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## **Supporting Information**

Ferroelectric enhanced Ga<sub>2</sub>O<sub>3</sub>/BFMO-based deep ultraviolet photovoltaic detectors with dual electric fields for photogenerated carriers separation

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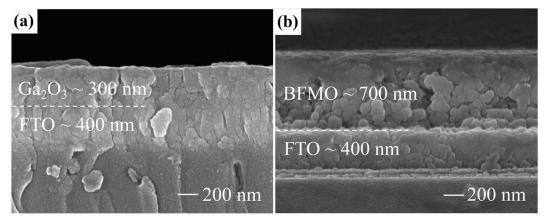


Fig. S1. Cross-sectional images of the (a) Ga<sub>2</sub>O<sub>3</sub> and (b) BFMO thin films.

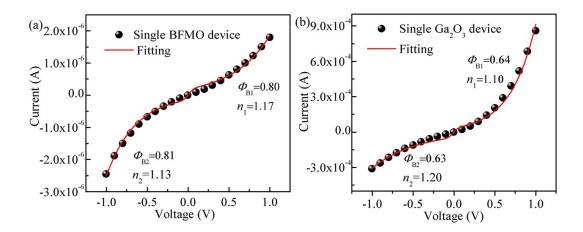


Fig. S2. Current-voltage (I-V) curves of the (a)  $Ga_2O_3$  and (b) BFMO devices under dark and their fits.