Electronic Supplementary Material (ESI) for Journal of Materials Chemistry C.

Supporting information

Hybrid perovskite exchange of PbS quantum dots for fast and high-detectivity visible-near-infrared photodetectors

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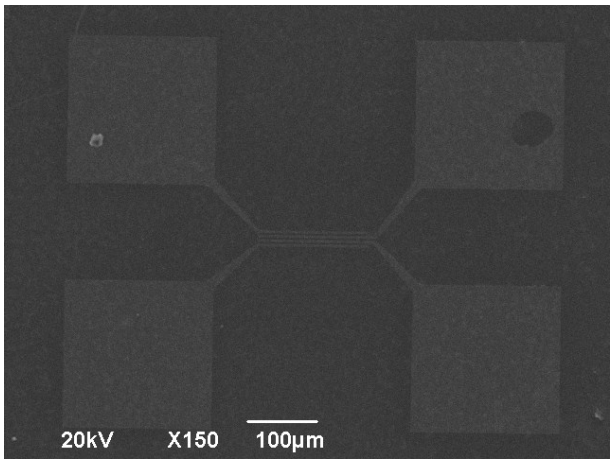

Figure S1. SEM image of the electrode pattern.

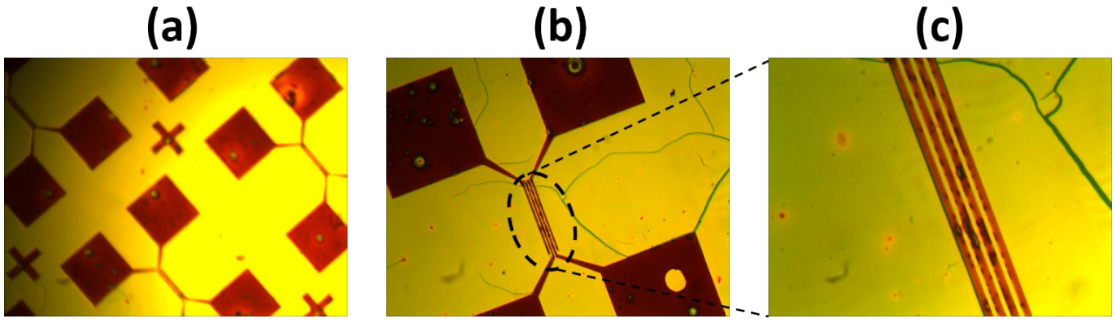

Figure S2. Photograph of PbS-QDs films (a) before and (b) after hybrid perovskite exchange, in the microscope, (c) channel detail of the PbS-QDs/ hybrid perovskite device.

PbS-QDs film was coated on the electrode uniformly and compactly without obvious cracks before ligand exchange process. After hybrid perovskite exchange, some cracks appeared due to the film contracts.

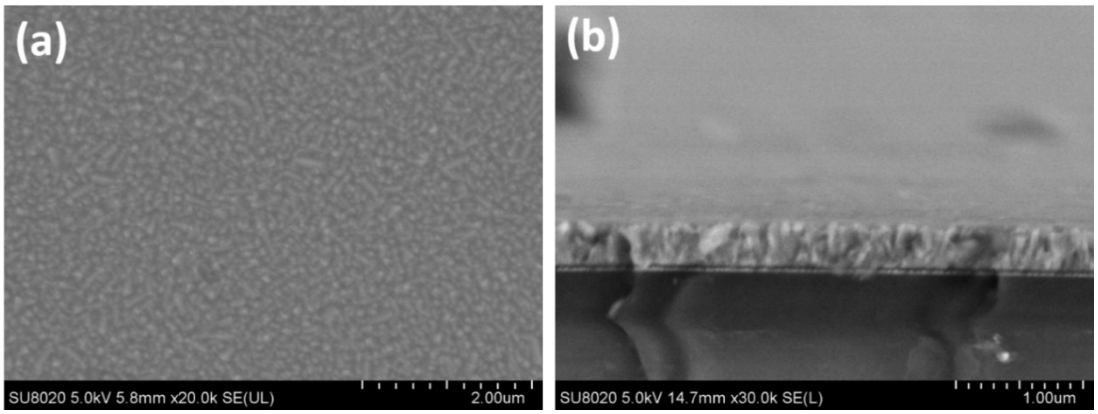

Figure S3. (a) Top and (b) Cross section SEM images of the PbS-QDs film after hybrid perovskite exchange, the thickness of the film is about 200 nm.

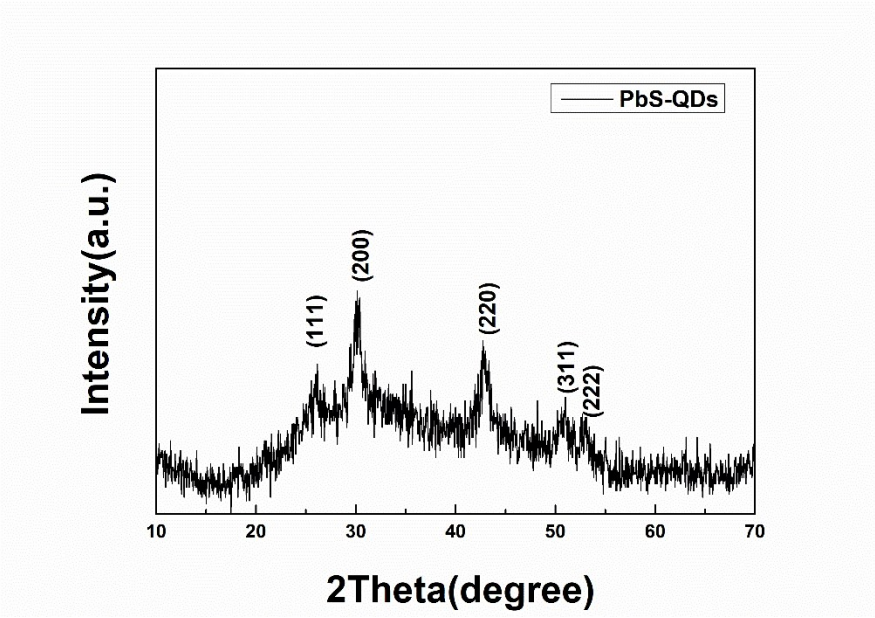

Figure S4. XRD patterns of PbS-QDs.