

Supporting Information

Ultrahigh, ultrafast and large response size visible-near-infrared optical position sensitive detector based on CIGS structure

Shuang Qiao, Kaiyu Feng, Zhiqiang Li[†], Guangsheng Fu, Shufang Wang[†]

*Hebei Key Laboratory of Optic-Electronic Information and Materials, College of
Physics Science and Technology, Hebei University, Baoding 071002, P. R. China.*

[†]Corresponding authors: lizhiqiang@hbu.edu.cn, and sfwang@hbu.edu.cn

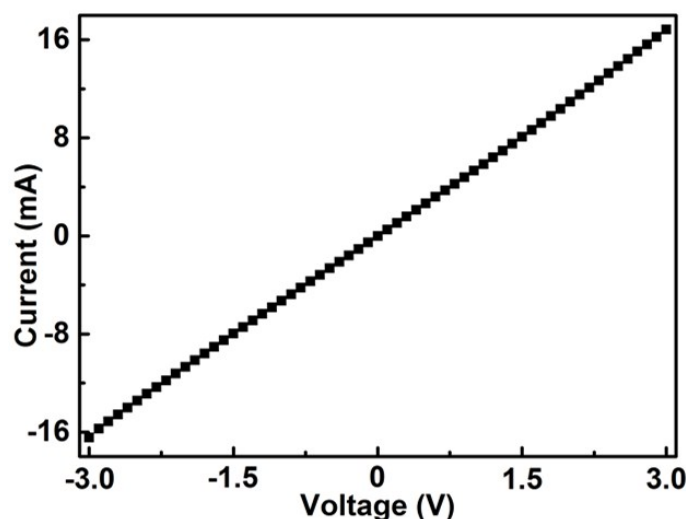


Figure S1. The transverse I-V curve in the dark.

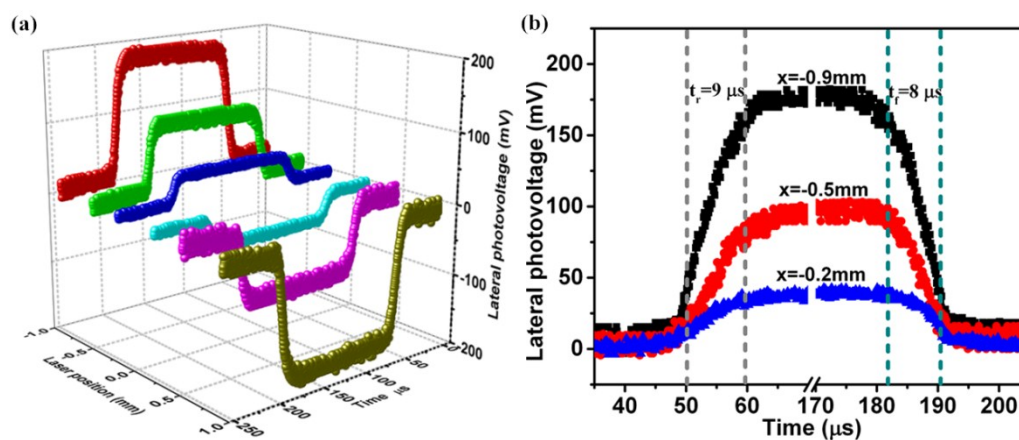


Figure S2. (a) Time-dependent lateral photovoltages to pulsed visible laser irradiation

(532 nm laser) at six different laser positions with a frequency of 4000 Hz. (b) shows the enlarged rise and fall edges of the lateral photovoltage curve at three different positions.

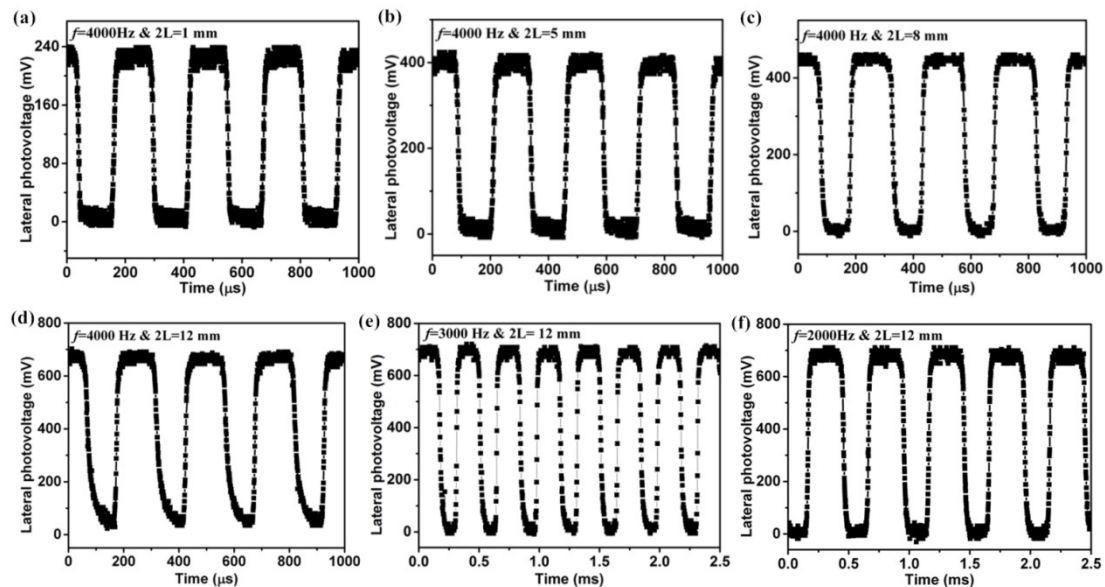


Figure S3. Time-dependent lateral photovoltages of the Glass/Mo/CIGS/CdS/ZnO/ITO structure to pulsed visible laser irradiation (532 nm laser) with a frequency of 4000 Hz under contact distance of (a) 1 mm, (b) 5 mm, (c) 8 mm, and (d) 12 mm, respectively. Time-dependent lateral photovoltages to pulsed visible laser irradiation (532 nm laser) under contact distance of 12 mm, with a frequency of (e) 3000 Hz, and (f) 2000 Hz, respectively.