

Supporting Information

Selective Ammonia-Sensing Platforms Based on a Solution-Processed Film of Poly(3-Hexylthiophene) and p-Doping Tris(Pentafluorophenyl)Borane

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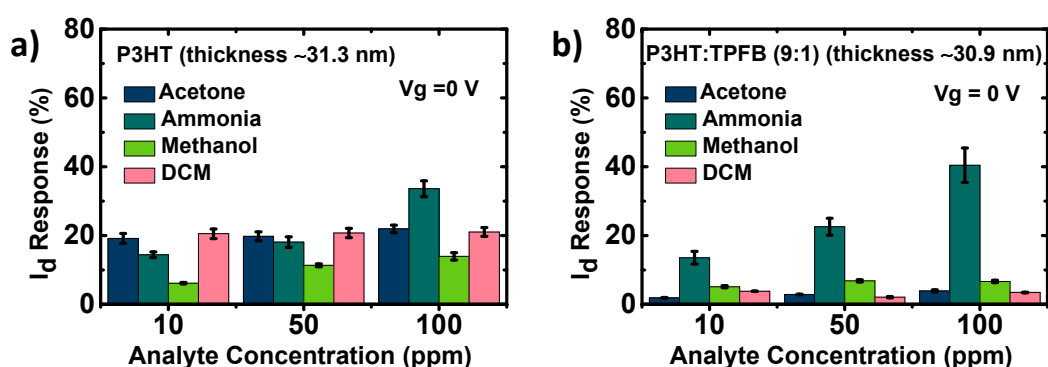


Figure S1. Selectivity of sensors made from thin polymer films: (a) P3HT and (b) P3HT:TPFB=9:1. The current was recorded at the gate voltage of 0 V. The film thickness was controlled to be ~31 nm.

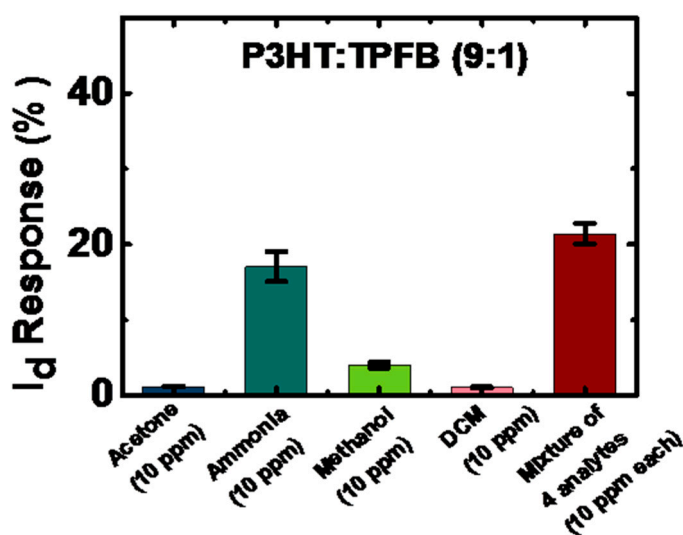


Figure S2. Percentage current responses of the P3HT:TPFB (9:1) devices for individual analyte at 10 ppm and the mixture of four analytes (10 ppm each). The current was recorded at the gate voltage of -100 V.

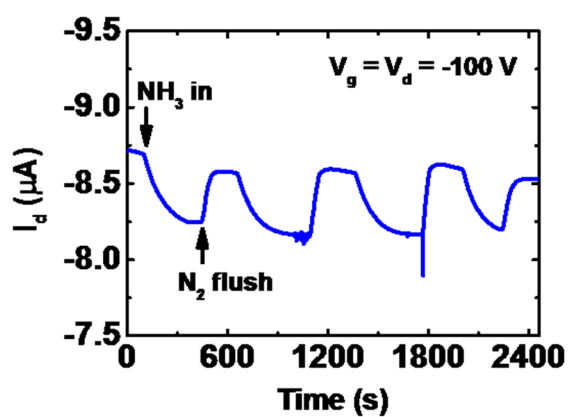


Figure S3. Real-time responses of a P3HT:TPFB (9:1) device during multi-cycling of sequential exposure to NH_3 (10 ppm) and N_2 -gas flush. The current was recorded at the drain and gate voltages of -100 V .

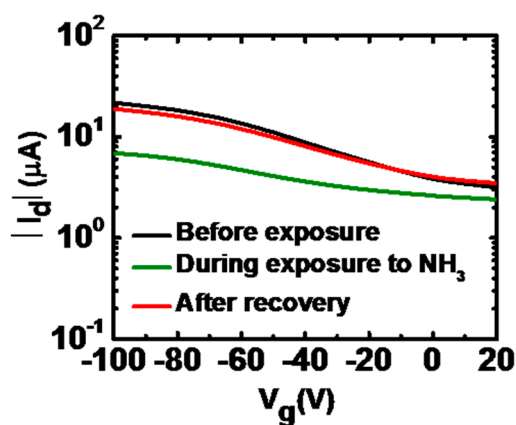


Figure S4. Transfer curves of a P3HT:TPFB (9:1) device before NH_3 exposure, during NH_3 exposure, and after recovery in N_2 environment.

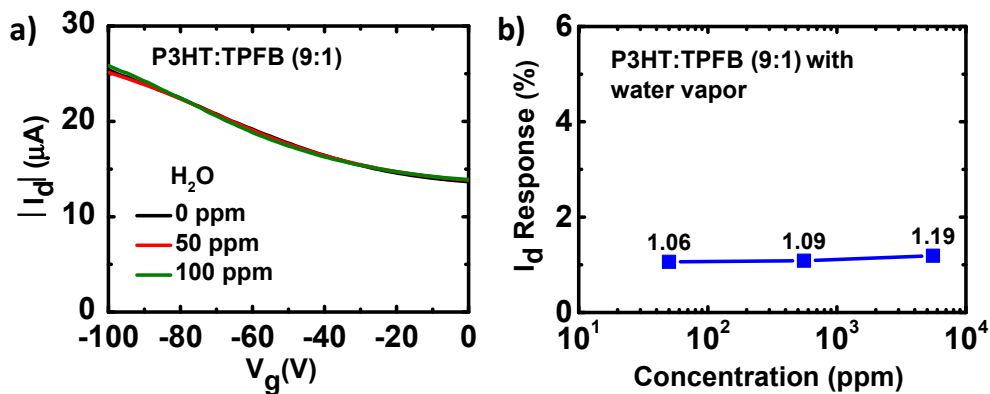


Figure S5. (a) Transfer curves of a P3HT:TPFB (9:1) device in water vapor. (b) Percentage current responses of a P3HT:TPFB (9:1) device to a various concentration of H_2O vapor. The current was recorded at the gate voltage of -100 V.



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