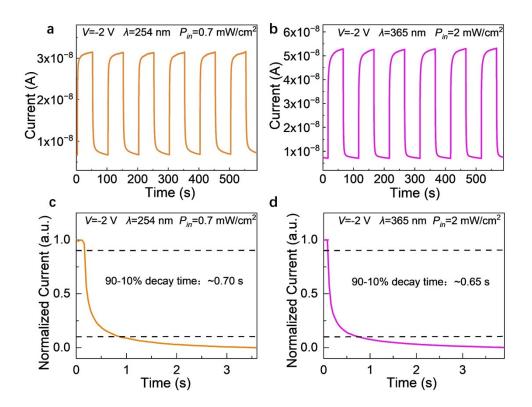
## **Electronic Supplementary Information**

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Self-powered flexible UV photodetector based on individual ZnOamorphous Ga<sub>2</sub>O<sub>3</sub> core-shell heterojunction microwire

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**Figure S1:** The *I*-*t* curves of ZnO-a-Ga<sub>2</sub>O<sub>3</sub> core-shell microwire under (a) 254 nm and (b) 365 nm light illumination at -2 V. The normalized decay edges under (c) 254 nm light illumination and (d) 365 nm light illumination at -2 V.

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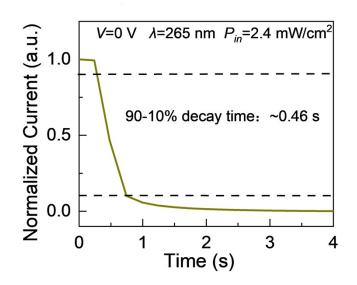


Figure S2: The normalized decay edge under 265 nm light illumination at 0 V.