

# Electronic Supplementary Information

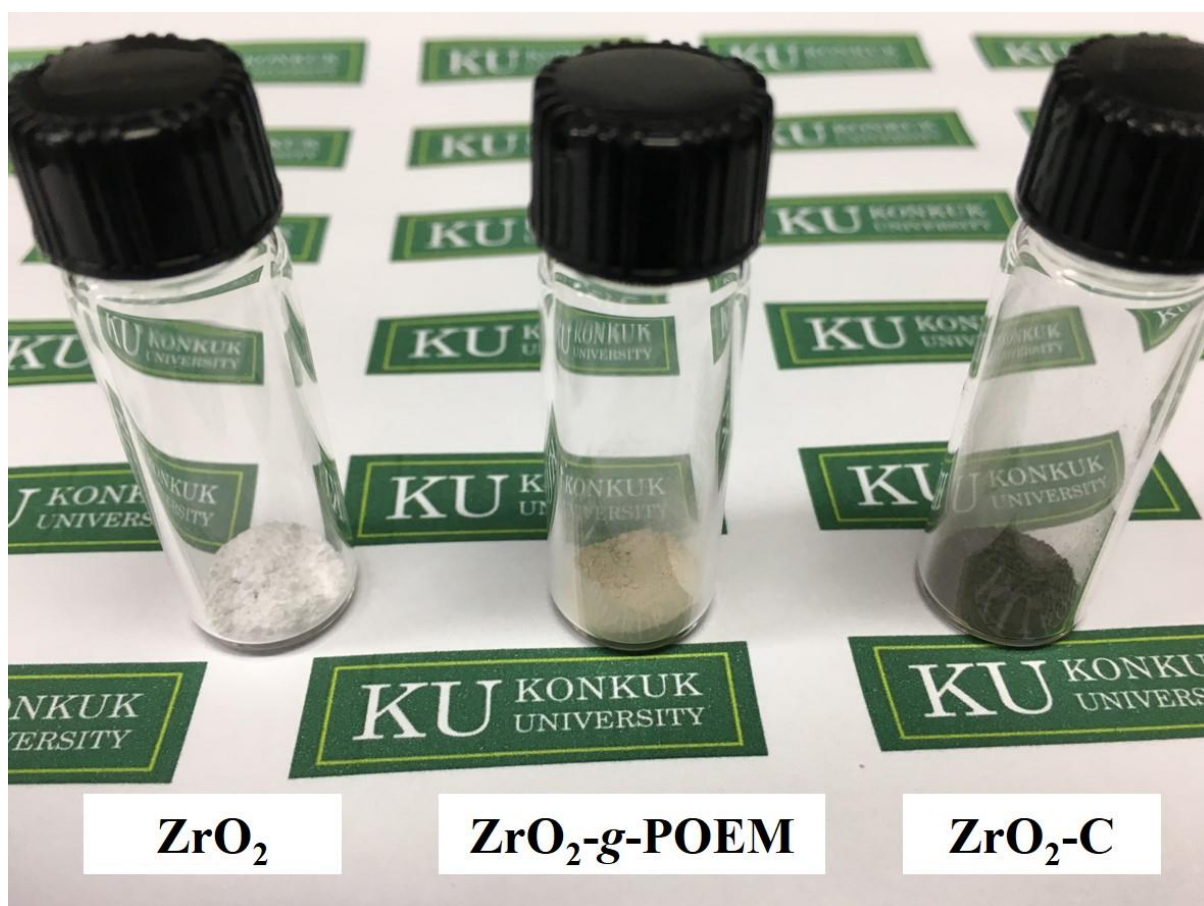
## Surface Carbon Shell-Functionalized $\text{ZrO}_2$ as Nanofiller in Polymer Gel Electrolyte-Based Dye-Sensitized Solar Cells

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**Figure 1.** Photograph of  $\text{ZrO}_2$ ,  $\text{ZrO}_2$ -g-POEM and  $\text{ZrO}_2$ -C.

