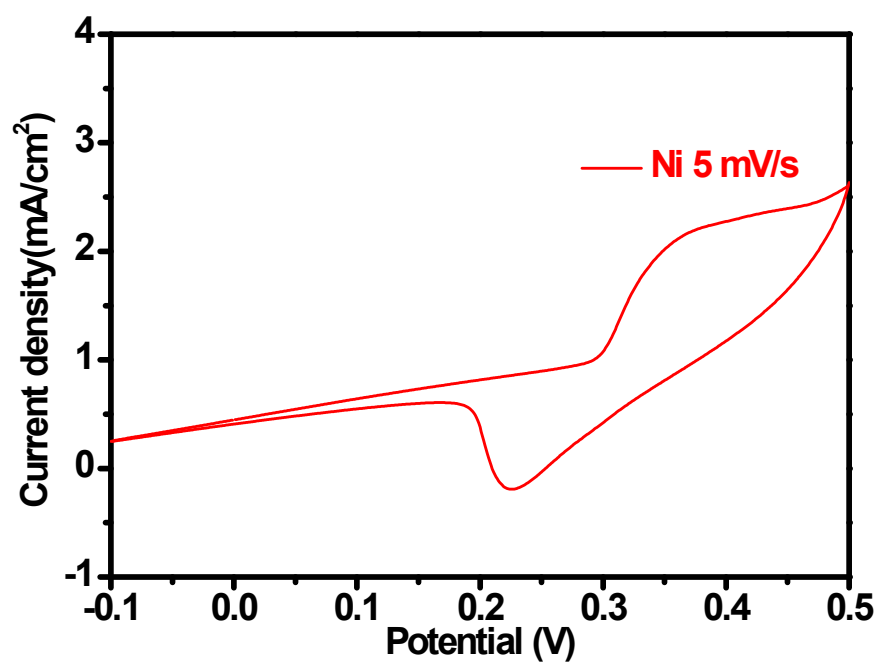


Fig. S4. CV curve of pure Ni foam

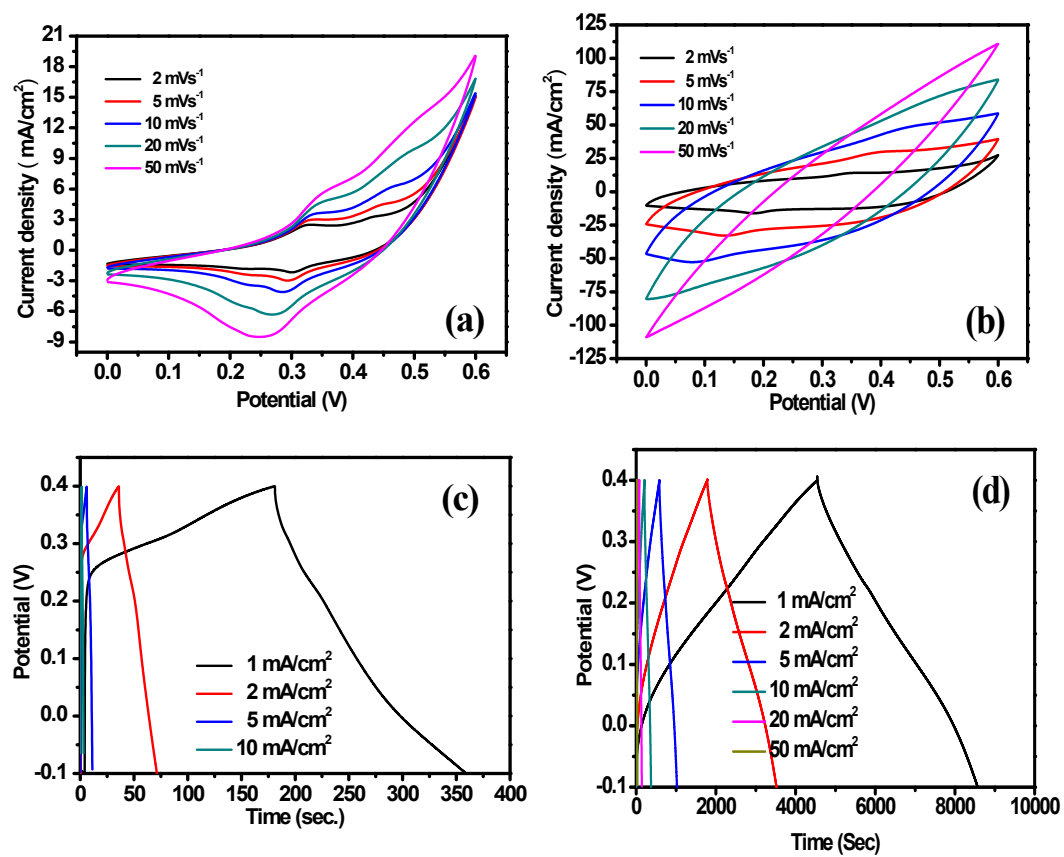


Fig. S5. CV (a,b) and charge-discharge curves (c,d) of the electrodes: (a,c) $\text{CoMoO}_4@\text{Ni}$; (b,d) $\text{MnO}_2@\text{CoMoO}_4@\text{Ni}$

