## **Supporting Materials**

## Differentiation of Gas Molecules Using Flexible and

## All-Carbon Nanotube Devices

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## Figure summary:

Figure S1. (a) Typical electrical characteristics including transfer curves and  $I_d$  -  $V_d$  relations for an all-P2-SWNT transistor. (b) Transfer curves showing that an all-P2-SWNT transistor is p-doped (or threshold voltage positively shifted) upon exposure to NO from  $N_2$ .

Figure S2. Typical electrical characteristics,  $I_d$  vs.  $V_g$  and  $I_d$  vs.  $V_d$  for an all-P3-SWNT resistor. The resistance of the resistor is  $0.51 \text{M}\Omega$ .

Figure S3. Sensing curves for the Au-contacted resistor showing that the device is normally insensitive to CO exposure (measured at  $V_d = 10V$ ).

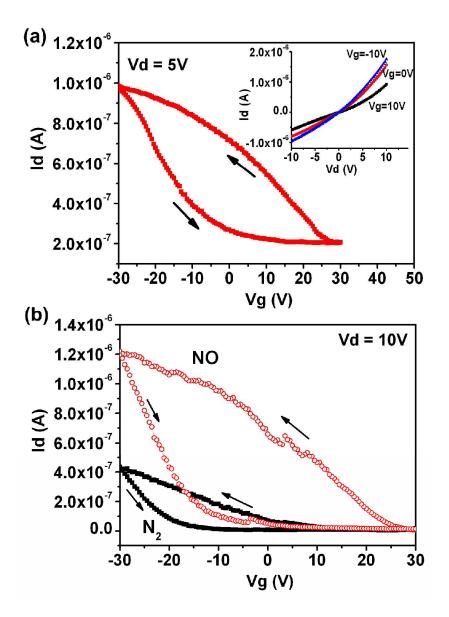


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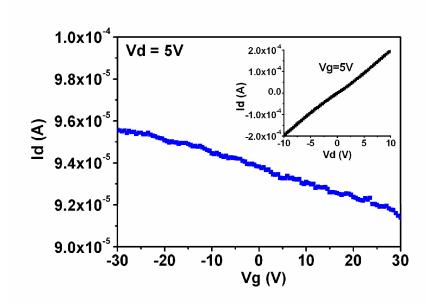


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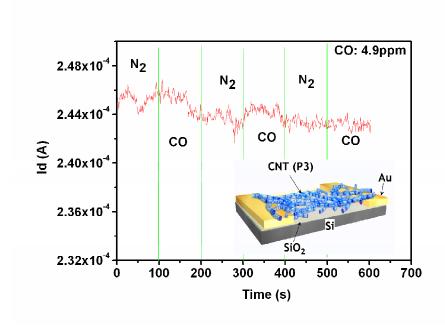


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