Electronic Supplementary Material (ESI) for Nanoscale.

<Supplementary information>

All-inkjet-printed flexible UV photodetector

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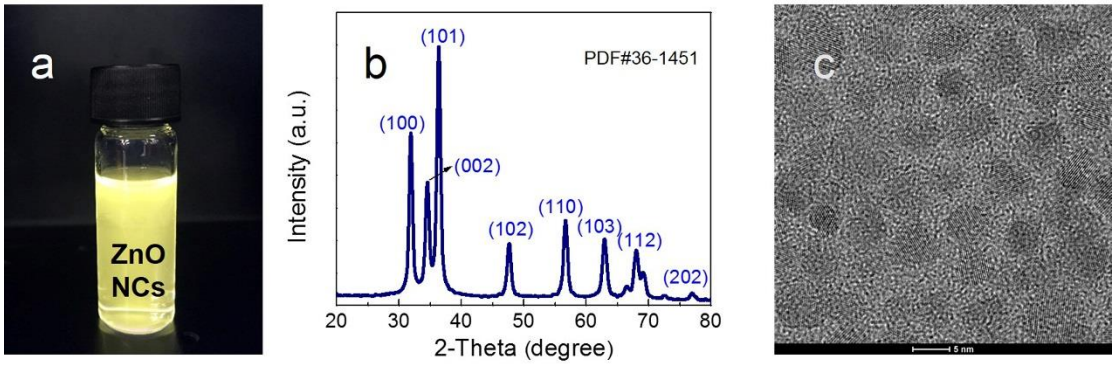

Figure S1. Basic characterization of ZnO NC ink. (a) Photograph of ZnO ink sample under the UV light. (b) X-Ray diffraction measurement of ZnO NCs. (c) Transmission electron microscopy (TEM) image of ZnO NCs.

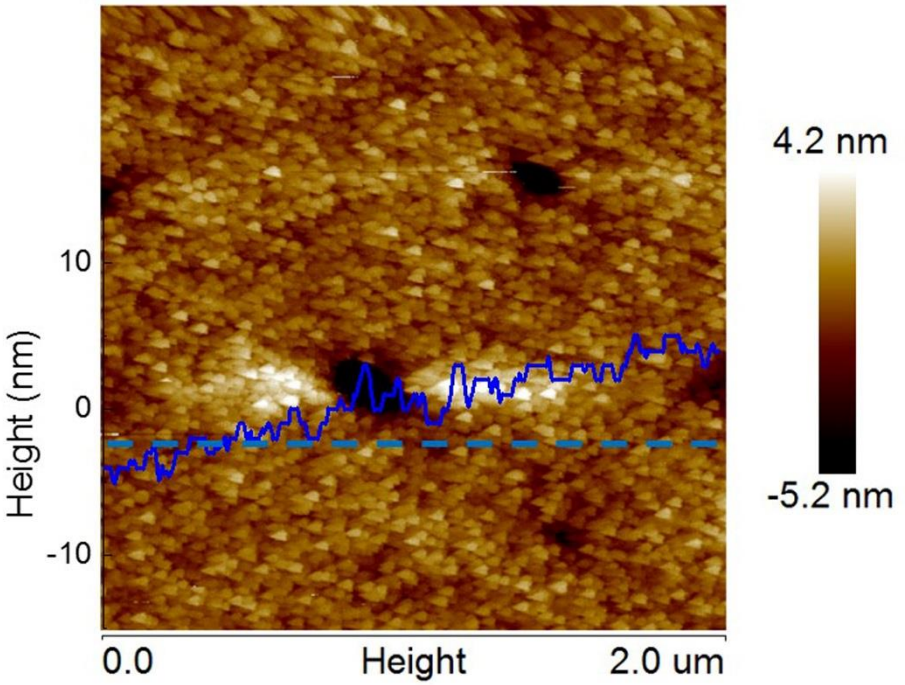

Figure S2. Atomic force microscopy (AFM) image of ZnO NC film without post processing.

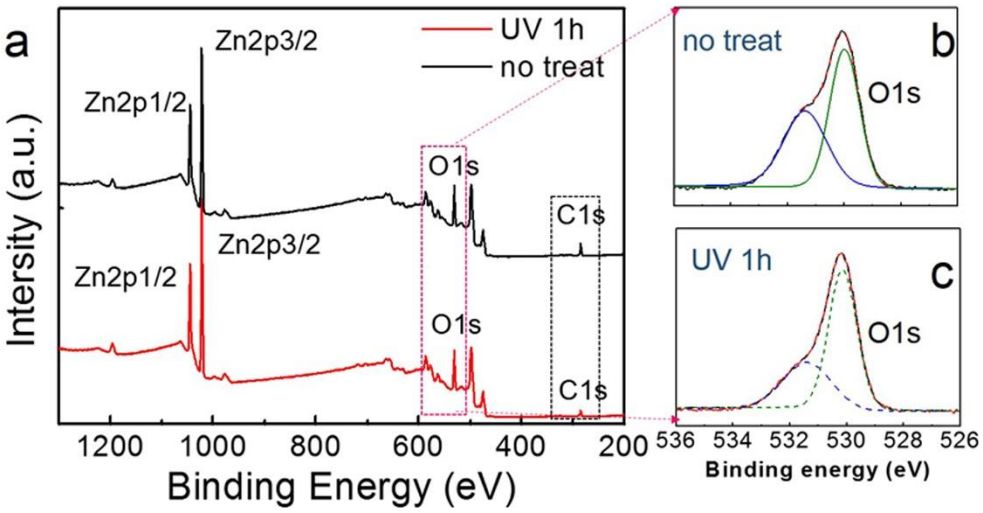

Figure S3. X-ray photoelectron spectroscopy (XPS) spectra of ZnO NCs films with and without UV treatment. (a) Typical XPS full spectra of ZnO films with and without UV treat. (b) Core level XPS spectrum of O1s for ZnO film without and (c) with UV postprocessing.