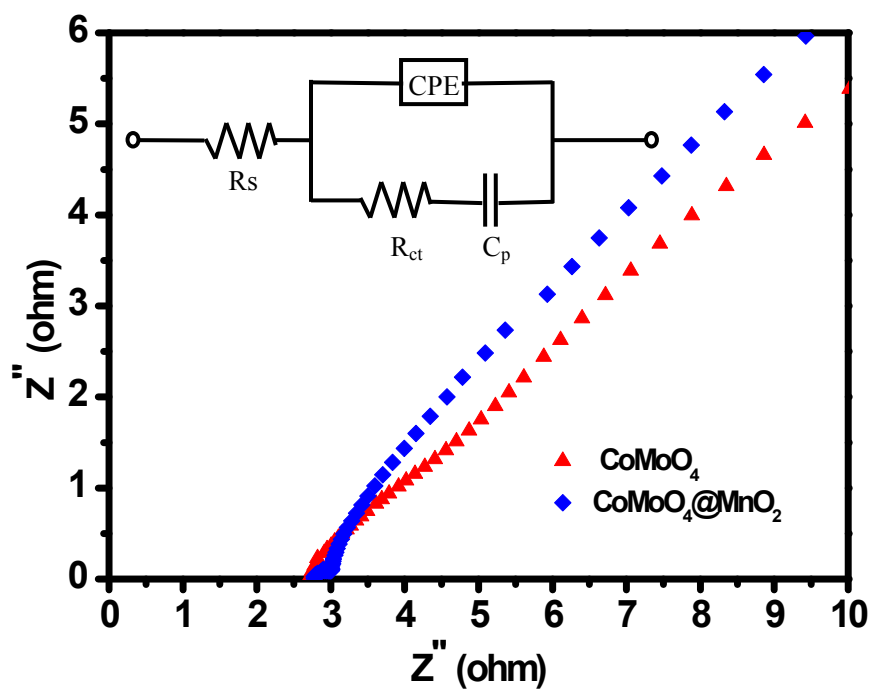


Fig. S6. Nyquist plots (the inset of simulated equivalent circuit diagram from the EIS analysis) from the EIS spectra of $\text{CoMoO}_4@\text{Ni}$ and $\text{MnO}_2@\text{CoMoO}_4@\text{Ni}$ electrodes

