

Electronic Supplementary Information for

Direct Writing DPP-DTT/SrTiO₃ Organic/inorganic

Heterojunction for Anisotropic Self-powered Photodetectors

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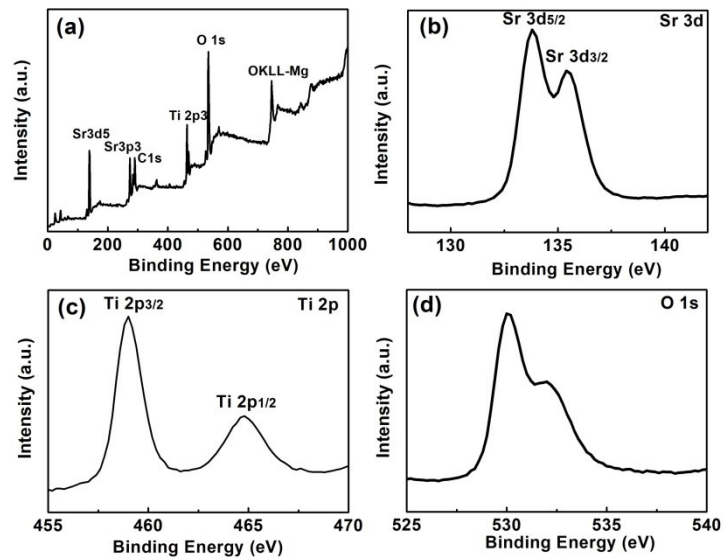


Figure S1. XPS spectra: (a) SrTiO₃; (b) Sr 3d; (c) Ti 2p; (d) O 1s.

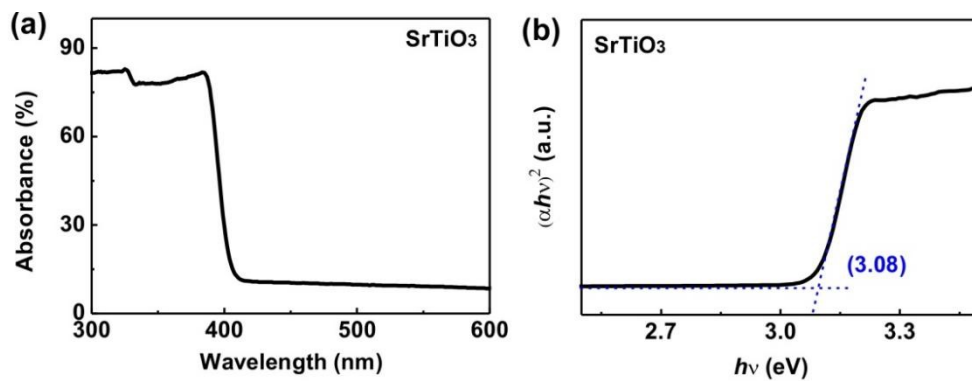


Figure S2. (a) UV-vis absorption spectra of the SrTiO₃ film. (b) Tauc plots of SrTiO₃ film obtained from their absorbance spectra.

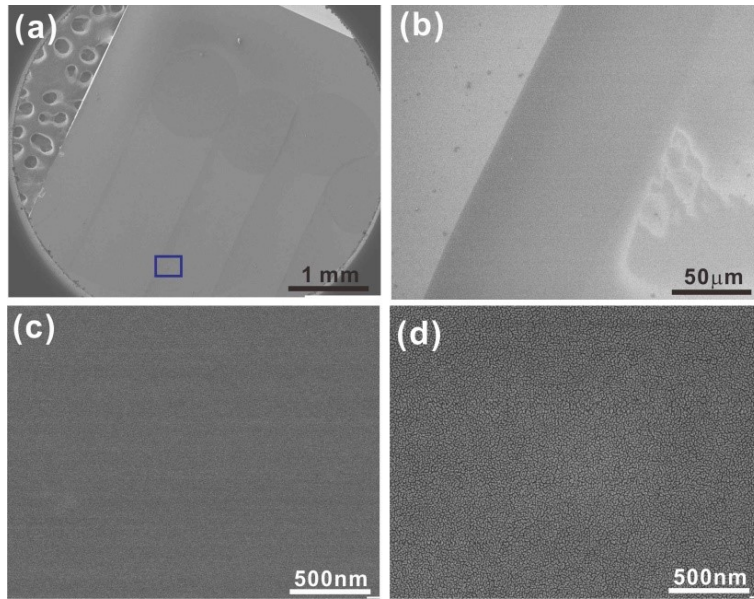


Figure S3. (a, b, d) SEM images of the DPP-DTT film with different magnifications via direct writing method. (c) SEM images of the DPP-DTT film via spin coating method.

