

Electronic Supplementary Information

**Gel Electrolytes Based on an Ether-Abundant Polymeric Framework  
for High-Rate and Long-Cycle-Life Lithium Ion Batteries**

Li-Yu Huang,<sup>1</sup> You-Chao Shih,<sup>1</sup> Shih-Hong Wang,<sup>1</sup> Ping-Lin Kuo,<sup>1</sup> and Hsisheng  
Teng<sup>1,2,\*</sup>

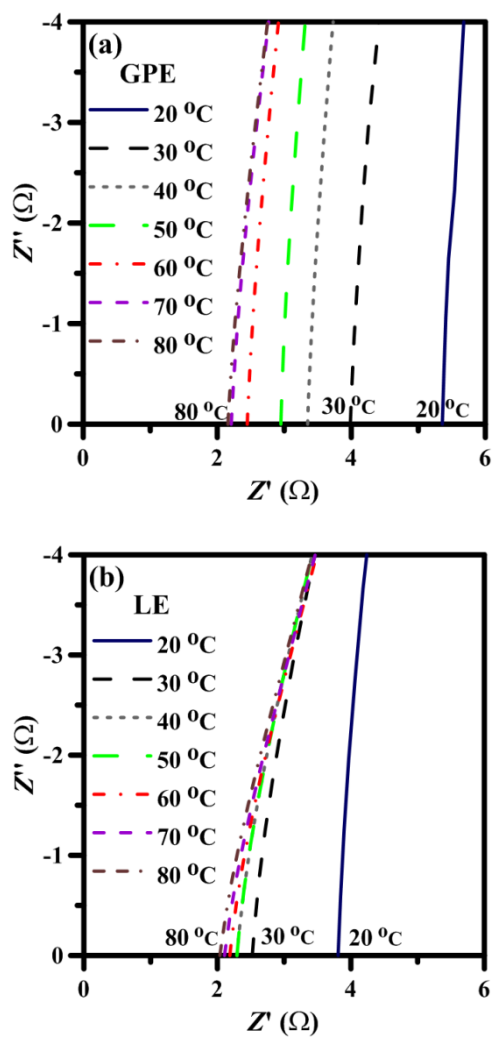
<sup>1</sup>Department of Chemical Engineering and Research Center for Energy  
Technology and Strategy, National Cheng Kung University, Tainan 70101, Taiwan

<sup>2</sup>Center for Micro/Nano Science and Technology, National Cheng Kung  
University, Tainan 70101, Taiwan

\*To whom correspondence should be addressed. E-mail: [hteng@mail.ncku.edu.tw](mailto:hteng@mail.ncku.edu.tw),  
Tel: 886-6-2385371, Fax:886-6-2344496

**Electronic Supplementary Information for:**

**Nyquist impedance plots of GPE and LE inserted between two stainless-steel  
electrodes at various temperatures.**



**Fig. S1.** Nyquist impedance plots of (a) GPE and (b) LE inserted between two stainless-steel electrodes with a frequency range of 0.1 Hz to 1 MHz at 0 V and temperatures of -20–80 °C. The thicknesses of the GPE and LE films were 100 and 12  $\mu\text{m}$ , respectively.