Electronic supplementary information

Optimizing Photovoltaic Performance in CuInS$_2$ and CdS Quantum Dot-Sensitized Solar Cells by using an Agar-Based Gel Polymer Electrolyte

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Figure S1. Structure of agarose
**Figure S2.** Thermogravimetric curves for agar pure (powder) and agar membrane.

**Figure S3.** Absorption spectra of TiO$_2$/CuInS$_2$ composite to track the maximum adsorption of CuInS$_2$ deposited by EPD onto TiO$_2$. 

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Weigh\% \( \times \) Temp. (ºC) 

Agar powder \( \bullet \) 

Agar membrane \( \bullet \)

**Figure S2.** Thermogravimetric curves for agar pure (powder) and agar membrane.

**Figure S3.** Absorption spectra of TiO$_2$/CuInS$_2$ composite to track the maximum adsorption of CuInS$_2$ deposited by EPD onto TiO$_2$. 

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Figure S4. Current-voltage characteristic of CdS and CuInS$_2$ QDSCs (a) and photocurrent stability (b). The electrolyte and QDs used in both experiments are shown in the inset.