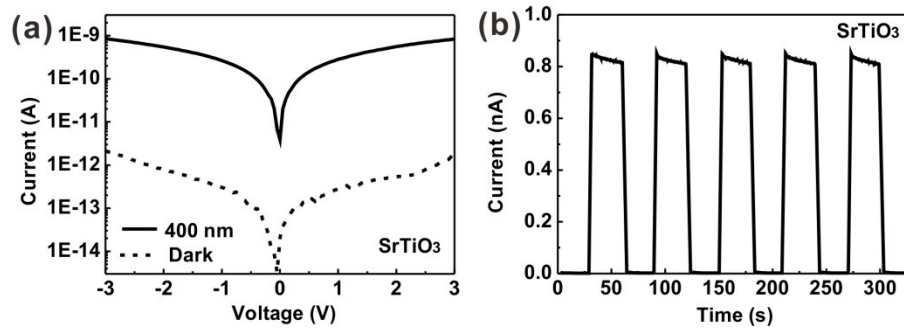


Figure S4. (a) I - V and (b) I - t curves of the SrTiO₃ PD in dark and upon 400 nm light irradiation.

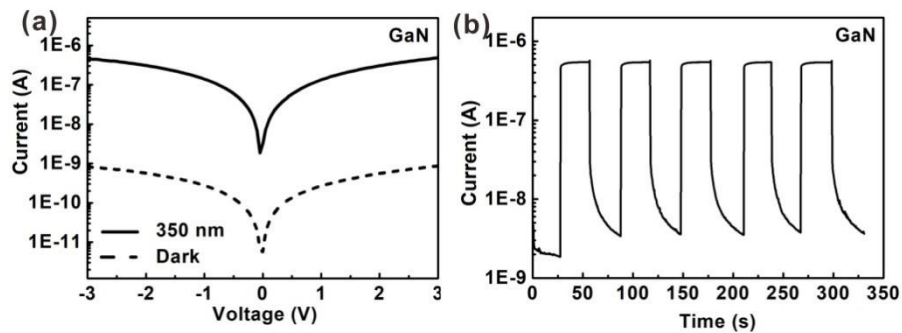


Figure S5. (a) I - V and (b) I - t curves of the GaN PD in dark and upon 350 nm light irradiation.

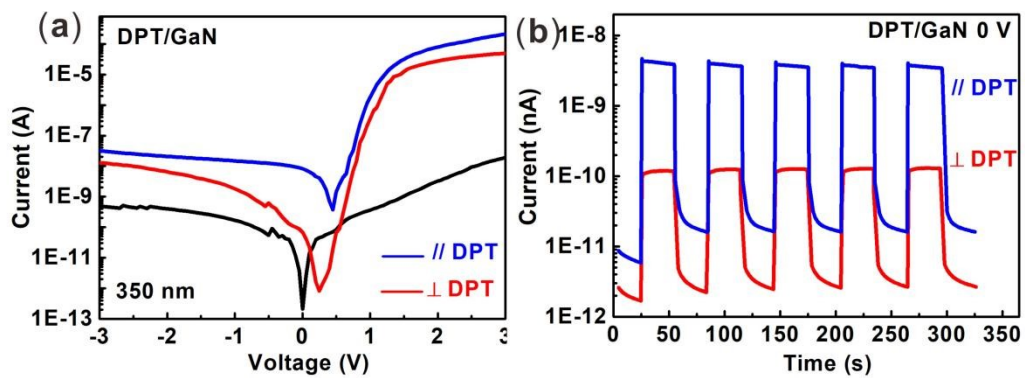


Figure S6. Comparison of photoelectric performance between //DPT/GaN and \perp DPT/GaN PDs.

(a) $I-V$ and (b) $I-t$ characteristics under dark and 350 nm light illumination.