

(Supporting Information)

**Highly efficient UV-sensing properties of Sb-doped ZnO
nanorod arrays synthesized by a facile, single-step hydrothermal reaction**

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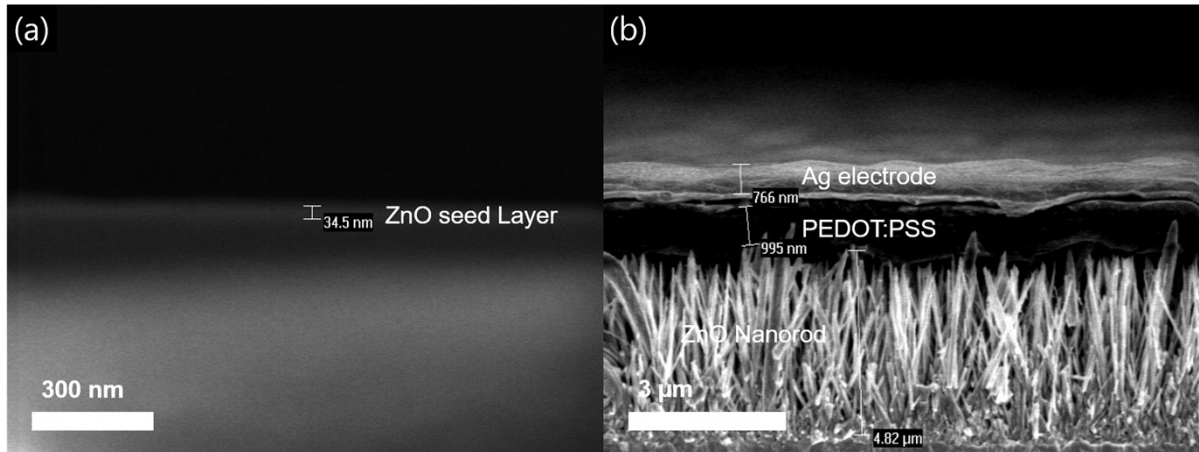


Figure S1. SEM cross-sectional view of (a) ZnO seed layer, and (b) Ag electrode on PEDOT:PSS covered Sb-doped ZnO NRAs

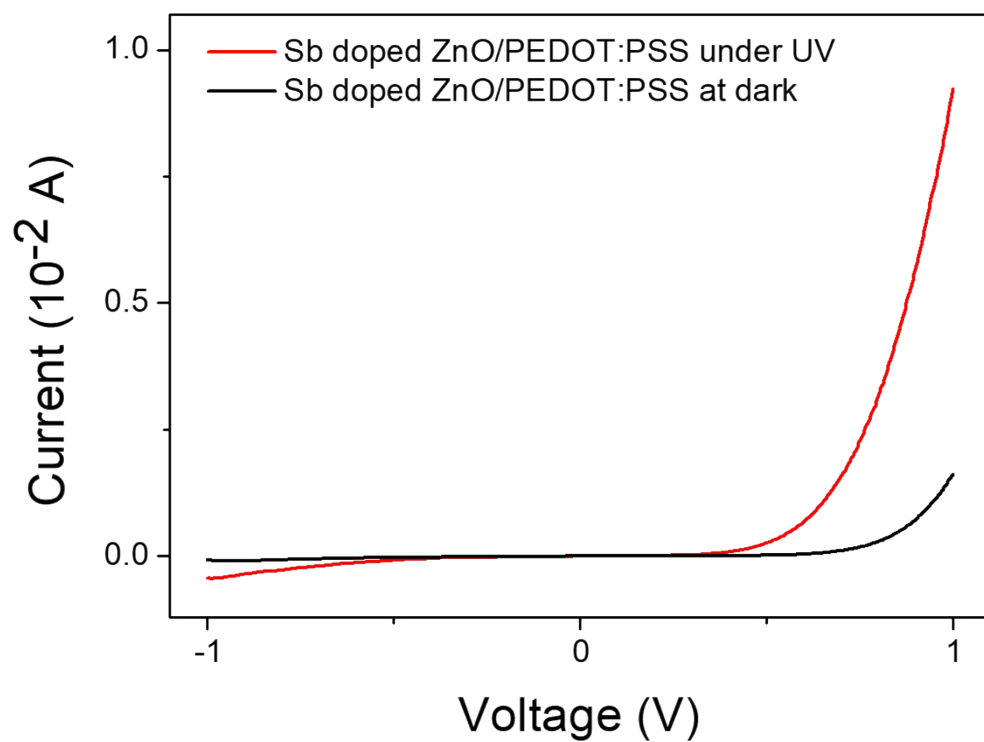


Figure S2. I-V curves of Sb-doped ZnO NRAs covered with PEDOT:PSS with and without UV illumination

Ref. #	name	Wavelength (nm)	Voltage (V)	Intensity (W/cm ²)	Responsivity	Rise time constant	Falling time constant
1 ¹	In:ZnO	390	1	2 * 10 ⁻²	2.5	-	-
	Ga:ZnO	380	1	2 * 10 ⁻²	5.45	2.45 s	4.0 s
2 ²	Li,N:ZnO	360	20	2 * 10 ⁻³	116	-	-
	Li,N:ZnO	360	20	5 * 10 ⁻⁸	216	-	-
3 ³	Fe:ZnO	365	10	2 * 10 ⁻⁴	12	-	-
4 ⁴	Al:ZnO	365	1	3 * 10 ²	0.031	0.7 s	2.5 s
Current Study	Sb:ZnO	365	0.5	16 * 10 ⁻⁶	53.5	338 s	124 s
	Sb:ZnO	365	0	16 * 10 ⁻⁶	0.02	233 s	80.5 s

Table S1. The comparison tabulation of sensing properties among several doped ZnO nanostructures.

Reference

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