

## **Supporting Information**

Table S1: Available physical properties of Ti foam along with those of traditional SGL and Toray GDLs for comparison.

<b>Material</b>	<b>Thickness (μm)</b>	<b>Porosity (%)</b>	<b>Relative density</b>
<b>Toray 060</b>	190	78	0.22
<b>SGL 35BC</b>	325	80	0.2
<b>Ti foam</b>	230	66	0.34

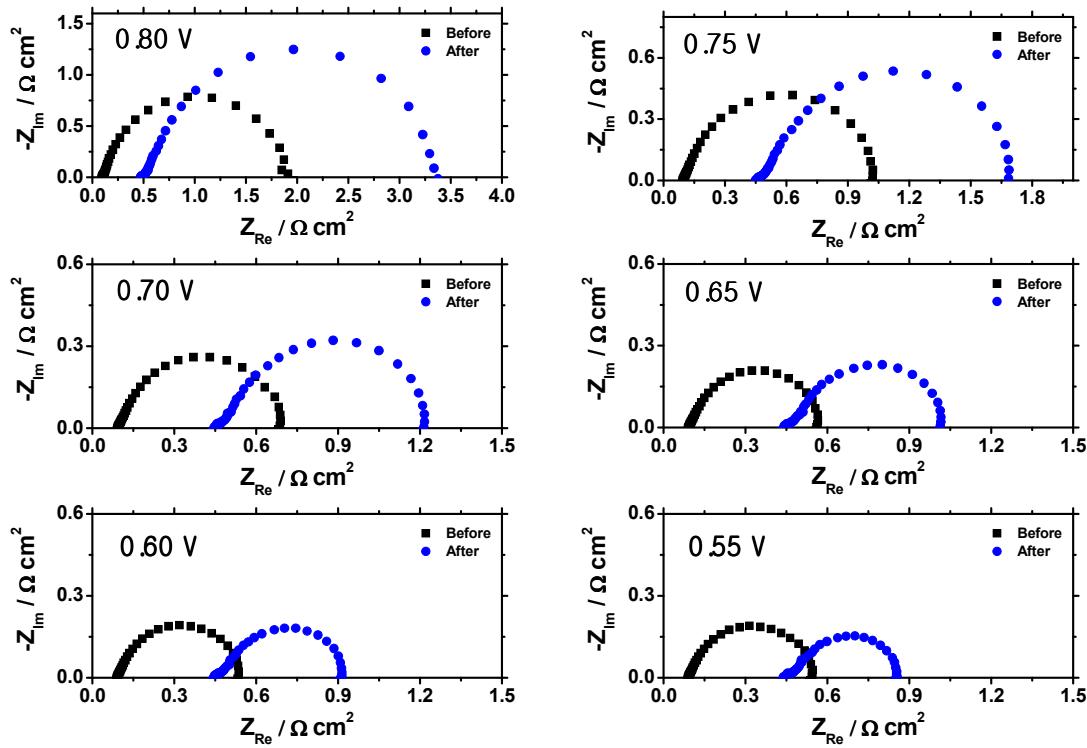


Figure S1. EIS measurements for the Ti foam cathode GDL by operations under H<sub>2</sub>/air supplementations with a cell potential ranging from 0.55 V to 0.80 V both before and after the ACT test.