Supplementary Information

Zn-anode interphase regulation by electrolyte additives in aqueous two-electron Zn–I_2 batteries

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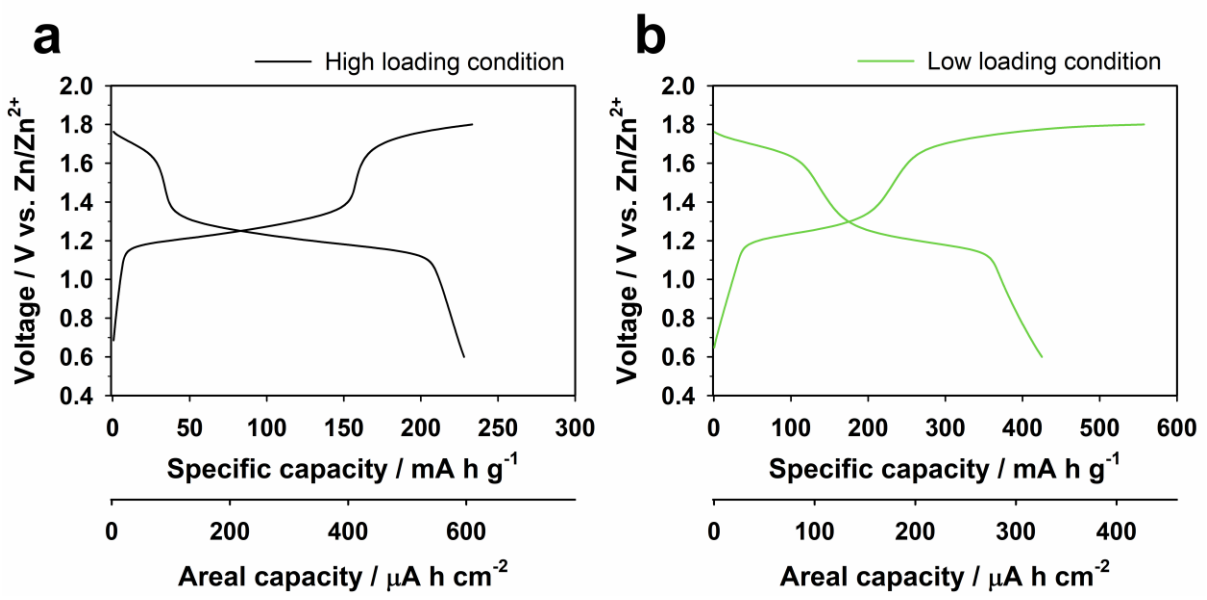

Fig. S1 Voltage profiles (2nd cycle) of aqueous Zn–I_2 full cells in the 1 *m* $ZnCl_2$ electrolyte with (a) high iodine loading condition (30 wt.%) and (b) low iodine loading condition (15 wt.%). The low-loading cathode delivers a higher gravimetric capacity owing to improved iodine utilization, whereas the high-loading cathode provides a higher areal capacity despite lower gravimetric utilization.

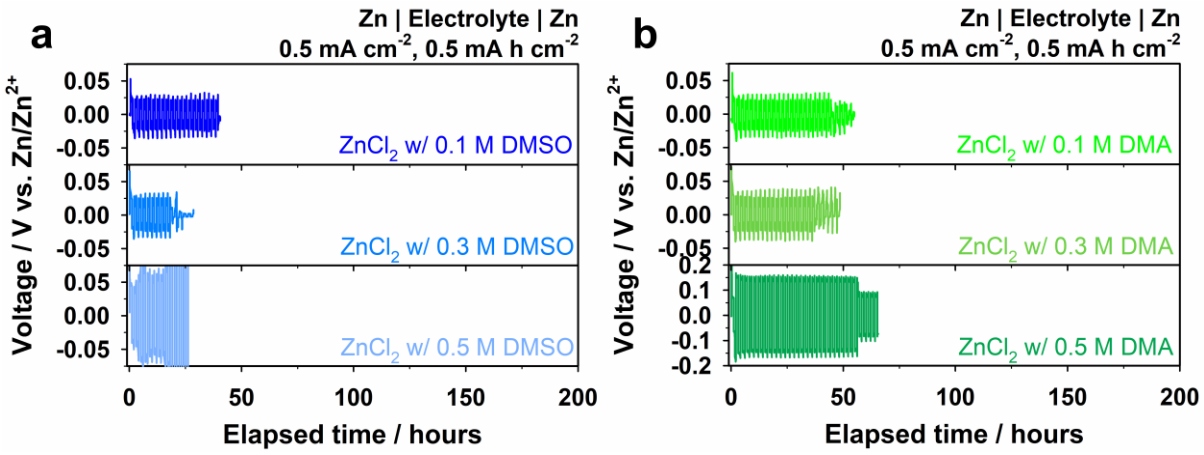

Fig. S2 Cycle performance of Zn | Zn symmetric cells in 1 *m* $ZnCl_2$ with varying (a) DMSO and (b) DMA concentrations at a current density of 0.5 mA cm^{-2} with an areal capacity of 0.5 mA h cm^{-2} per half-cycle.