

Figure S1: Initial and maximum resistances vs cycle number for Li-S cells containing different amounts of electrolyte at a constant current density of 167.2 mA gs^{-1} .

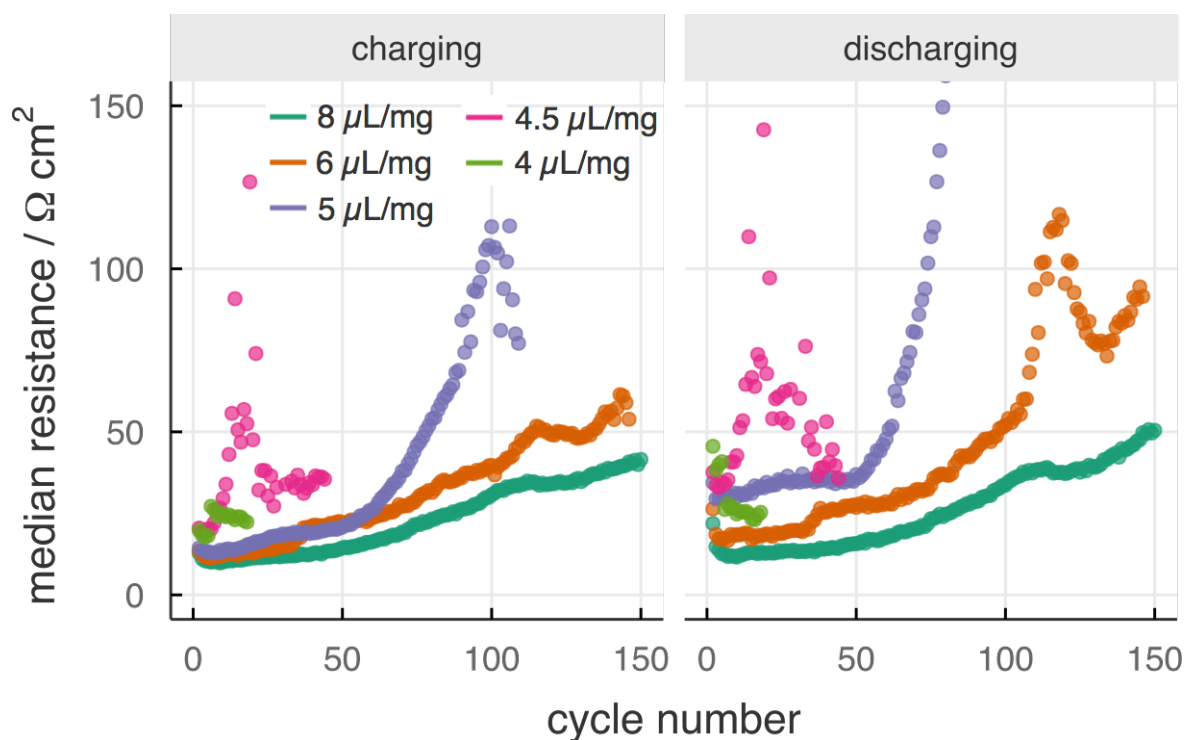


Figure S2: Median resistance vs cycle number for Li-S cells containing different amounts of electrolyte at a constant current density of $167.2 \text{ mA g}_S^{-1}$.

