Moderate hydrogen bond network via in−situ dissolved interfacial cationic solvation effect for highly active aqueous zinc−manganese batteries

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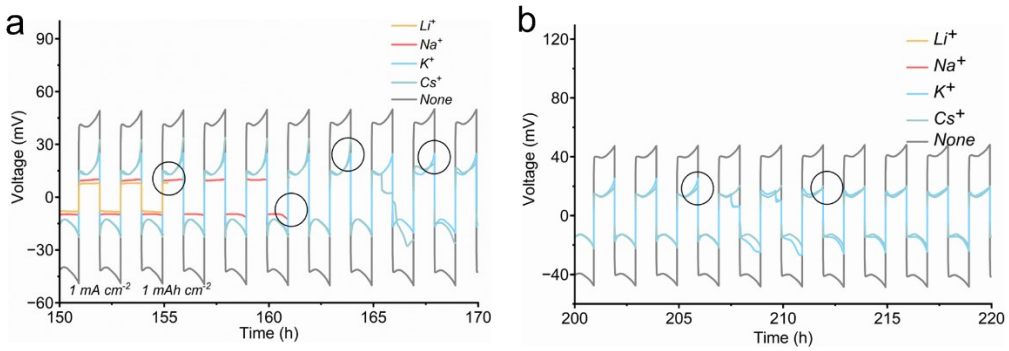

Figure S1. Suppressed cycle stability by alkali metal ion additives at current density of (a) 150 h-170 h and (b) 200 h-220 h.

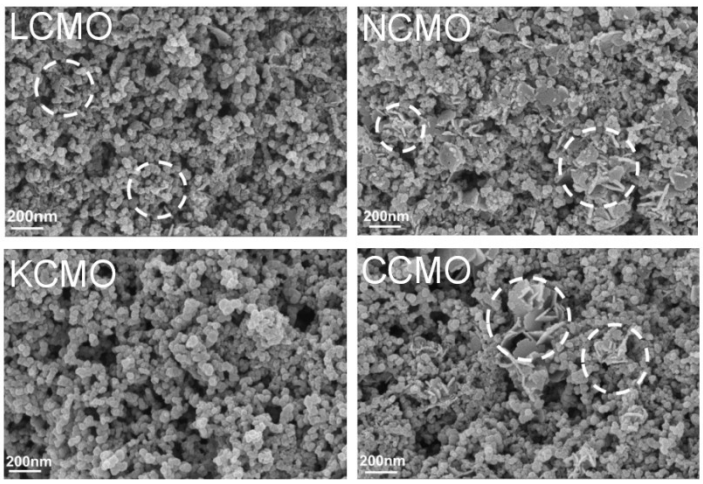

Figure S2. SEM images of LCMO,NCMO, KCMO, CCMO.

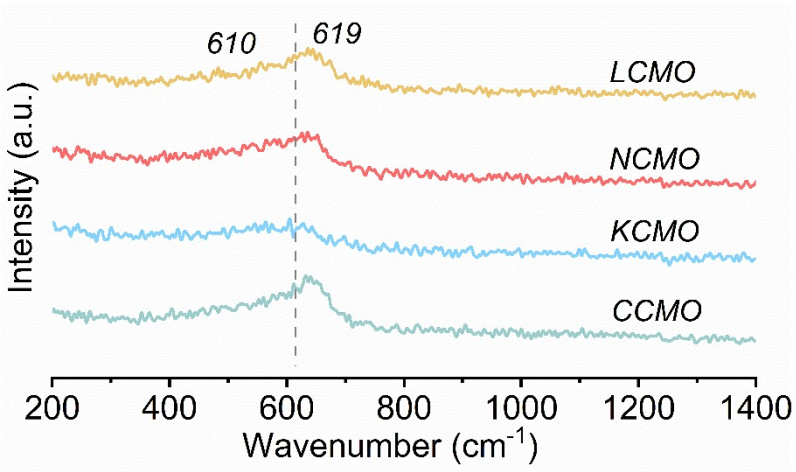

Figure S3. Powder Raman Spectra of LCMO, NCMO, KCMO and CCMO.

