Supporting Information

Growth, Patterning and Alignment of Organolead Iodide Perovskite Nanowires for Optoelectronics

Hui Deng[1], Dongdong Dong[1], Keke Qiao[1], Lingling Bu[1], Bing Li[1], Dun Yang[1], Hong-En Wang[2], Yibing Cheng[1, 3], Zhixin, Zhao[1], Jiang Tang[1], Haisheng Song[1*]*

[1]Wuhan National Laboratory for Optoelectronics (WNLO) and School of Optical and Electronic Information, Huazhong University of Sciences and Technology, 1037 Luoyu Road, 430074, Wuhan, Hubei, P. R. China

[2]State Key Laboratory of Advanced Technology for Materials Synthesis and Processing, Wuhan University of Technology, Luoshi Road, 430070, Wuhan, Hubei, China

[3]Department of Materials Engineering, Monash University, Melbourne, Victoria, 3800, Australia

[*]Email of corresponding authors: zhixin-zhao@163.com and songhs-wnlo@mail.hust.edu.cn

Figure S1 (a) The leakage current for open circuit at a bias voltage of 10 V. (b) The leakage current evolved as the probes connected on the bare glass at a bias voltage of 10 V.

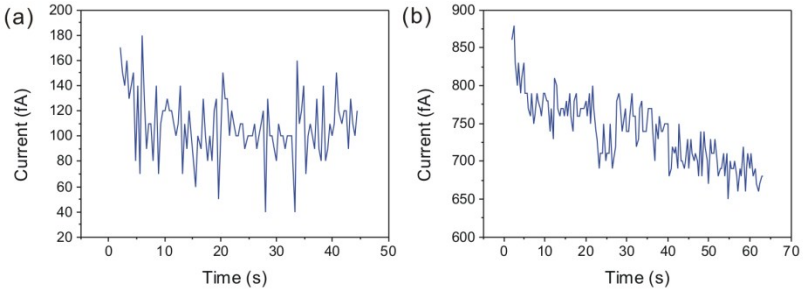

Figure S2 (a-c) I-t curves of the photodetectors at a bias voltage of 30 V (a), 40 V (b) ,50 V (c) by 650 nm illumination. (d) The curves of Figure S2a-c were plotted in one figure.

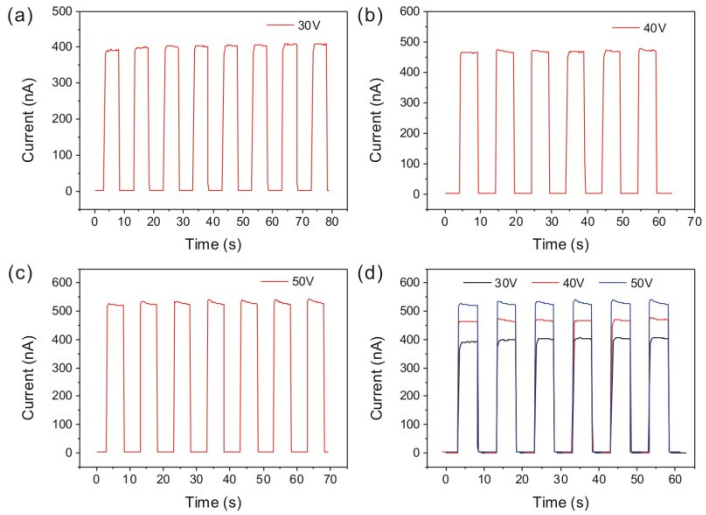

Figure S3. The morphologies of NW absorption layer surface.