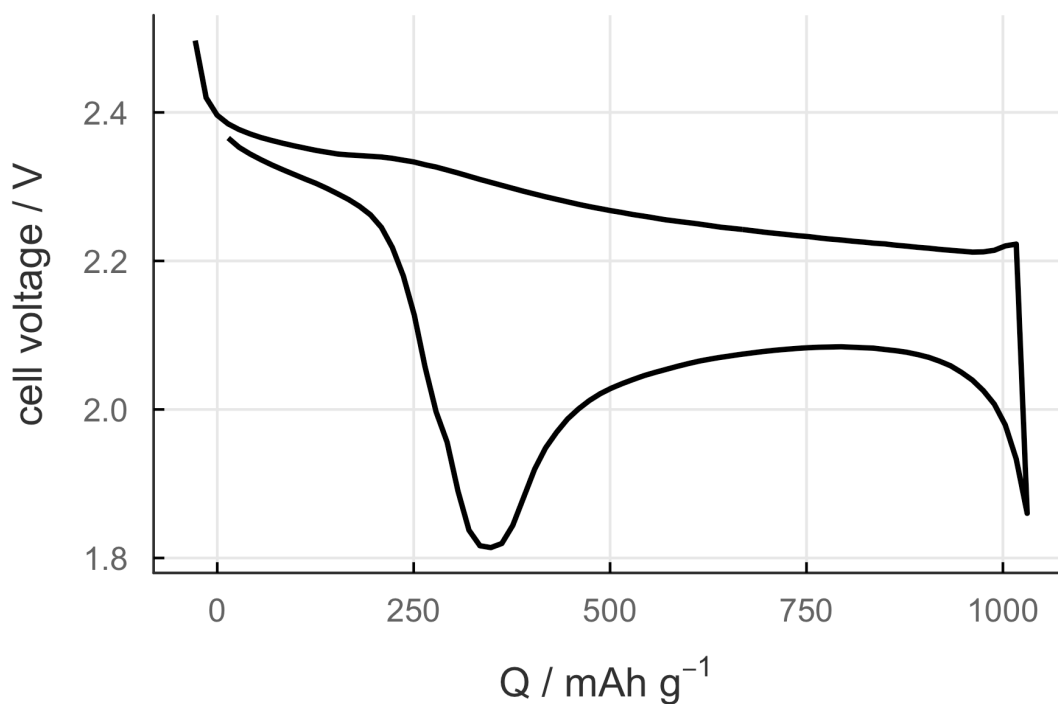


Figure S3: Voltage profile for the fifth cycle of a Li-S cell containing $4 \mu\text{L mg}_S^{-1}$ of electrolyte at a constant current density of $167.2 \text{ mA g}_S^{-1}$.

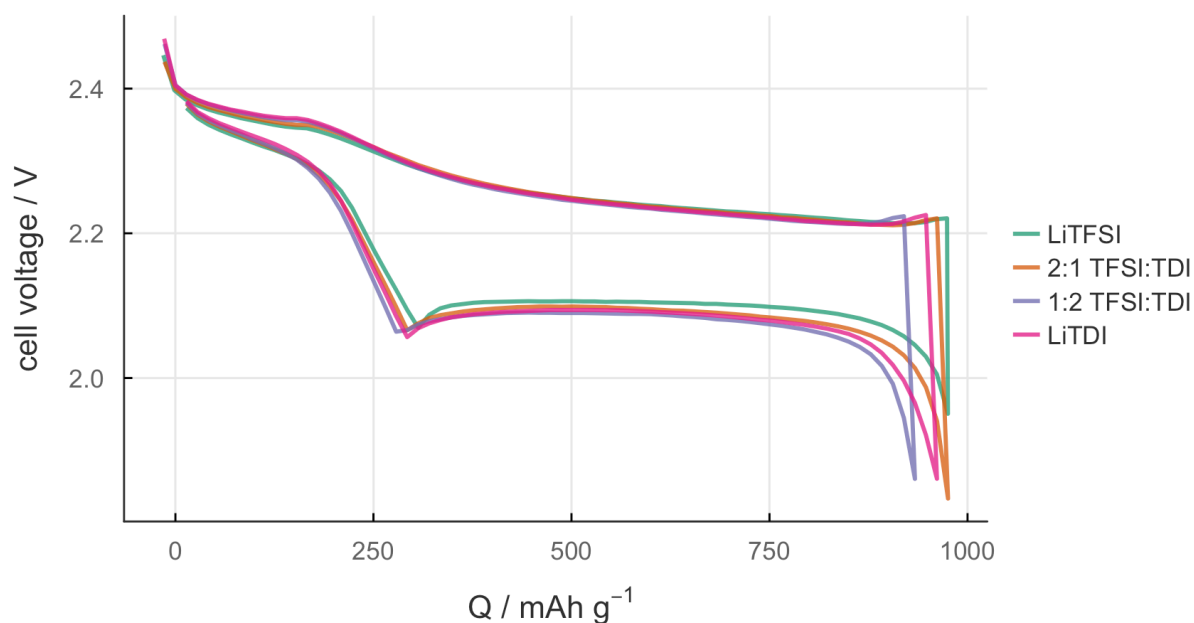


Figure S4: Voltage profiles at the 2nd cycle for Li-S cells containing 1M of LiTFSI, LiTDI or mixtures thereof. Electrolyte also contains 0.25 M LiNO₃, 1:1 DME:DOL. Cell is cycled at a constant current density of 167.2 mA gs⁻¹.

