

Supporting Information

for

NO gas sensing at room temperature using single titanium oxide nanodot sensors created by atomic force microscopy nanolithography

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Additional experimental data

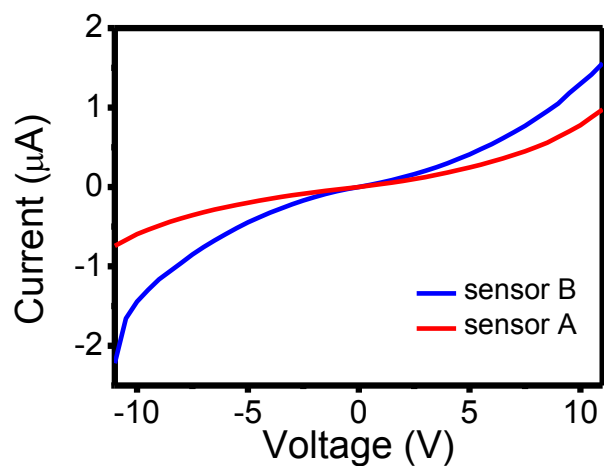


Figure S1: The current-voltage curves of sensors A and B before NO sensing.

Table S1: The resistances of sensors A and B before and after NO adsorption obtained from the current responses at a bias of 10 V as shown in the Figures.

sensor	C (ppm)	I_0 (μA)	I_g (μA)	R_0 ($\text{M}\Omega$)	R_g ($\text{M}\Omega$)	$\Delta R/R_0$ (%)
A	10	0.89	0.68	11.24	14.7	31
	15	0.89	0.63	11.24	15.87	41
	20	0.90	0.59	11.11	16.95	52
B	50	2	1.83	5	5.46	9
	100	2	1.72	5	5.81	16
	250	2	1.58	5	6.33	27
	500	2	1.36	5	7.35	47

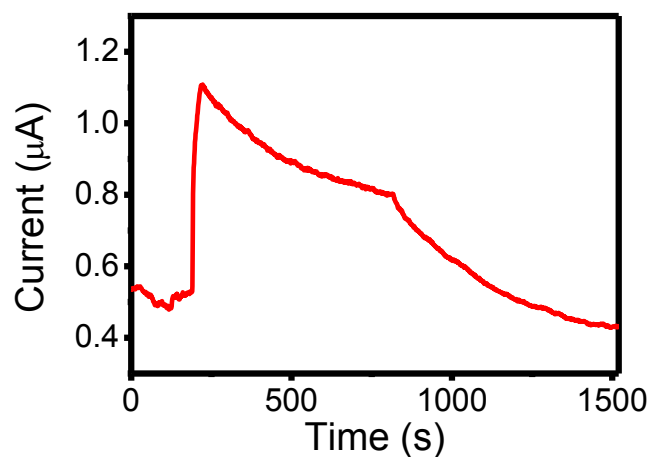


Figure S2: A finer time scale current response of sensor A at 10 V in the UV-recovery mode.

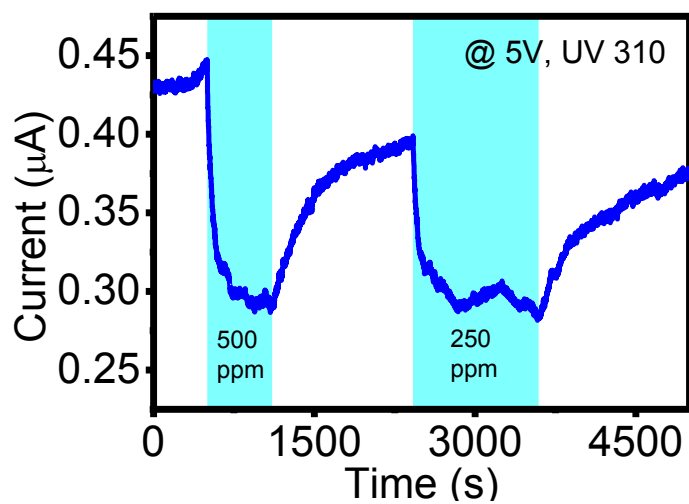


Figure S3: The current response of sensor B at 5 V in the UV-activation mode.

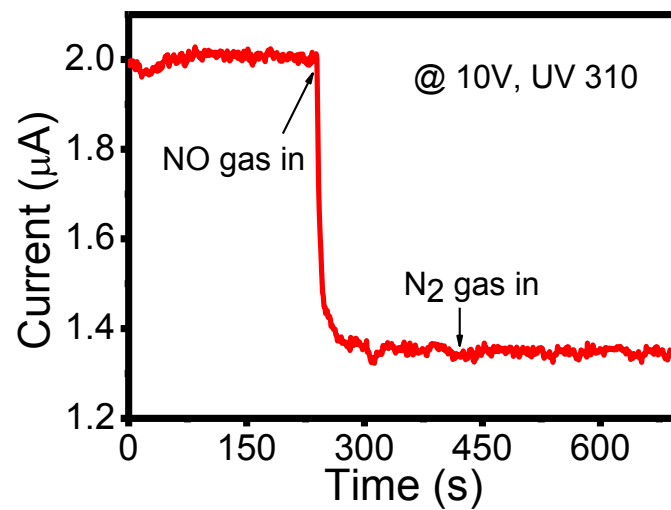


Figure S4: The current response of sensor B at 10 V due to the injection of 500 ppm NO and subsequent high-pressure N₂.