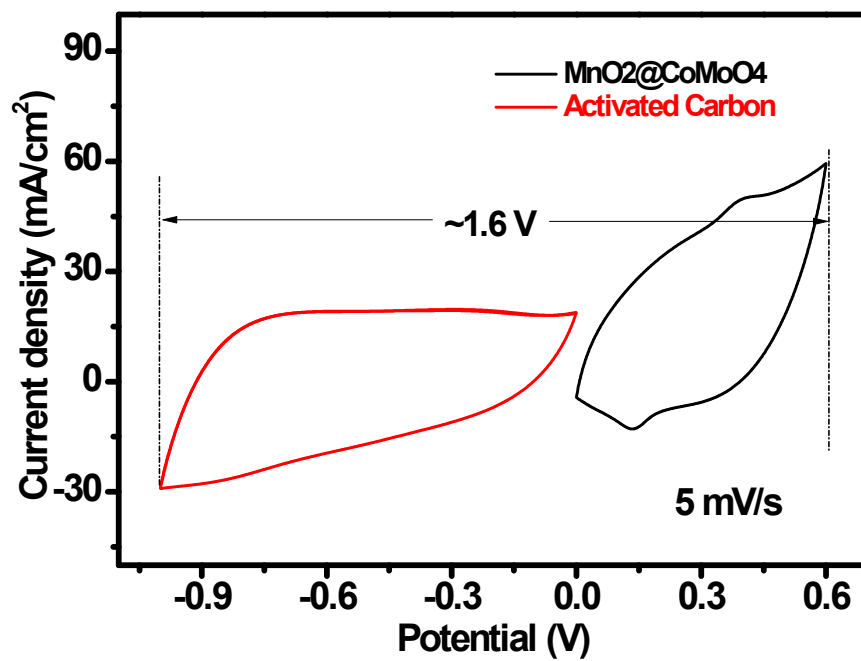


Fig. S7. Comparative CV curves of the MnO₂@CoMoO₄@Ni electrode and activated carbon (AC) electrode (three-electrode cell, vs. SCE)

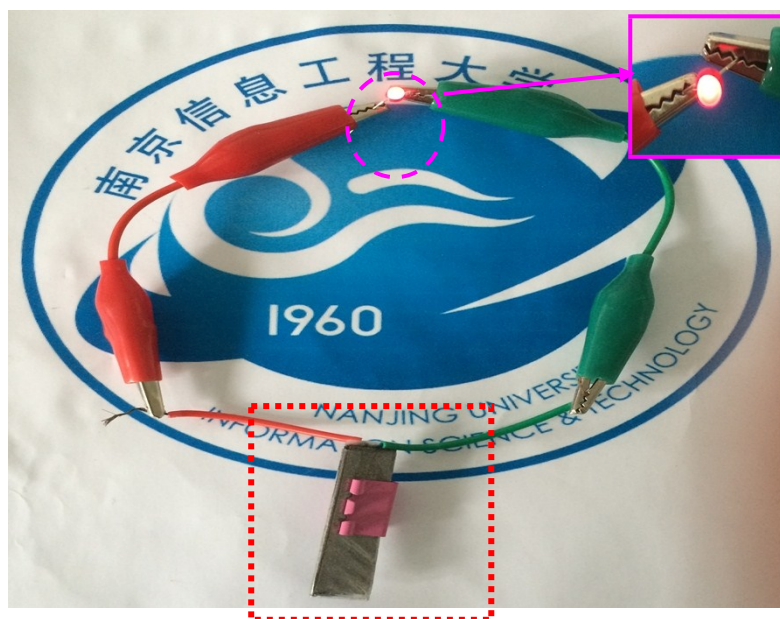


Fig. S8. A photograph of one AC@Ni//MnO₂@CoMoO₄@Ni ASC can efficiently light up a LED indicator

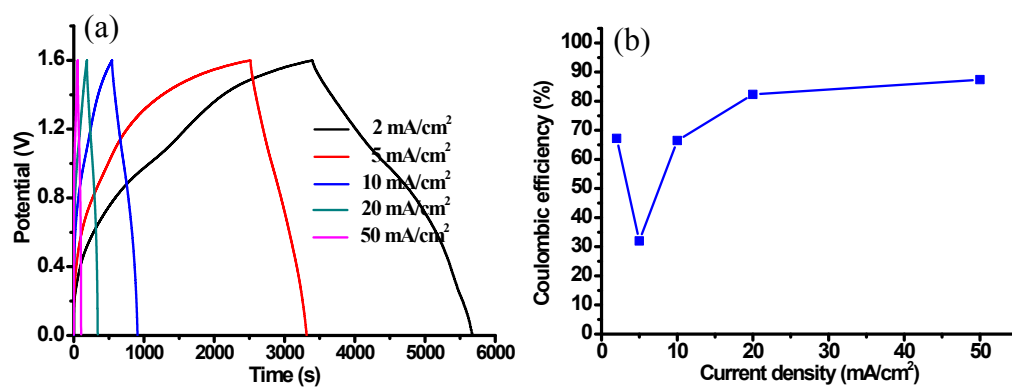


Fig. S9. Galvanostatic charge-discharge curves (a) and Coulombic efficiency vs. current density (b) of AC@Ni//MnO₂@CoMoO₄@Ni ASC