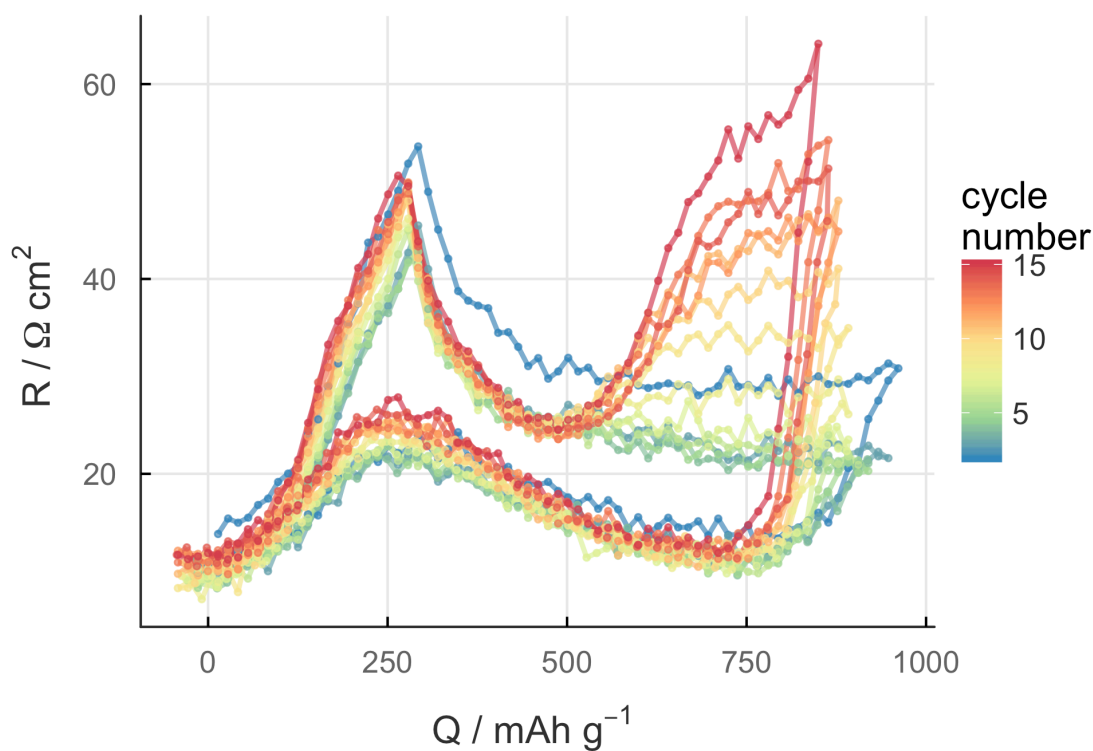


Figure S5: Resistance profiles between the 2nd and 15th cycles for a Li-S cell with an electrolyte of 1 M LiTDI, 0.25 M LiNO₃, 1:1 DME:DOL at a constant current density of 167.2 mA gs⁻¹.

