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Supplementary information

Highly Flexible Organometal Halide Perovskite Quantum Dot based Light-Emitting Diodes on a Silver Nanowire-Polymer Composite Electrode

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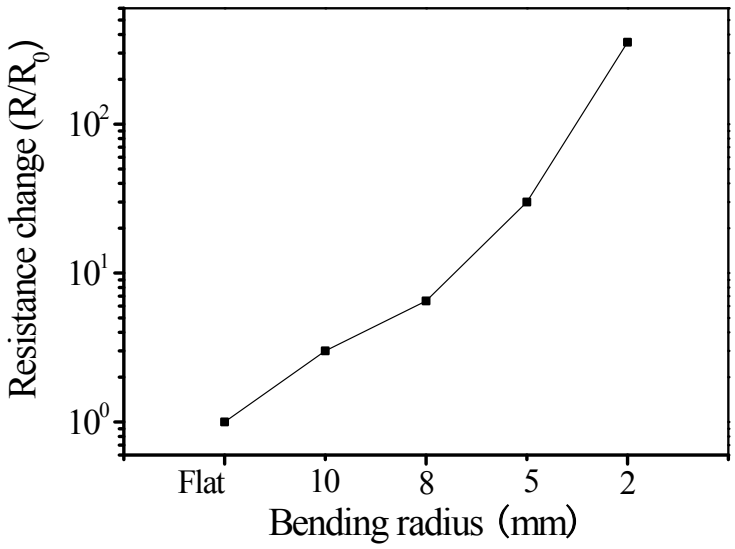

Fig. S1. Resistance change of the flexible PET/ITO substrate as a function of bending radius.

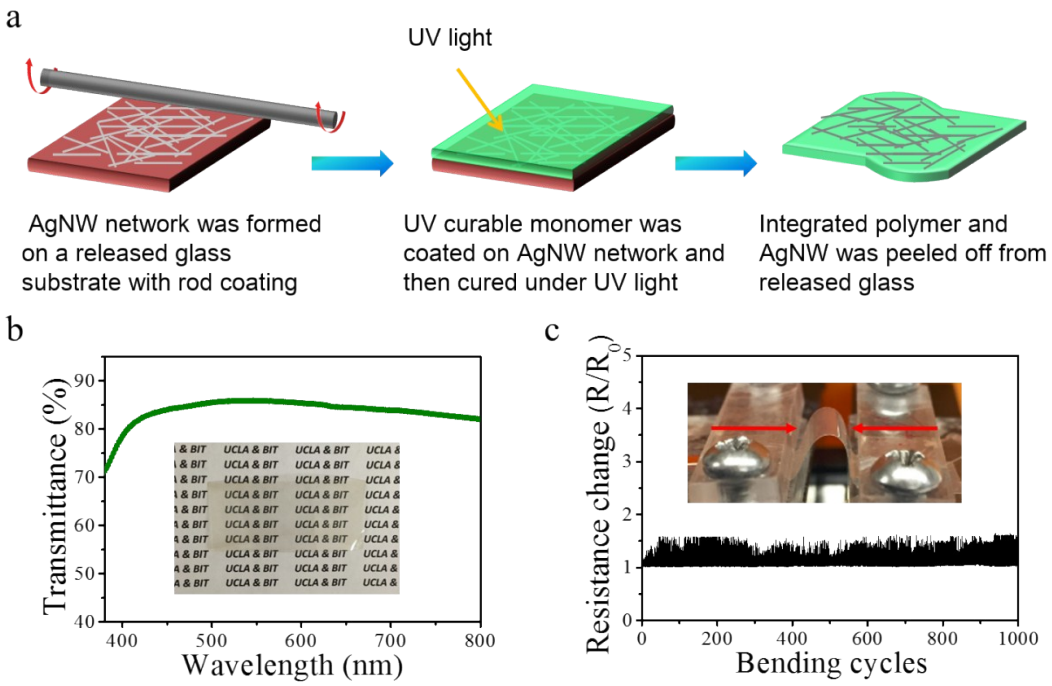

Fig. S2. **a**. Process flow for the fabrication of the flexible AgNW substrate. **b**. Transmittance spectrum of the AgNW-polymer based electrode. Optical image of the flexible electrode with a total thickness of 90 microns shown in the inset. **c**. Resistance change of the flexible polymer/AgNW composite substrate as a function of bending cycles (bending radius: 4 mm).

