Supporting Information

High-performance red light nano-photodetector enabled by plasmonic Cu nanoparticles

Dan-Dan Wang, Cai-Wang Ge, Guo-An Wu ,Jiu-Zhen Wang, Teng-Fei Zhang, Yong-Qiang Lin-

Bao Luo*

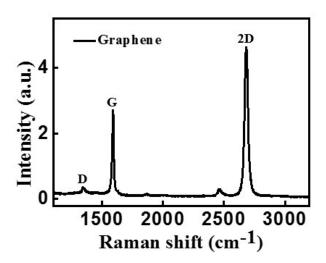


Figure S1. Raman spectrum of the multi-layer graphene film.

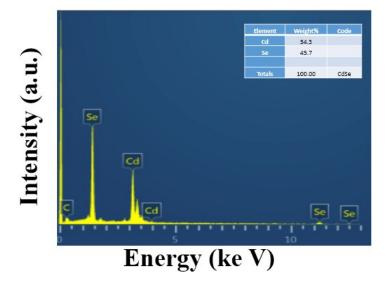


Figure S2. The energy dispersive spectrometer (EDS) analysis of the CdSeNRs.

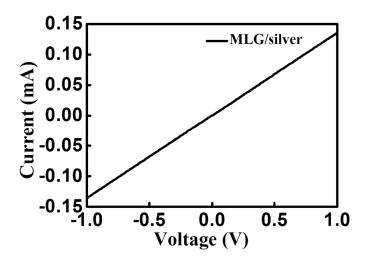


Fig.S3 The *I-V* curve of graphene and the silver electrode

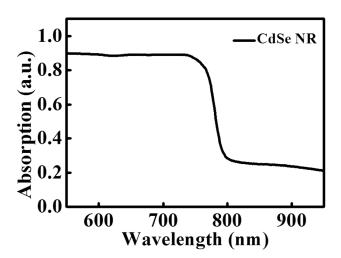


Fig.S4 The absorption curve of the CdSeNRs.

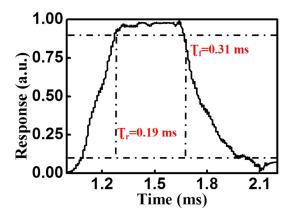


Fig.S5 Rising and falling edges for determining τ_r and τ_f of the PD before decoration with CuNPs array.

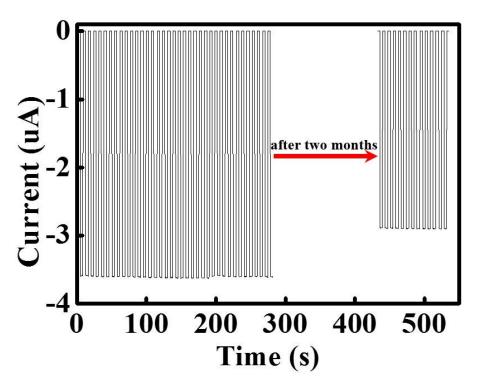


Fig. S6. Photoresponse of the plasmonic nano-photodetector after 2 months storage.