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Supporting Information

2 Cationic charge effect of glutamine repulsion adsorbate of Li-metal

3 surfaces for highly stable lithium-sulfur batteries

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48 Figure S1. Optical photographs of glutamine-containing DOL:DME (1:1) solutions containing (a)

49 10 mM glutamine and (b) 15 mM glutamine



	Ref			Glutamine		
	Ç1	Ç2	A1	Ç1	Ç2	A1
slope	-2.37	-4.36	7.67	-2.233	-4.726	8.864
D _{Li+}	1.82 *10 ⁻¹²	6.16*10 ⁻¹²	1.89*10 ⁻¹¹	1.61*10 ⁻¹²	7.23*10 ⁻¹²	2.54 * 10 ⁻¹¹

Figure S2. Li⁺ diffusion coefficients determined after CV studies at various scan rates; (a)
comparison of the Li⁺ diffusion coefficients for the reference cell and the glutamine cell with a
bar-graph and (b) a table showing each Li⁺ diffusion coefficient at the C1, C2, and A3 peaks.