

Supporting Information

Controllable Vapor Growth of CsPbBr₃/CdS 1D Heterostructures with Type-II Band Alignment for High-Performance Self-Powered Photodetector

*Chao Fan^{†1}, Ke Yang^{†1}, Xing Xu¹, Zhuodong Qi¹, Sha Jiang¹, Mingxia Xia^{*2} and Qinglin Zhang^{*1}*

[†]Hunan Key Laboratory of Two-Dimensional Materials, School of Physics and Electronics, Hunan University, Changsha, 410082, P. R. China

²College of Information Science and Engineering, Changsha Normal University, Changsha, 410082, P. R. China

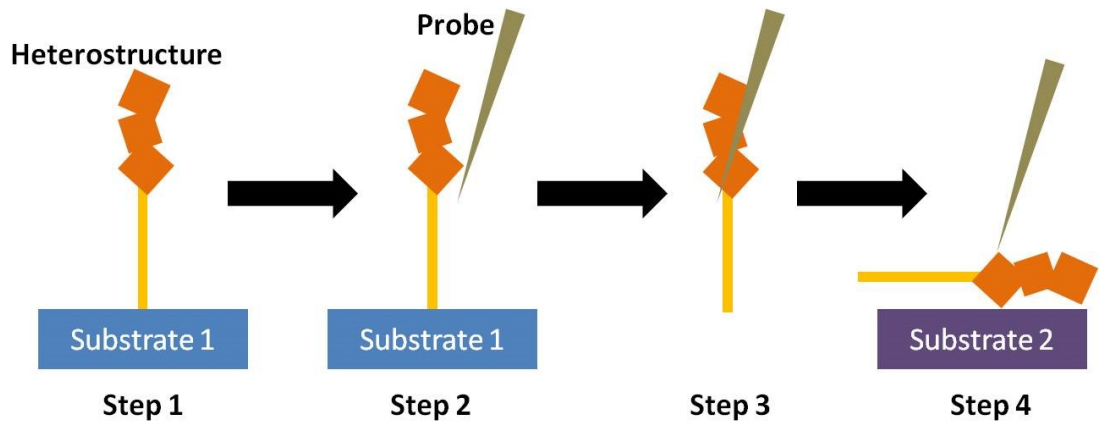


Figure S1. Schematic diagram of transfer process

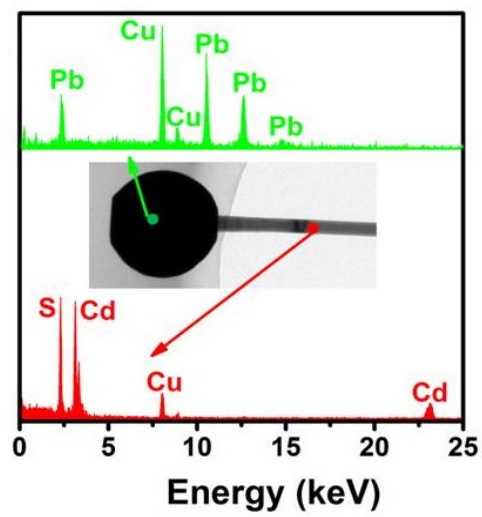


Figure S2. EDS spectra detected from the marked position in the inset.

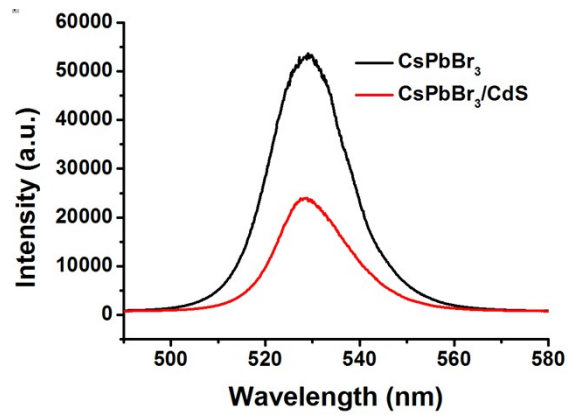


Figure S3. PL spectra of the CsPbBr₃ microcubes on CdS microwires and the pristine CsPbBr₃ microcubes measured under the illumination of the focused CW 405 nm laser with the same intensity.

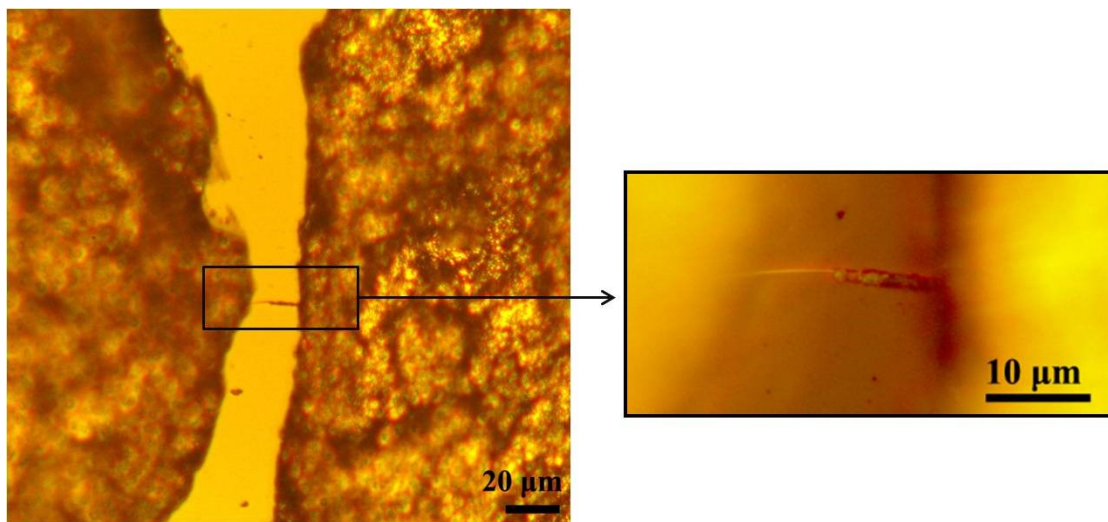


Figure S4. The optical microscope image of the photodetector.