

Supporting Information

High-performance CsPbBr₃ Nanobelt Photodetectors

Jing Li¹, Xue Jiang^{2,*}, Lingfeng Qiu¹, Tianze Wen¹, Jinju Zheng³, Jialong Zhao²,
Bingsuo Zou^{1,*} and Zhentao Du^{1,*}

¹ School of Resources, Environment and Materials, Guangxi Key Laboratory of Processing for Non-ferrous Metals and Featured Materials, Guangxi University, Nanning 530004, China.

² School of Physical Science and Technology, State Key Laboratory of Featured Metal Materials and Life-cycle Safety for Composite Structures, Guangxi Key Laboratory of Processing for Non-ferrous Metals and Featured Materials, Guangxi University, Nanning 530004, China.

³ Institute of Micro/Nano Materials and Devices, Ningbo University of Technology, Ningbo 315211, China

Corresponding Authors

*E-mail: whut_jx@126.com (X. J.)

*E-mail: zoubs@gxu.edu.cn (B. Z.)

*E-mail: zhentaodu@126.com (Z. D.)

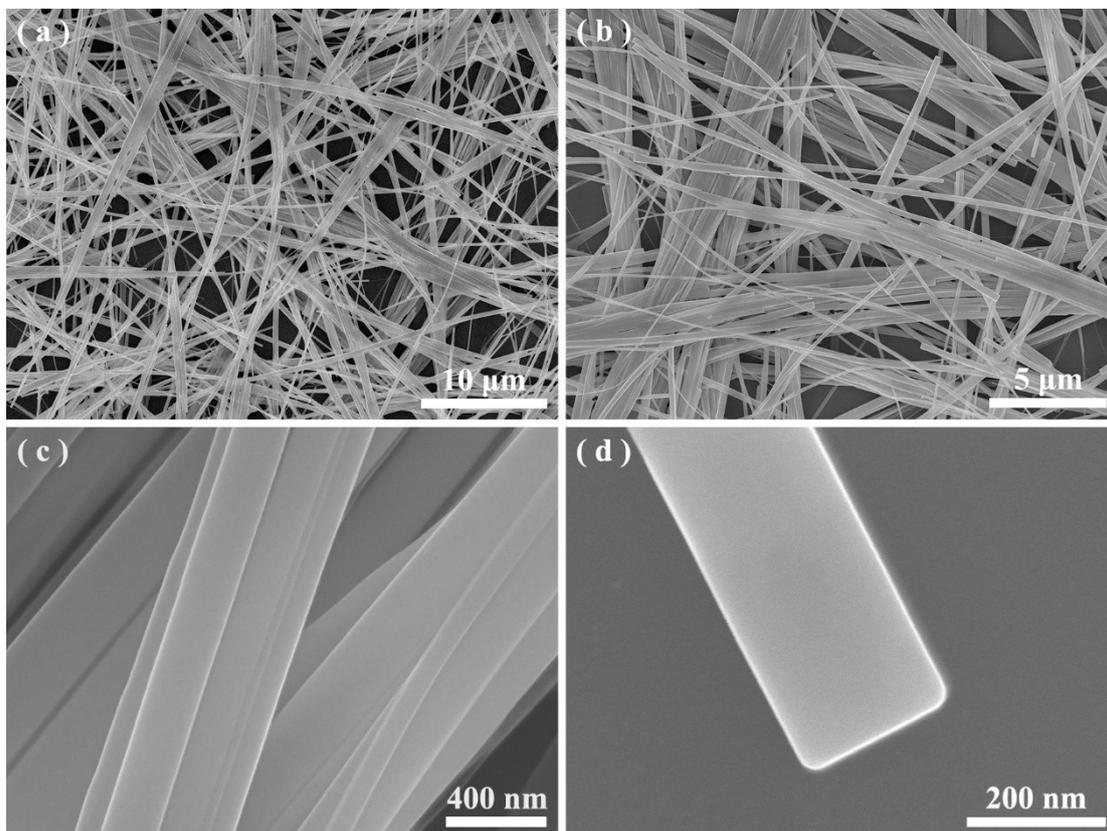


Fig. S1 SEM images of the CsPbBr₃ nanobelts under different magnifications.