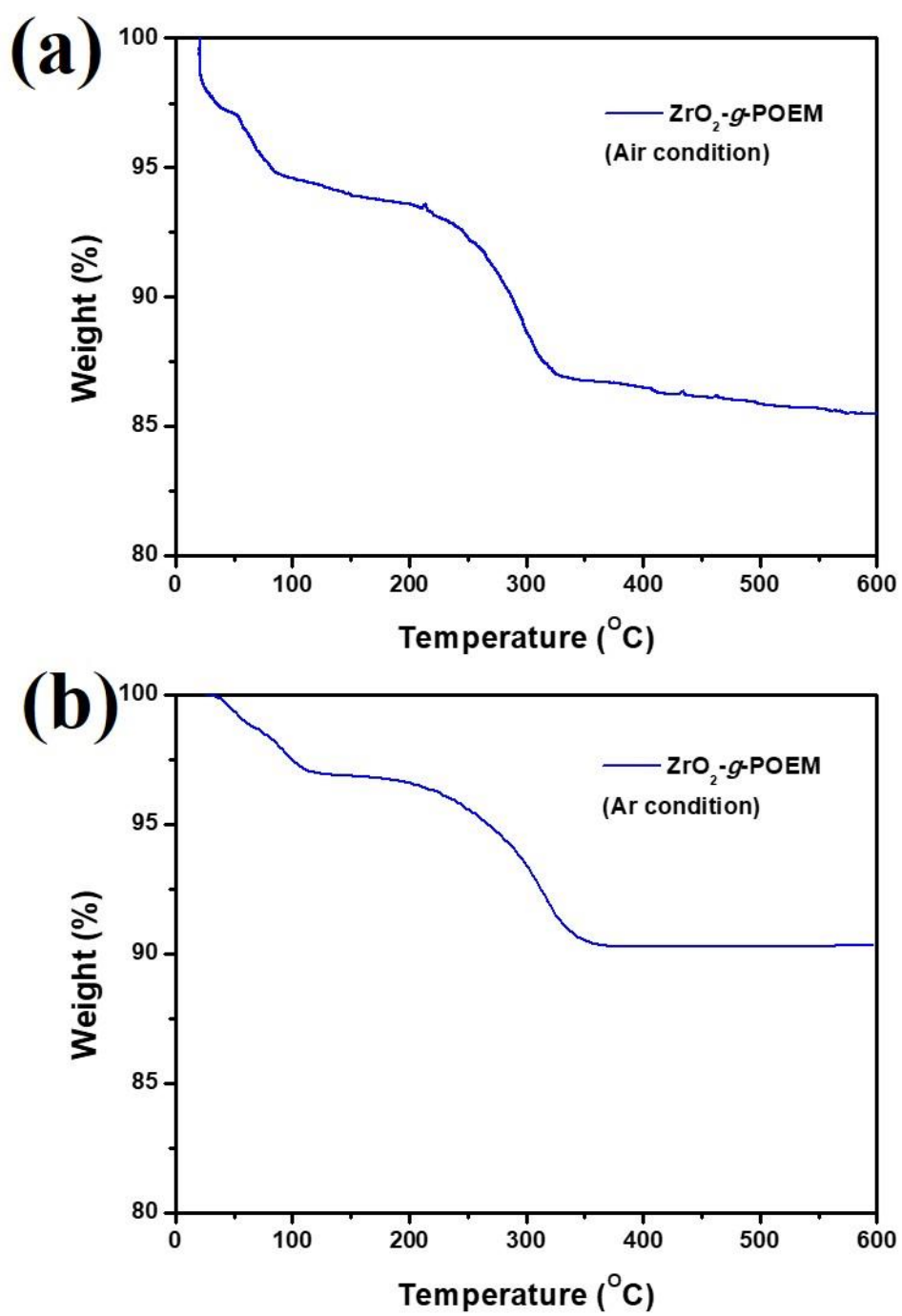
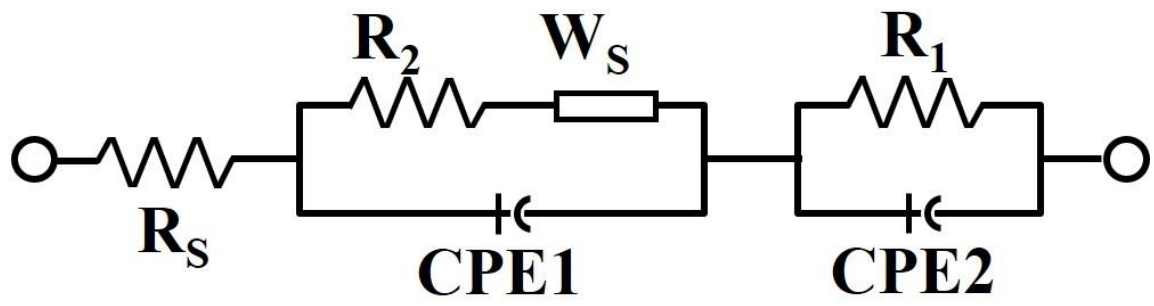


Figure 2. TGA curves of  $\text{ZrO}_2\text{-C}$  under (a) air and (b) Ar conditions.



**Figure 3.** Equivalent circuit of DSSCs.