Supporting Information

Ternary poly(ethylene oxide)/Poly(L,L-lactide) PEO/PLA blends as High-Temperature Solid Polymer Electrolytes for Lithium Batteries

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Table S1. Values obtained from Lauritzen-Hoffman adjustment

	K_g^{τ} (K^2)	σ (erg cm^{-2})	σ_q (erg cm^{-2})	q (erg)
PEO	1.49 x 10^5	35.1	14.19	6.17 x 10^{-13}
PEO 5 wt% LiTFSI	2.11 x 10^5	35.1	15.65	5.80 x 10^{-13}
PEO 10 wt% LiTFSI	2.27 x 10^5	35.1	16.89	6.26 x 10^{-13}
PEO 15 wt% LiTFSI	2.54 x 10^5	35.1	19.05	7.06 x 10^{-13}
60 PEO 40 PLA 0 wt% LiTFSI	1.4 x 10^5	36.09	10.45	3.87 x 10^{-13}
60 PEO 40 PLA 5 wt% LiTFSI	1.46 x 10^5	36.09	10.97	4.06 x 10^{-13}
60 PEO 40 PLA 10 wt% LiTFSI	2.97 x 10^5	36.09	21.8	7.95 x 10^{-13}
60 PEO 40 PLA 15 wt% LiTFSI	3.16 x 10^5	36.09	21.45	8.08 x 10^{-13}

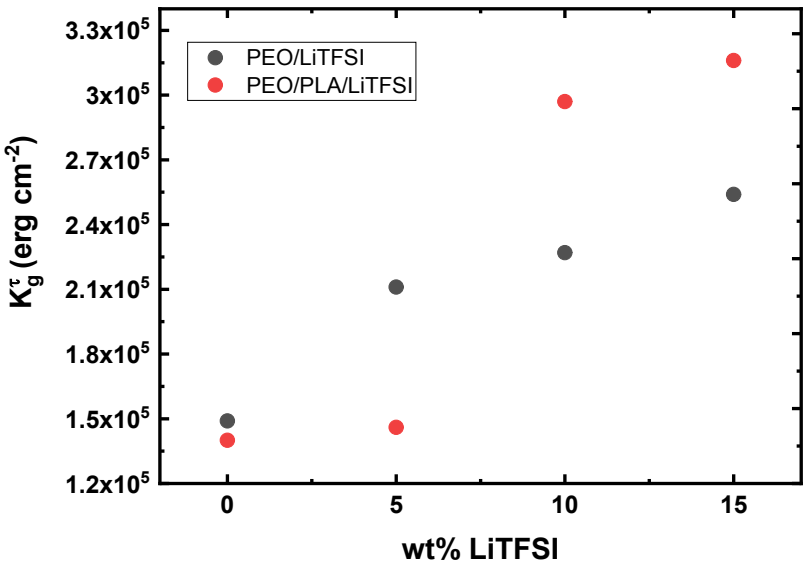

Figure S1. Kg^{τ} values vs wt% LiTFSI for the systems PEO/LiTFSI and PEO/PLA/LiTFSI

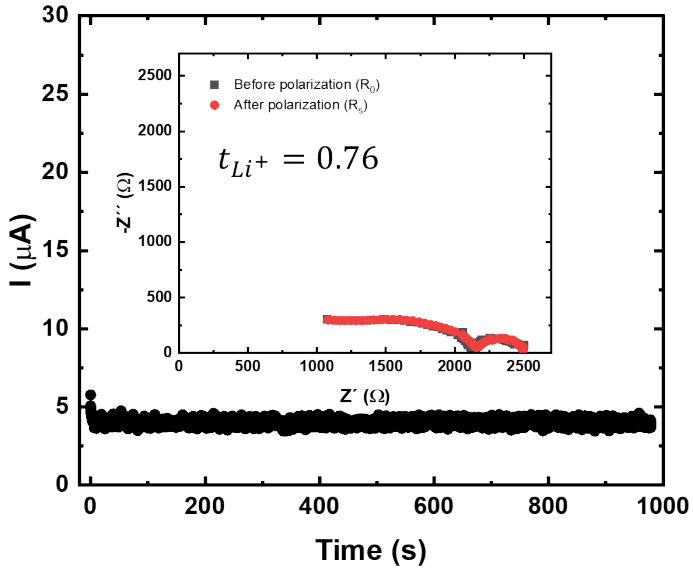

Figure S2. ac- and dc-measurements for the lithium ion transference number measurements for 50 PEO/50 PLiMTFSI electrolyte.

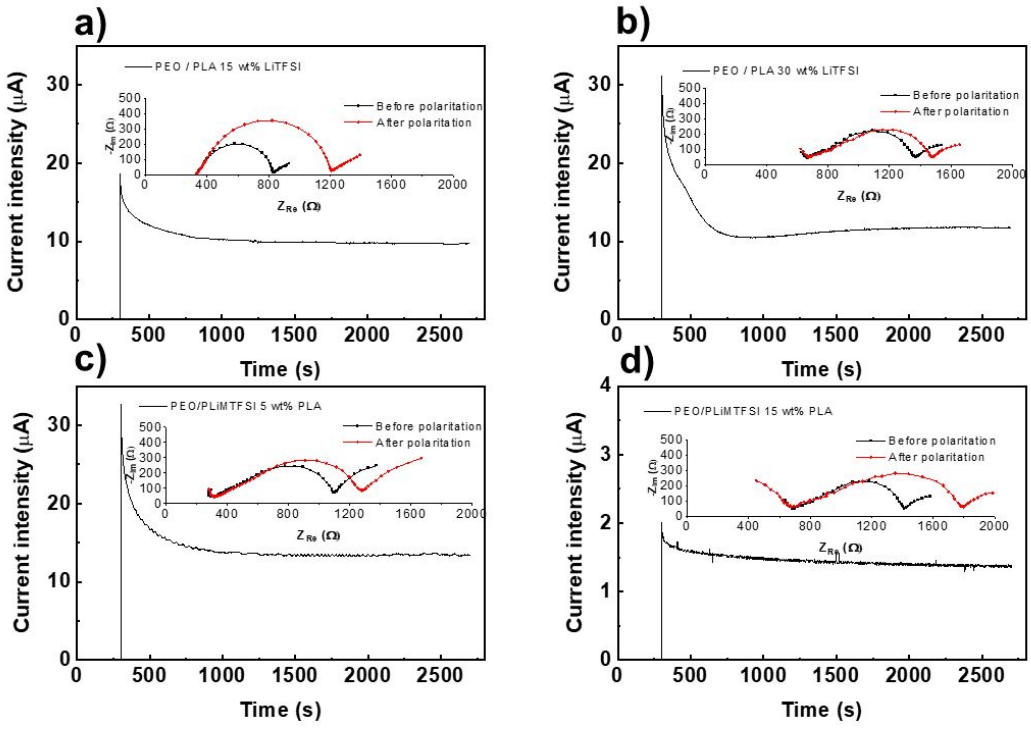

Figure S3. ac- and dc-measurements for the lithium ion transference number measurements for: a) PEO/PLA 15 wt% LiTFSI, b) PEO/PLA 30 wt% LiTFSI, c) PEO/PLiMTFSI 5 wt% PLA, and d) PEO/PLiMTFSI 15 wt% PLA electrolytes.