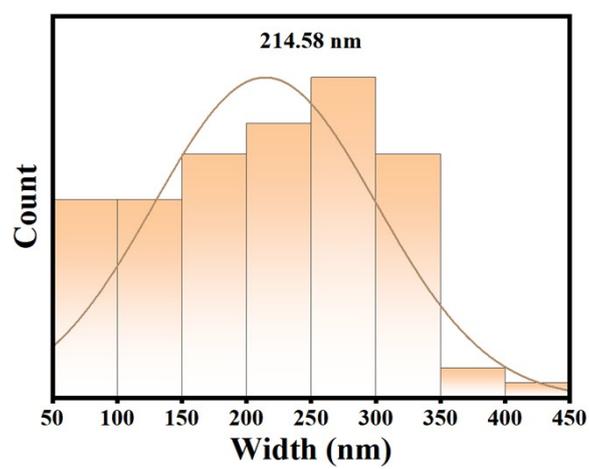


Fig. S2 Width size distribution of the CsPbBr₃ nanobelts.

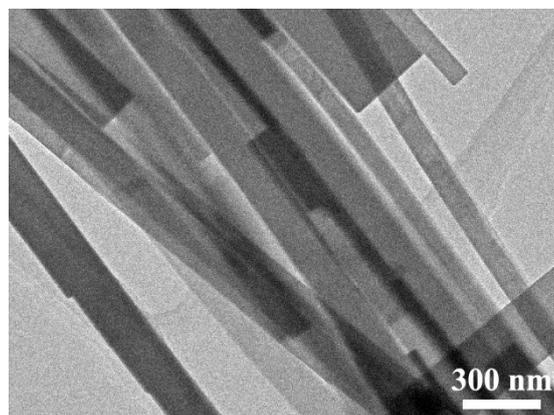


Fig. S3 TEM image of the CsPbBr₃ nanobelts.

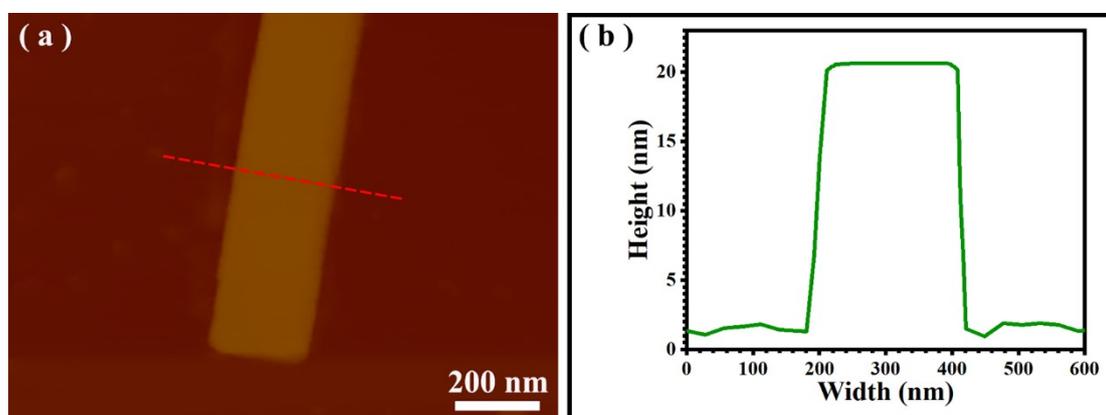


Fig. S4 (a) The AFM image of the CsPbBr₃ nanobelt. (b) Corresponding thickness data of the CsPbBr₃ nanobelt.

