

Supporting information

Polyelectrolyte Interlayer for Ultra-Sensitive Organic Transistor Humidity Sensors

Yeong Don Park[†], Boseok Kang[†], Ho Sun Lim, Kilwon Cho, Moon Sung Kang,* and Jeong Ho Cho*

[†] Prof. Y. D. Park and B. Kang contributed equally to this work.

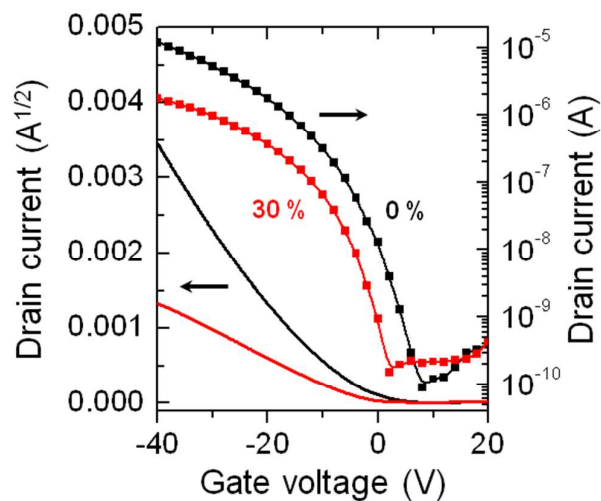


Figure S1. Transfer characteristics of a reference pentacene FET sensor at relative humidity levels of 0 and 30% ($V_D = -40$ V).

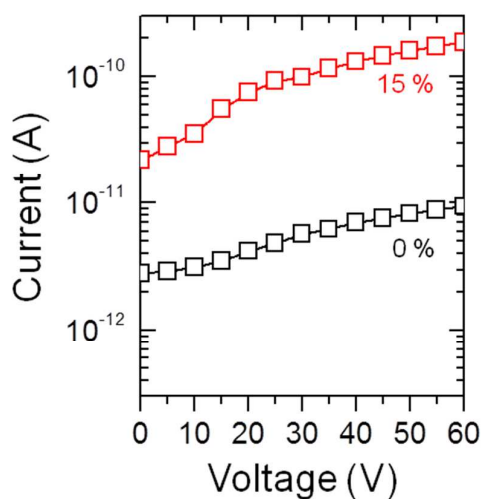


Figure S2. I - V characteristics of poly(METAC-co-TSPM) thin film at relative humidity of 0 and 15 %.

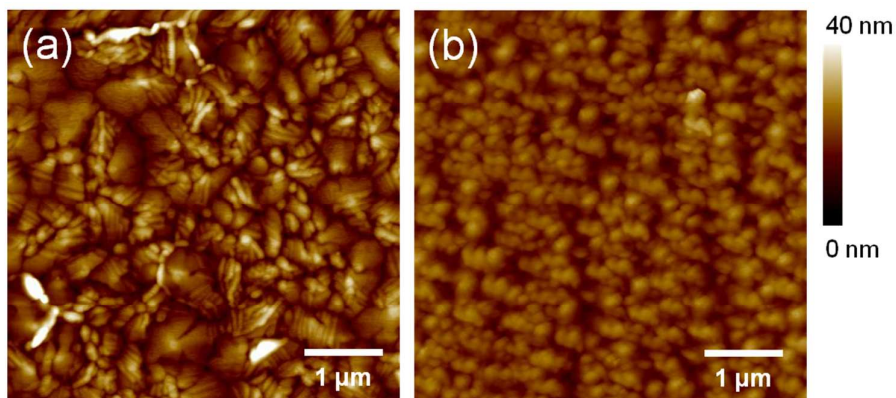


Figure S3. AFM images of 50-nm-thick pentacene on (a) a pristine poly(METAC-*co*-TSPM) layer and (b) a poly(METAC-*co*-TSPM) layer treated with photoresist.

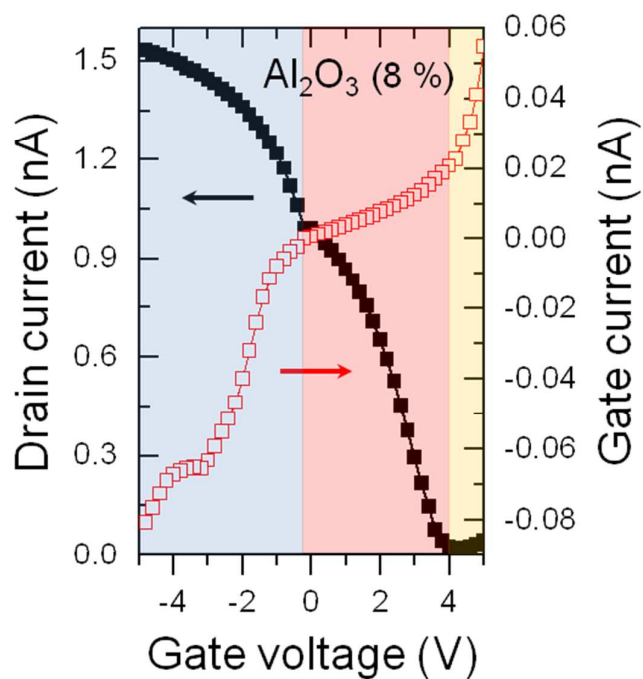


Figure S4. A representative transfer characteristic with I_G ($V_D = -5$ V) of the low voltage flexible sensors on Al_2O_3

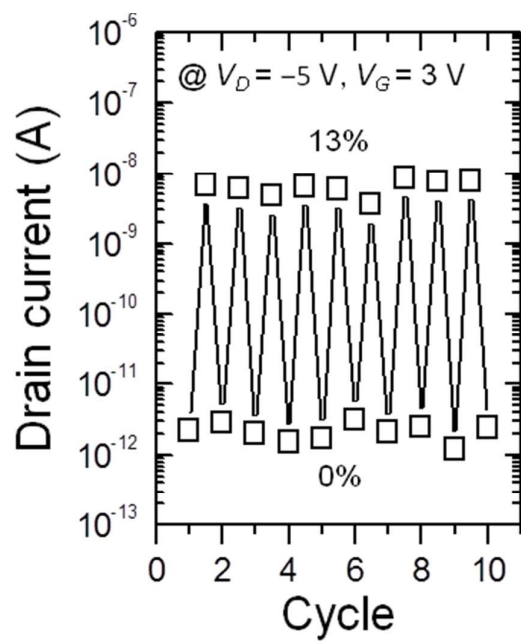


Figure S5. Plot of I_D for flexible sensors at $V_G = 3$ V and $V_D = -5$ V as a function of the switching cycle.