## **Supporting Information**

## **Tuning Work Functions of Graphene Quantum Dot- Modified Electrode for Polymer Solar Cells Application**

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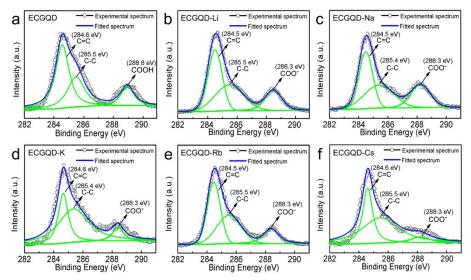
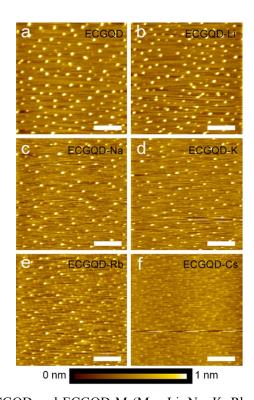
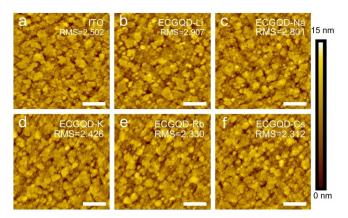


Fig. S1 XPS C1s spectra of ECGQD and ECGQD-M (M = Li, Na, K, Rb, Cs).



**Fig. S2** AFM images of ECGQD and ECGQD-M (M = Li, Na, K, Rb, Cs) spin-coated on mica substrates. Scale bar is 500 nm.



**Fig. S3** AFM height images of ITO substrate and the ITO substrate modified with different CILs. Scale bar is 500 nm.

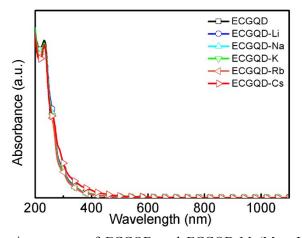


Fig. S4 UV-Vis absorption spectra of ECGQD and ECGQD-M (M = Li, Na, K, Rb, Cs) in aqueous solution.

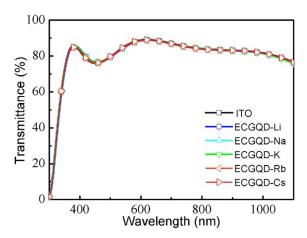


Fig. S5 Transmittance spectra of the ITO substrate modified with different CILs.

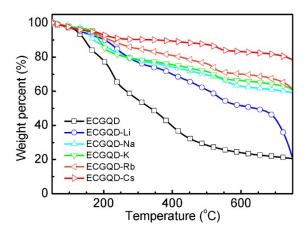


Fig. S6 TGA curves of ECGQD and ECGQD-M (M = Li, Na, K, Rb, Cs).