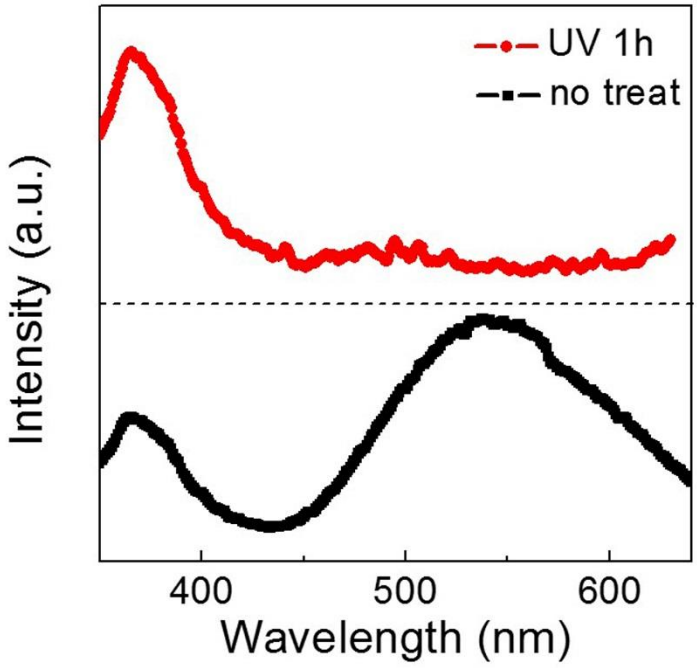

Figure S4. PL spectra of ZnO NCs films with and without UV treatment.

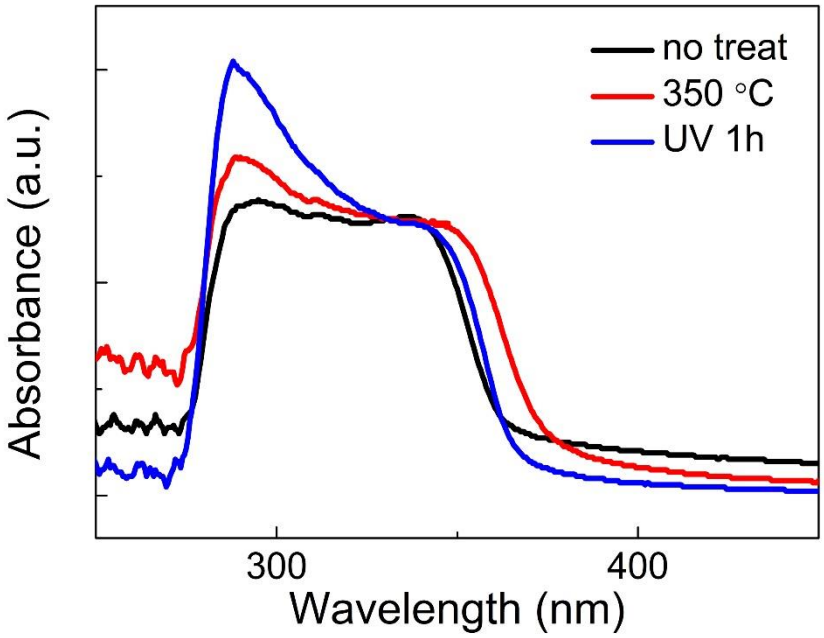

Figure S5. Absorption spectra of ZnO film with various treatments.

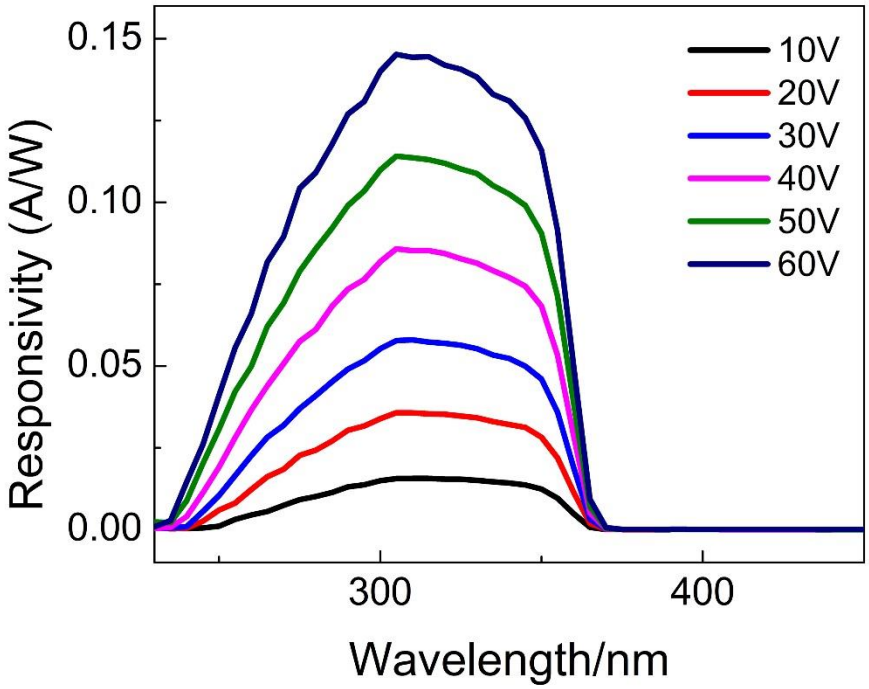

Figure S6. Responsivity curves of the UV treated device along with bias voltage.