Au-nanoparticles-decorated Sb₂S₃ nanowire based flexible ultraviolet/visible photodetectors

Kai Zhang,^a Tao Luo,^a Haoran Chen,^a Zheng Lou,^{*a} and Guozhen Shen^{*a,b}

^aState Key Laboratory for Superlattices and Microstructures, Institute of Semiconductors, Chinese Academy of Sciences, Pairing, 100082, Chinese

Beijing 100083, China

^bCollege of Materials Science and Opto-Electronic Technology, University of Chinese Academy of Sciences, Beijing 100049,

China

*gzshen@semi.ac.cn; zlou@semi.ac.cn

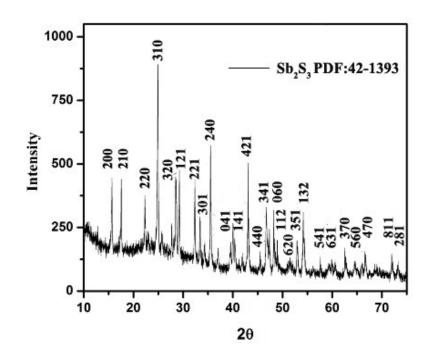


Figure S1. XRD pattern of the CVD-grown Sb₂S₃ NWs.

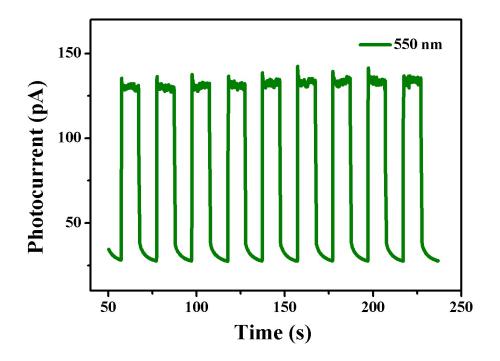


Figure S2. On/o \square cycle transient photoresponse of the flexible hybrid device, under 550nm light with a power density of 141 μ W cm⁻² at a bias of 10V.

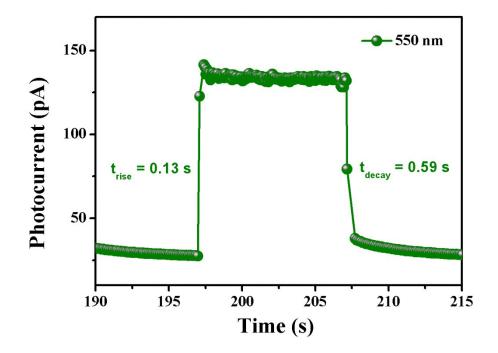


Figure S3. Response and recovery time of the hybrid device.