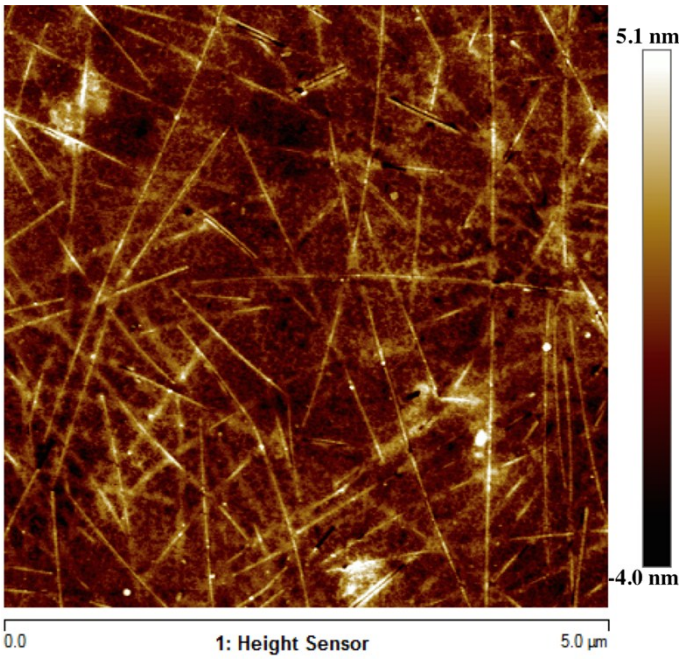

Fig. S3. AFM image of the AgNW composite substrate.

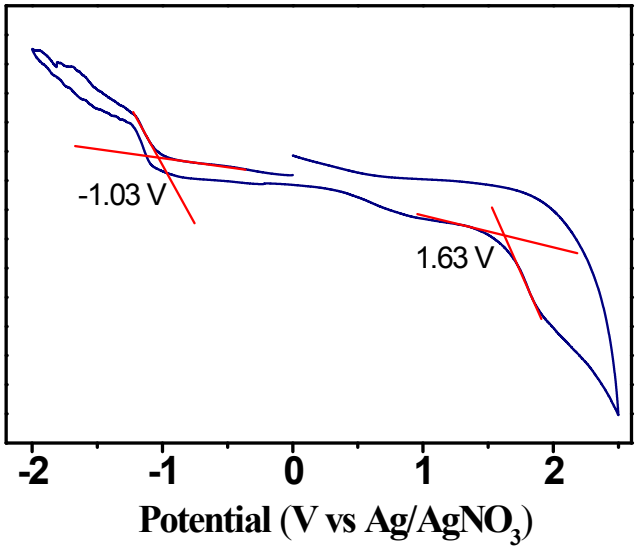

Fig. S4. Cyclic voltammetry of a $CH_3NH_3PbBr_3$ QD film. The dashed red lines are drawn to determine the onset redox potentials.