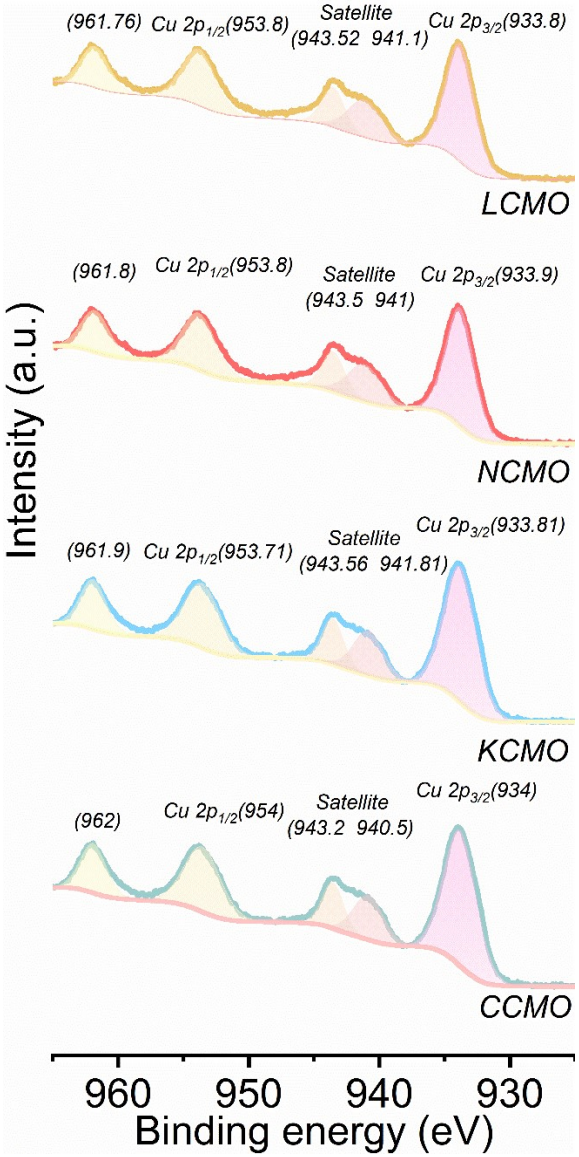

Figure S4. XPS Cu 2p spectra of LCMO, NCMO, KCMO, CCMO.

