Supplementary Information for

Flexible Alternating Current Electroluminescent Ammonia Gas Sensor

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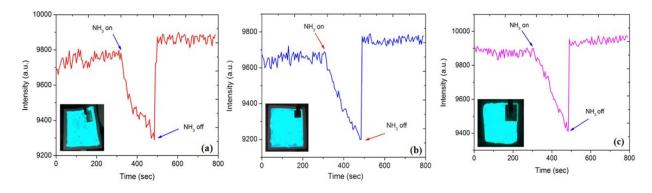


Figure S1: Dynamic response of EL gas sensors with different dark spots sites to 100 ppm NH_3 at room temperature. The calculated sensor responses of (a), (b), and (c) are 5.05%, 5.03%, and 4.94%, respective. The sensor responses of all EL gas sensors with different dark spots sites are still in the same range with SD < 0.07%.

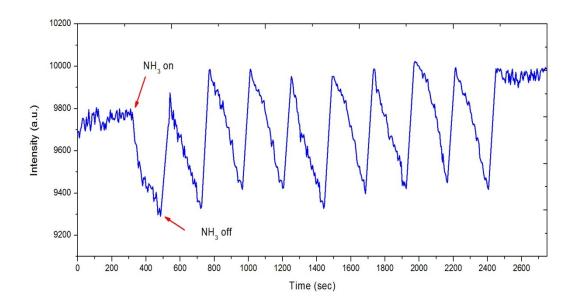


Figure S2: The reversible ability of EL gas sensor to 100 ppm NH_3 at room temperature up to 9 cycles

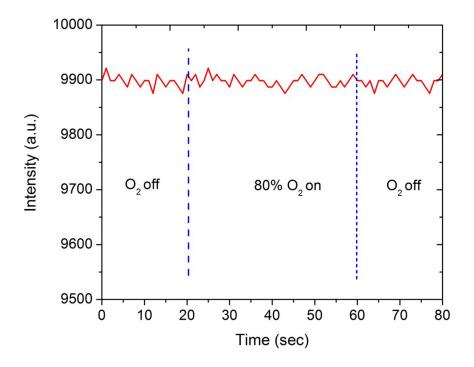


Figure S3: Dynamic response of EL gas sensor device to 80 vol% O₂ at room temperature.

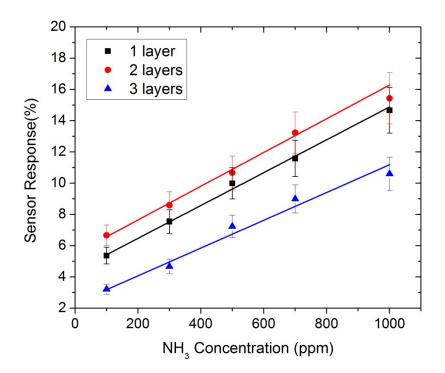


Figure S4: Sensor response of 1 layer, 2 layer and 3 layers PEDOT:PSS of AC-EL gas sensors as a function of NH₃ concentration at room temperature.

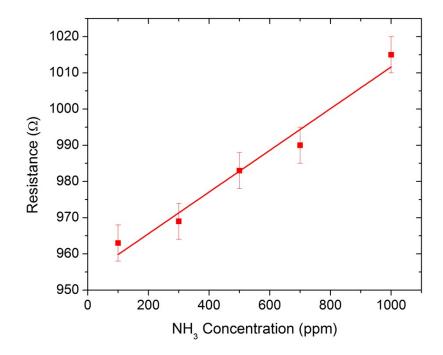


Figure S5: The relationship of PEDOT: PSS resistance as a function of the different NH₃ concentrations at room temperature.