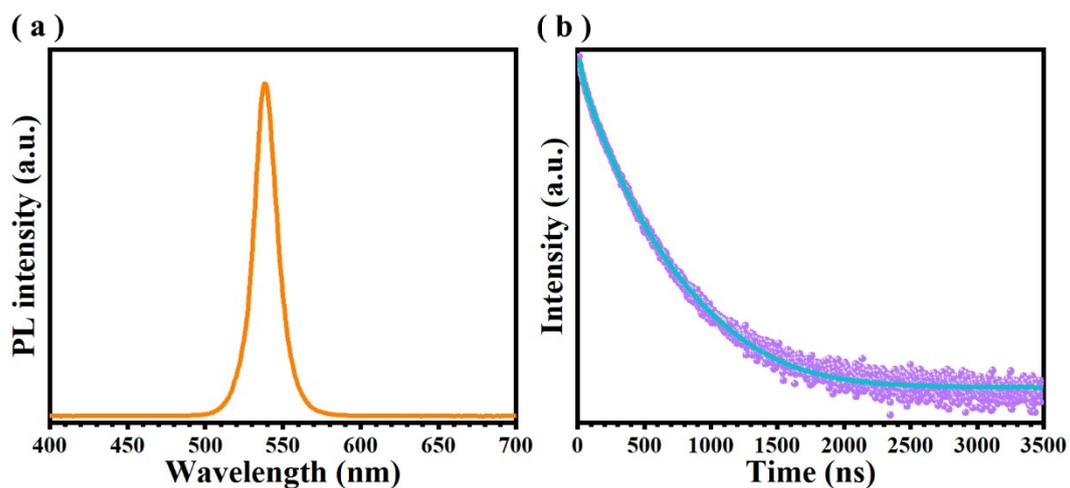


Fig. S5 (a) PL spectrum of the CsPbBr₃ nanobelts. (b) TRPL spectrum of the CsPbBr₃ nanobelts.

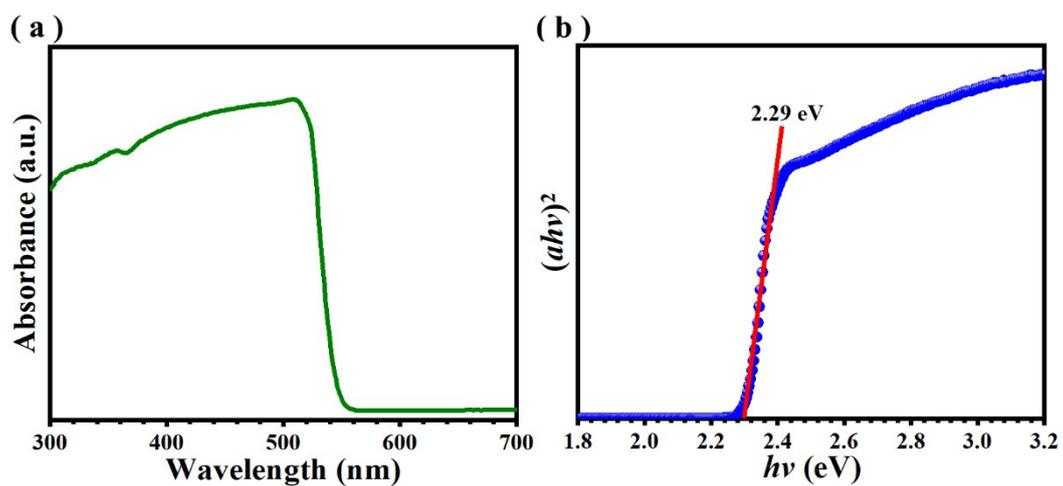


Fig. S6 (a) The representative UV-vis absorption spectrum of the CsPbBr₃ nanobelts. (b) The plot of $(ahv)^2$ versus $h\nu$.

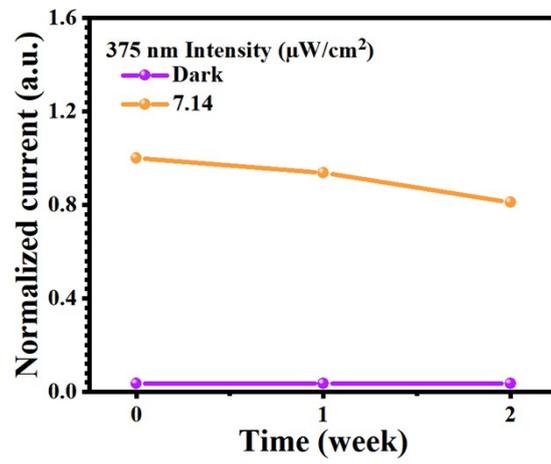


Fig. S7 Stability characteristics of the nanobelt PD after being maintained for two weeks under ambient conditions.