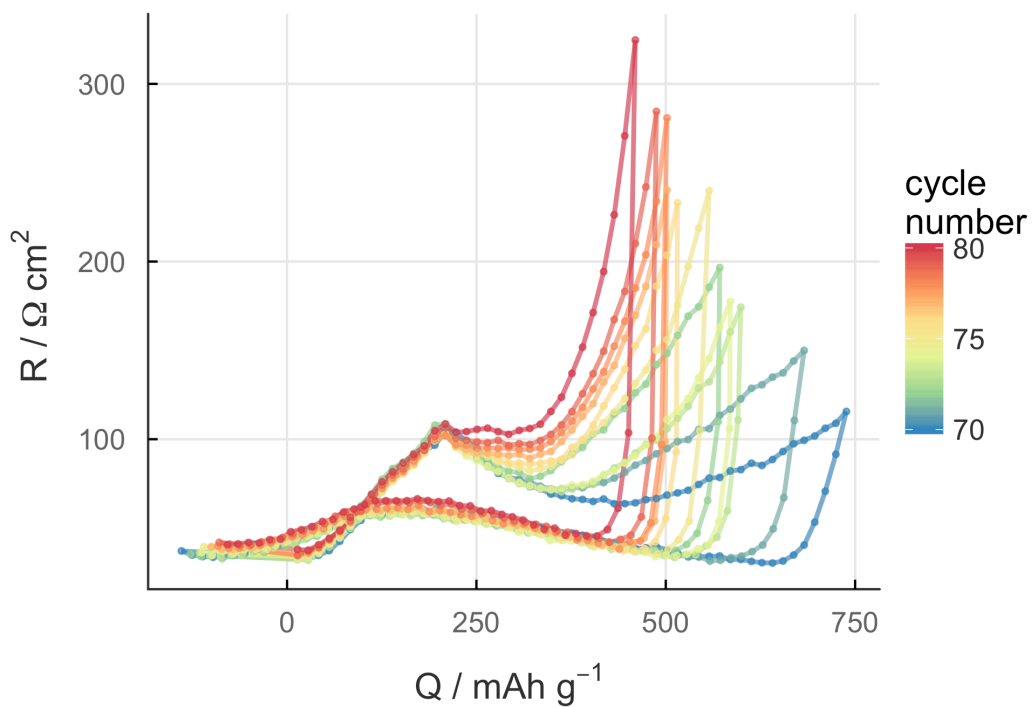


Figure S6: Resistance profiles between the 70th and 80th cycles for a Li-S cell with an electrolyte of 1 M LiTDI, 0.25 M LiNO₃, 1:1 DME:DOL at a constant current density of 167.2 mA gs⁻¹.

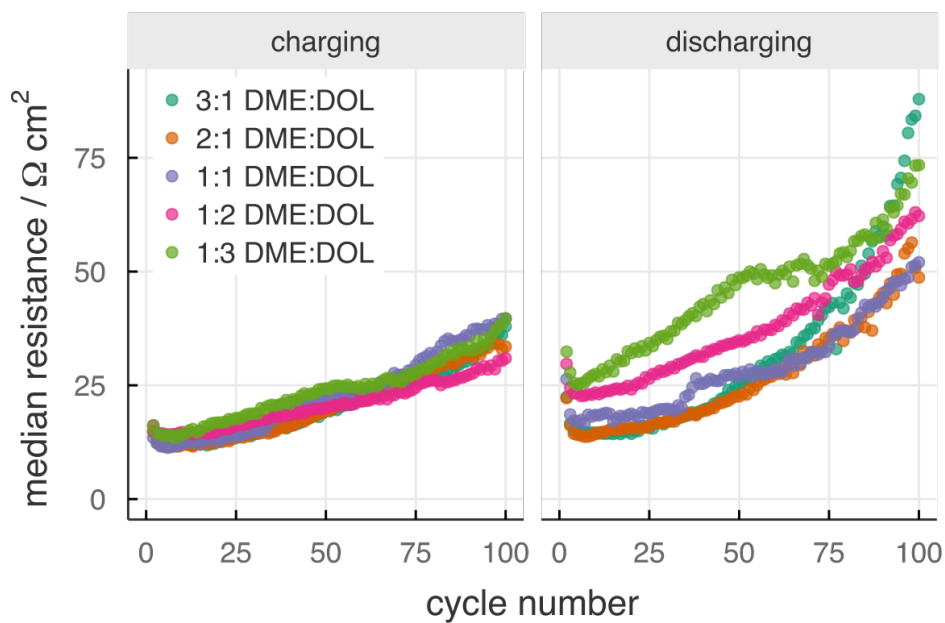


Figure S7: Median resistance vs cycle number for Li-S cells containing electrolytes with different DME:DOL ratios (salt content: 1 M LiTFSI, 0.25 M LiNO₃).