Supporting Information

On the beneficial effect of $MgCl_2$ as electrolyte additive to improve the electrochemical performance of $Li_4Ti_5O_{12}$ as cathode in Mg Batteries

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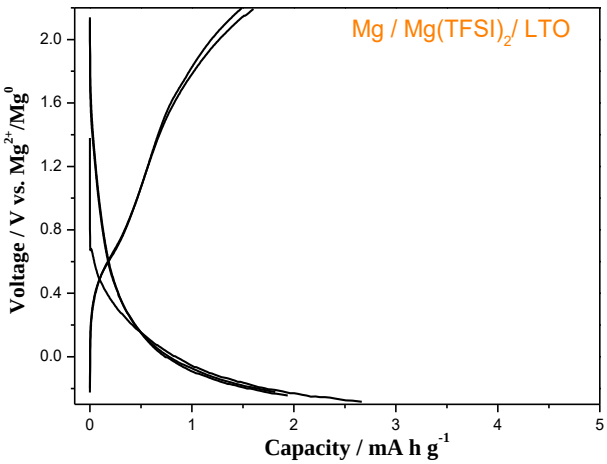

Figure S1. Galvanostatic discharge/charge curves of LTO sample in a three-electrode Mg cell using 0.5 M $Mg(TFSI)_2$ in DME.

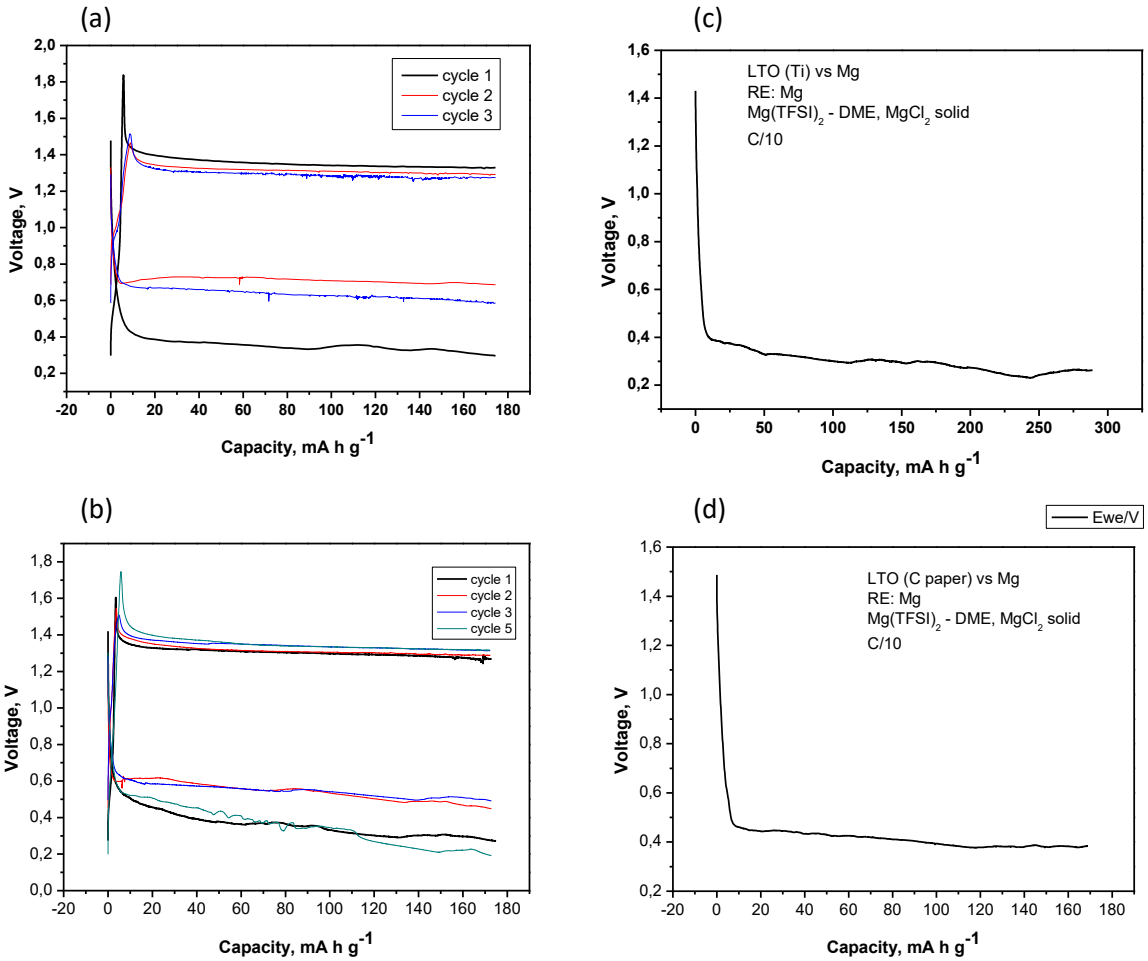

Figure S2. Galvanostatic discharge/charge curves of LTO sample in a three-electrode Mg cell using 0.5 M $Mg(TFSI)_2$ + 0.13 M $MgCl_2 \cdot 6H_2O$ in DME electrolyte in different current collector: (a-c) Ti foil and (d) C paper.