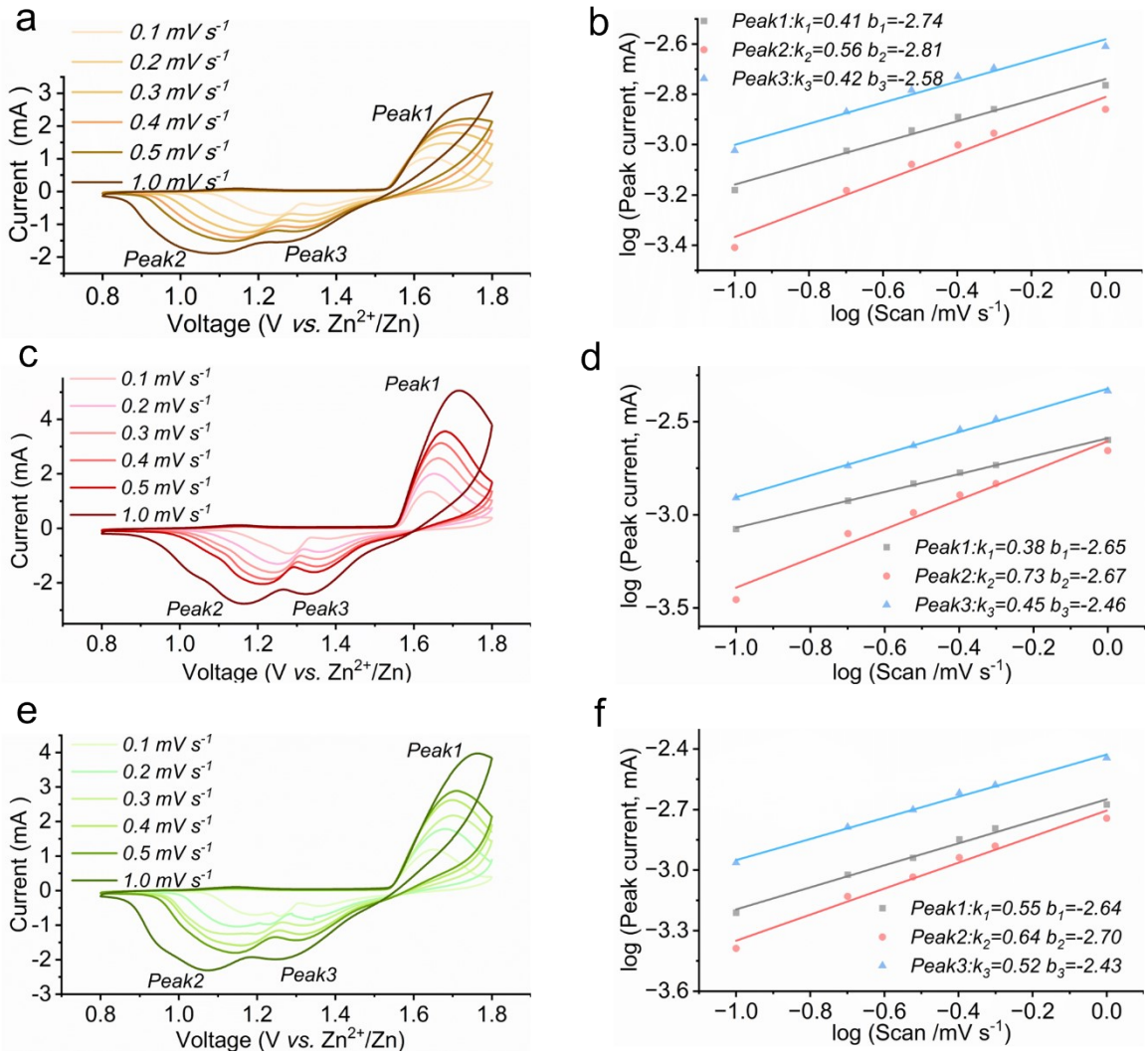

Figure S5 CV, k and b curves of (a), (b) LCMO, (c), (d)NCMO, (e), (f)CCMO at scan rates ranging from 0.1 mV s^{-1} to 1 mV s^{-1}.

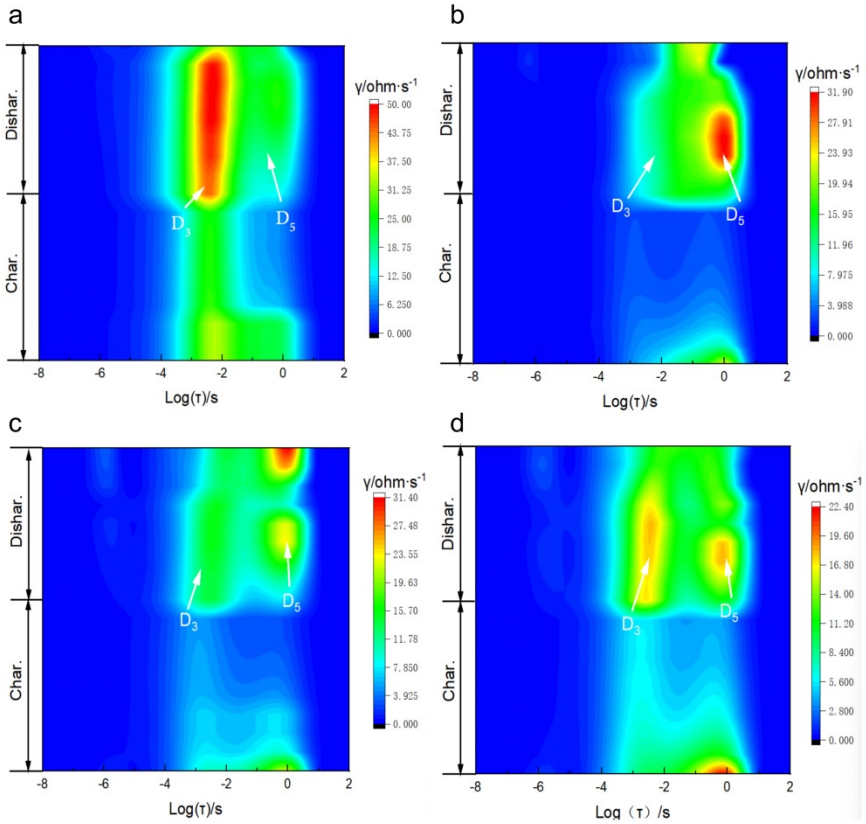

Figure S6. DRT spectra at the range of 10^{-8}~10^{2}s in (a) LCMO (b) NCMO (c) KCMO (d) CCMO.