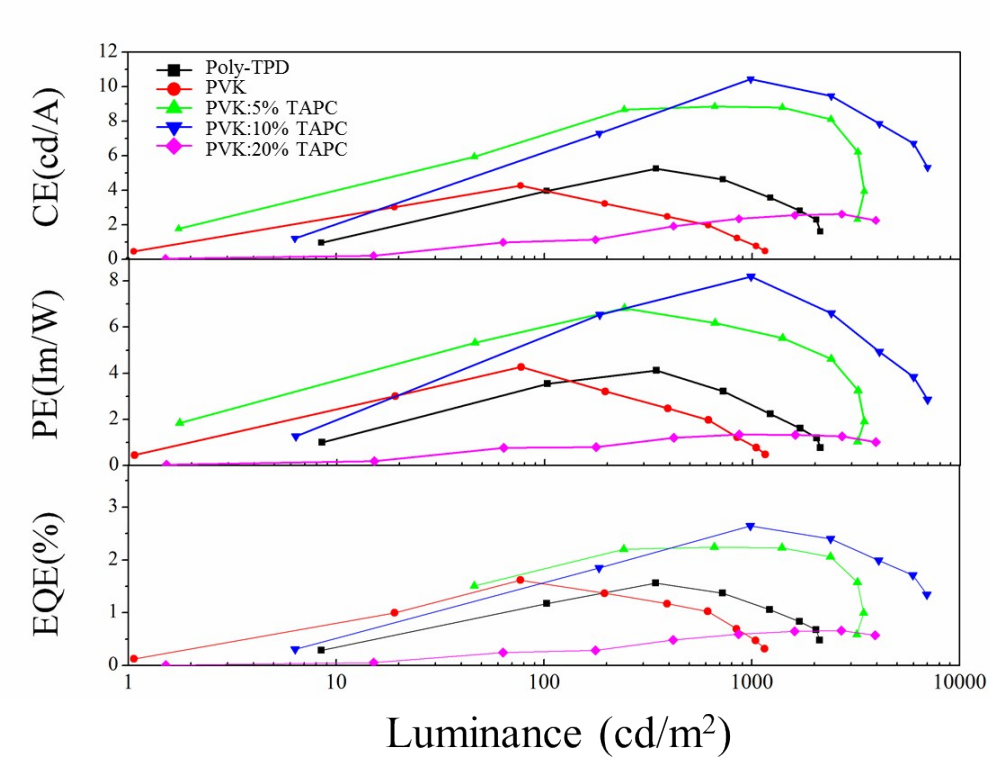

Fig. S5. Current effieciency (CE), power efficiecy (PE) and EQE of the QD LEDs with different HTLs.

