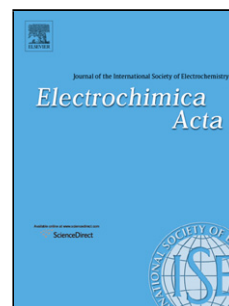


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## **One-Dimensional Glass Micro-Fillers in Gel Polymer Electrolytes for Li-O<sub>2</sub> Battery**

### **Applications**

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### **Abstract**

Gel polymer electrolytes (GPEs) are composed of liquid electrolytes in polymer matrices and have been widely used in lithium batteries. The incorporation of fillers in electrolytes has been shown to improve Li<sup>+</sup> transport properties due to the interaction of filler materials with the polymer, solvent, or salt. In this work, we report on the preparation of composite GPEs (cGPEs) that contain one-dimensional glass micro-fillers of approximately 1 micron in diameter and with an aspect ratio exceeding 100. The cGPEs were electrochemically characterized for Li<sup>+</sup> transport

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