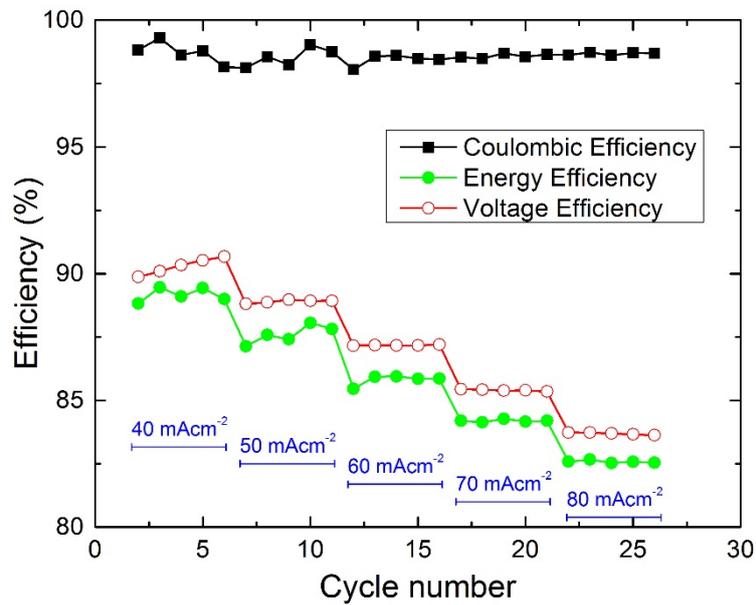
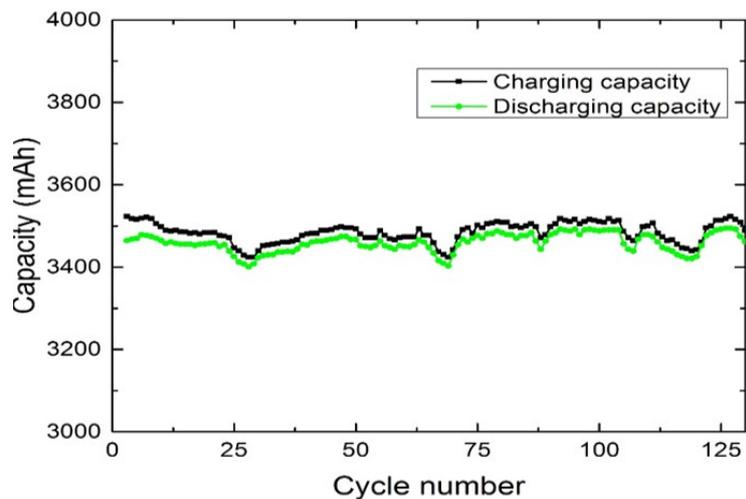


Supplementary materials



**Figure S1.** CE, EE and VEs at different current density of a 2-cell stack assembled with a combination of AEM and CEM.



**Figure S2.** Charging and discharging capacity over 125 cycles after auto-rebalancing of a 2-cell stack assembled with a combination of AEM and CEM.