

Electronic Supplementary Information

Fast-response self-powered flexible transparent ultraviolet photodetectors based on CuO/ZnO nanowire array heterojunction

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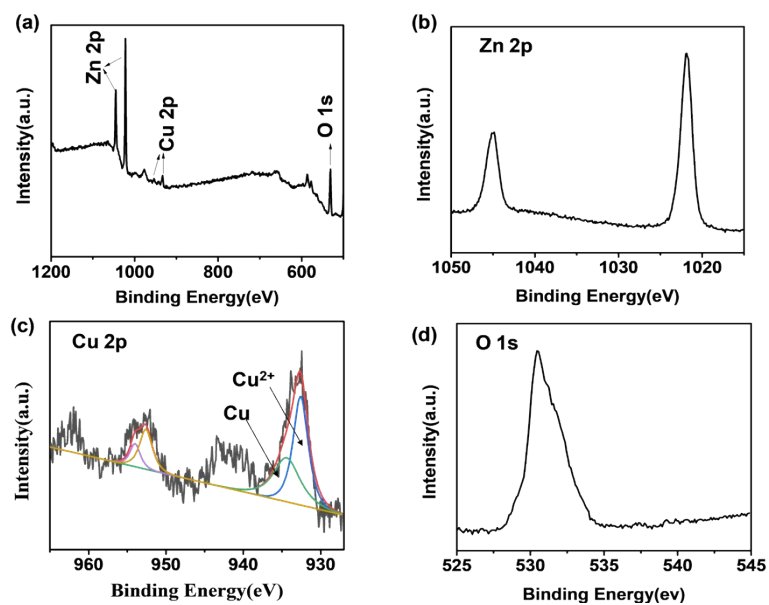


Figure S1 XPS spectra of (a) survey scan, (b) Zn 2p, (c) Cu 2p, and (d) O 1s of Cu/CuO/ZnO NWs.

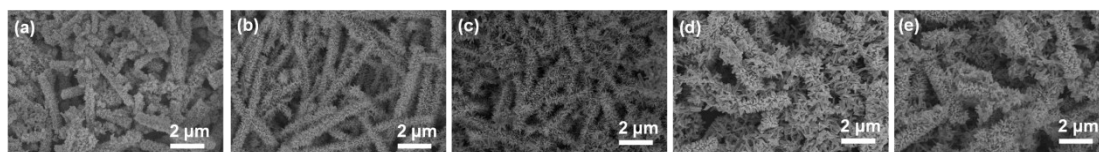


Figure S2 SEM images of CuO/ZnO NW array heterojunction films with ZnO growth time of (a) 0.5 , (b) 1, (c) 2, (d) 3 and (e) 5 h. All the films were prepared by pray coating CuO/ZnO NW on PET substrates with the thickness of 2500 nm.

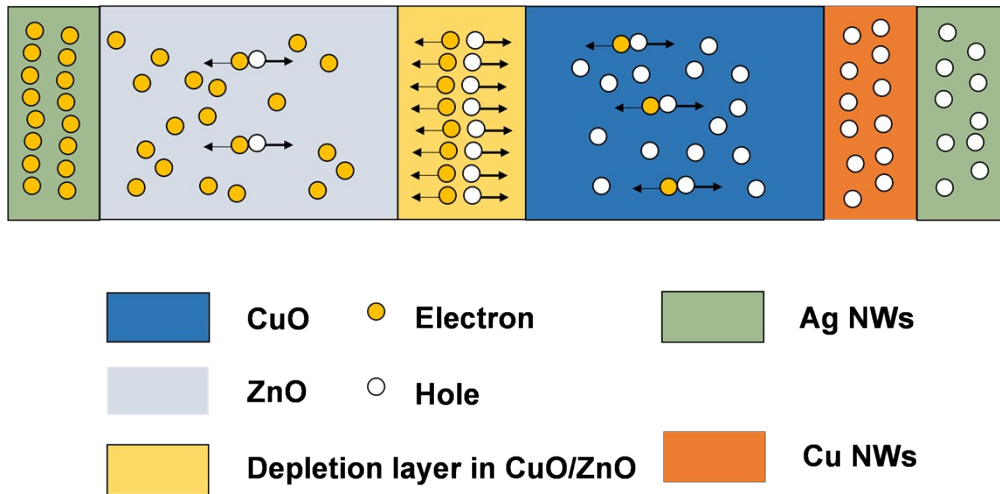


Figure S3 Schematic illustration of the charge transport process of self-powered flexible transparent UV PDs based on CuO/ZnO NW array heterojunction under UV light.

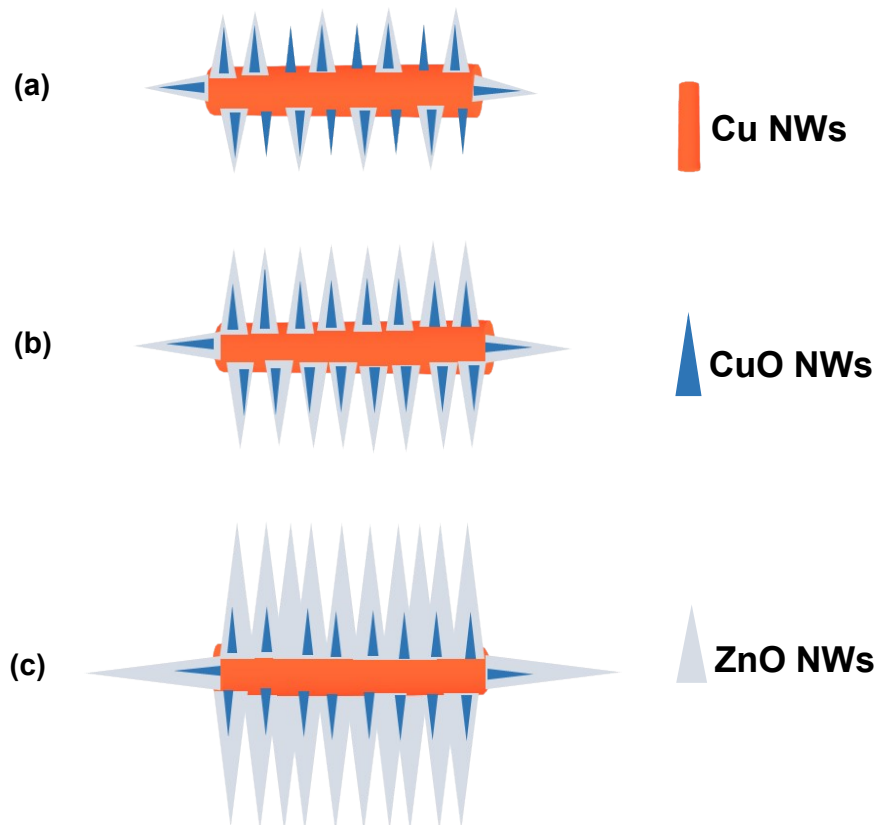


Figure S4 Schematic illustration of the structure of CuO/ZnO NW array heterojunction on Cu NW substrates with the different ZnO growth time of 1h (a), 3h (b) and 5 h (c).