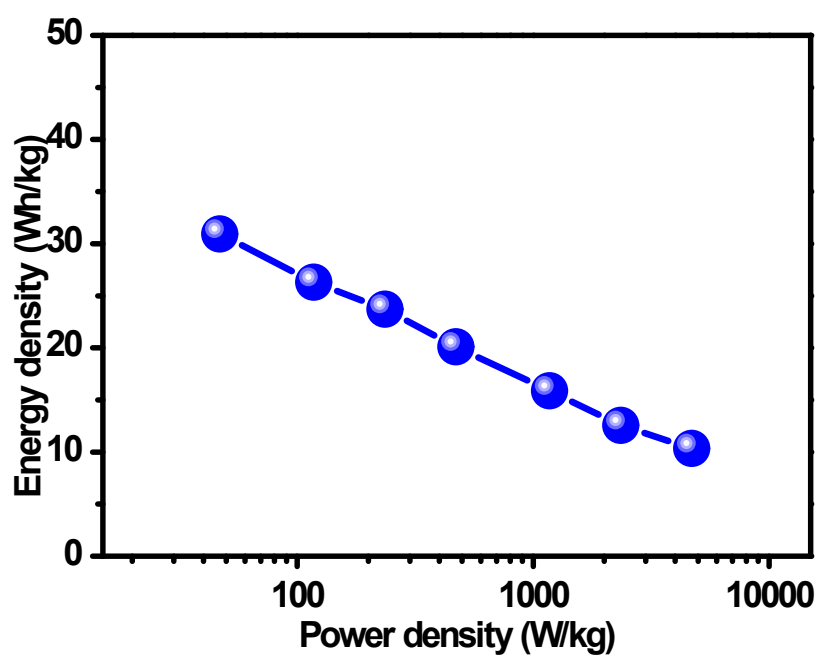


Fig. S10. Energy density vs. power density for AC@Ni//MnO₂@CoMoO₄@Ni device

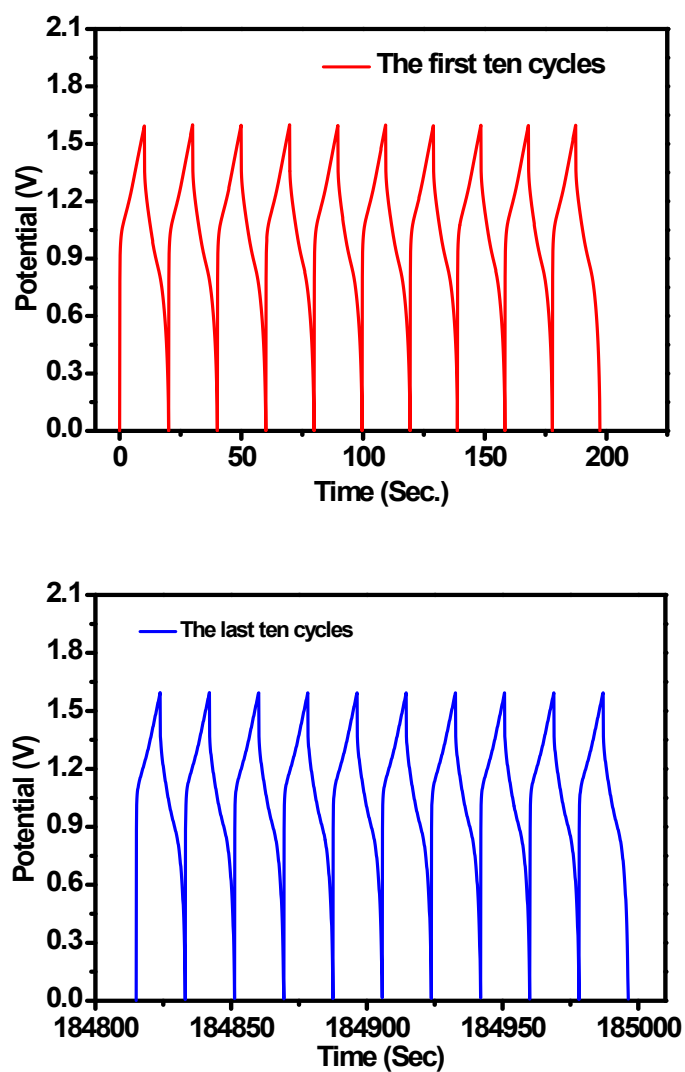


Fig. S11. The first ten cycles and the last ten cycles of charge-discharge curves during 10 000 cycles for our AC@Ni//MnO₂@CoMoO₄@Ni device