

Supplemental information

Photoresponse of multi-walled carbon nanotubes-copper sulphide (MWNT-CuS) hybrid nanostructures

Zhaoyao Zhan,^a Chao Liu,^b Lianxi Zheng,^{*a} Gengzhi Sun,^a Baosheng Li^a and Qing Zhang^b

^a School of Mechanical and Aerospace Engineering, Nanyang Technological University, Nanyang Ave 50, Singapore 639798. E-mail: lxzheng@ntu.edu.sg

^b Microelectronics Centre, School of Electrical and Electronic Engineering, Nanyang Technological University, Nanyang Ave 50, Singapore 639798.

The photon energy dependence of the photoresponse is also investigated by using four different wavelength band-pass filters, which are 334 nm, 420 nm, 475 nm and 550 nm filters. The responsivity (defined by the ratio of photocurrent to power density) with respect to the illumination photon energy shows that the MWNT-CuS hybrid devices are very sensitive from visible to ultraviolet range, as plotted in Fig. S1.

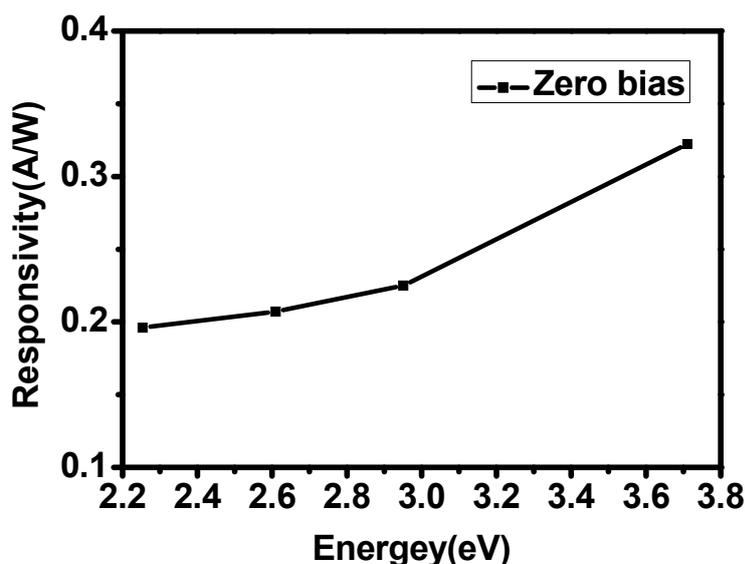


Figure S1. The photon energy dependence of zero-bias responsivity.