

*Electronic Supplementary Information*

**High performance quasi-solid-state self-powered  
UV photodetector based on TiO<sub>2</sub> nanorod arrays**

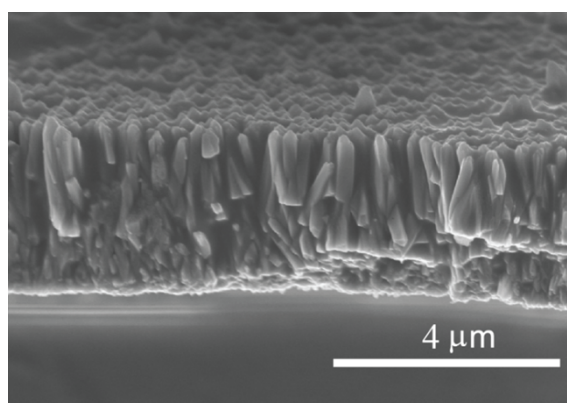
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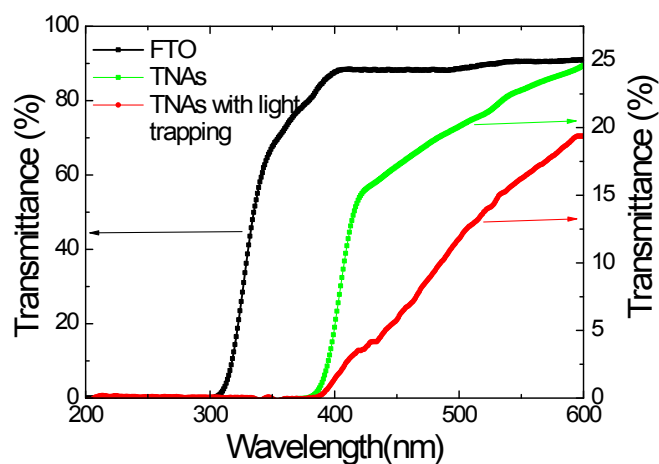
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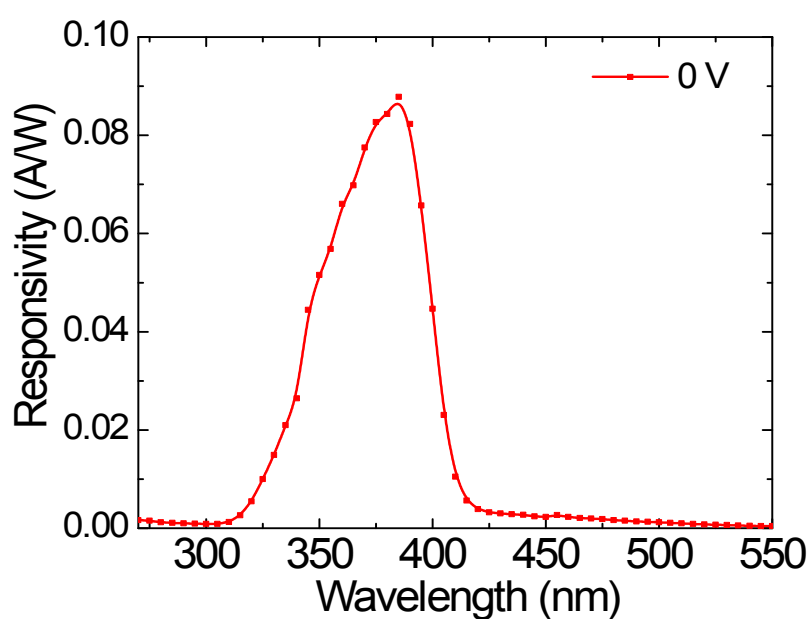
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Portland, Oregon 97207-0751, USA



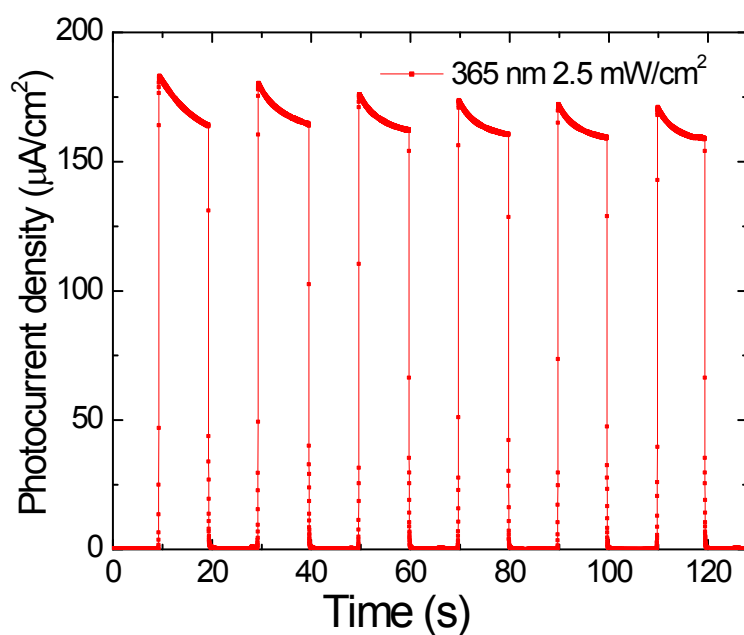
**Figure S1.** The SEM cross-section micrograph of TNAs coated with liquid crystal electrolyte after removing the solvent.



**Figure S2.** The transmission spectrum of FTO-glass, TNAs and TNAs with the quasi-solid-state electrolyte.



**Figure S3.** Spectral responsivity characteristic of the quasi-solid-state photodetector after being stored under ambient environment for 5 months



**Figure S4.** Incident light depended J-T characteristic of the quasi-solid-state photodetector after being stored under ambient environment for 5 months