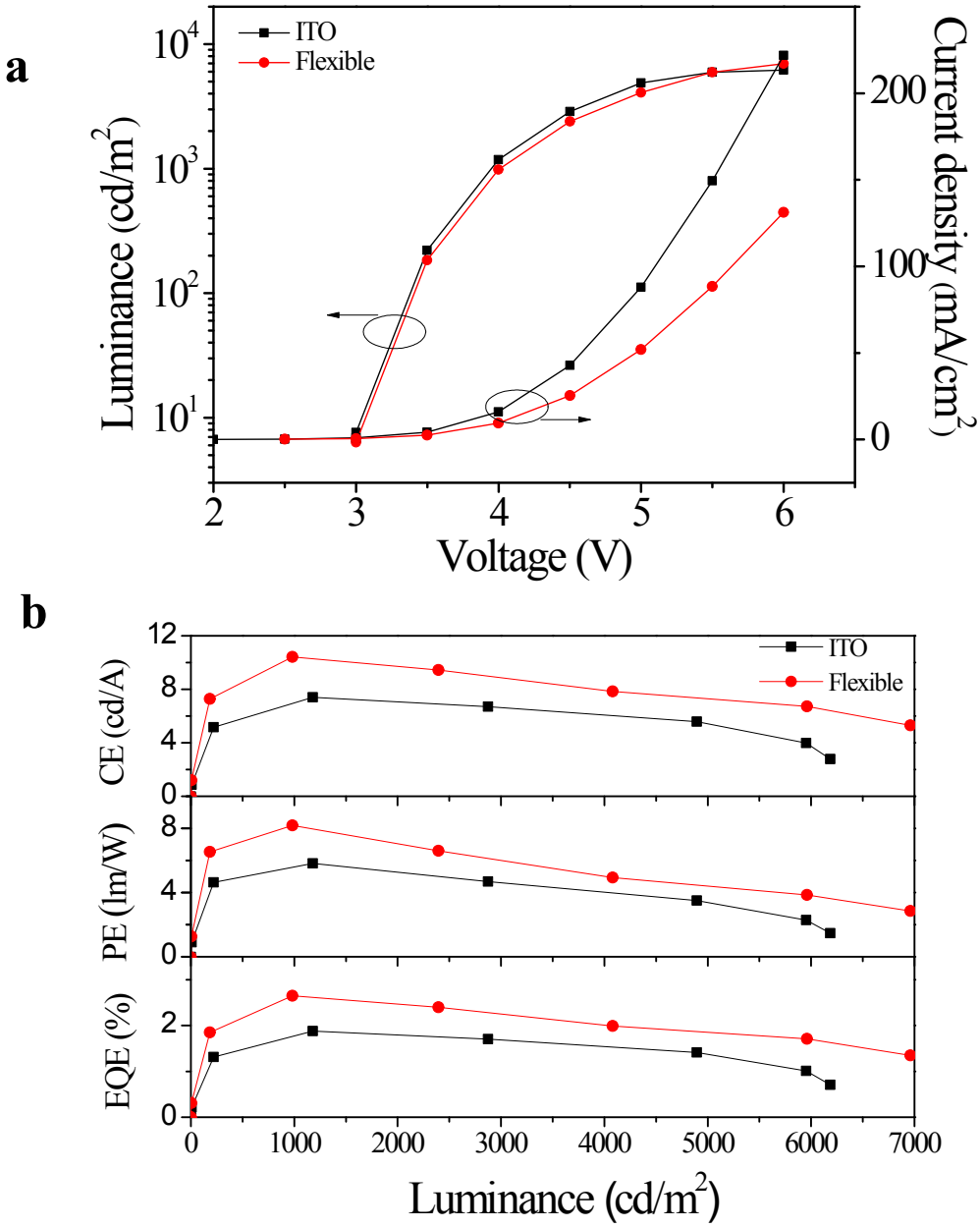

Fig. S6. a. *L-V-J* characteristics. **b**. Current efficiency, power efficiency and EQE of perovskite QD-LEDs based on flexible AgNW substrates and ITO/glass.

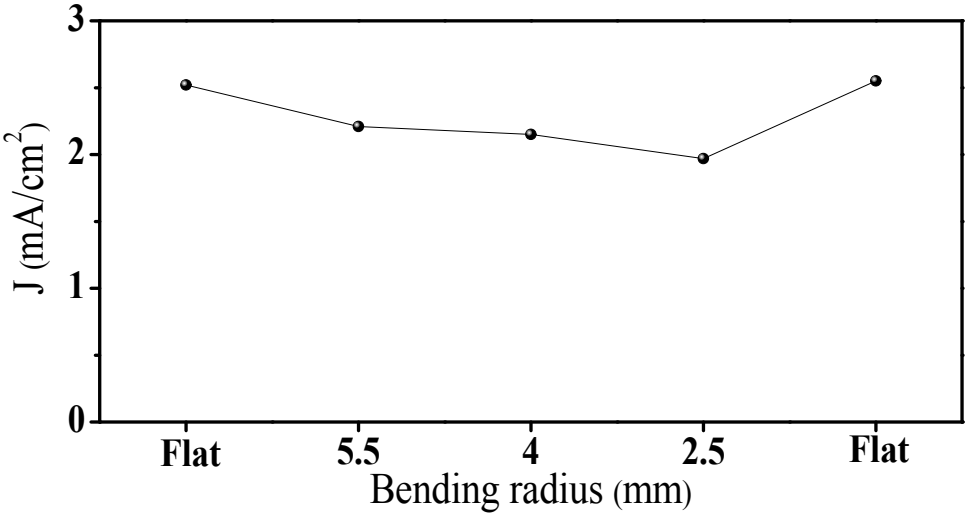

Fig. S7. Current density (*J*) of the flexible perovskite QD-LEDs operated at 3.5 V with bending radius of ∞ (flat), 5.5 mm, 4 mm, 2.5 mm and ∞, respectively.