低成本富勒烯衍生物电子传输层在钙钛矿太阳能电池的应用

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Low-Cost Fullerene Derivative as an Efficient Electron Transport Layer for Planar Perovskite Solar Cells

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Fig. S1  SEM image of the prepared NiO<sub>x</sub> film.

Fig. S2  SEM image of the deposited perovskite film on the NiO<sub>x</sub> film.

Fig. S3  AFM images of NMPFP and PCBM.

Fig. S4  UV-Vis absorption spectra of the PCBM film and the NMPFP film.

All films were fabricated by spin-coating the dichlorobenzene solution on the glass substrate.
Fig. S5  *J–V* curves of the PSCs based on PCBM with the forward and reverse scan.