

Supplementary Materials: Low-Temperature, Solution-Processed, Transparent Zinc Oxide-Based Thin-Film Transistors for Sensing Various Solvents

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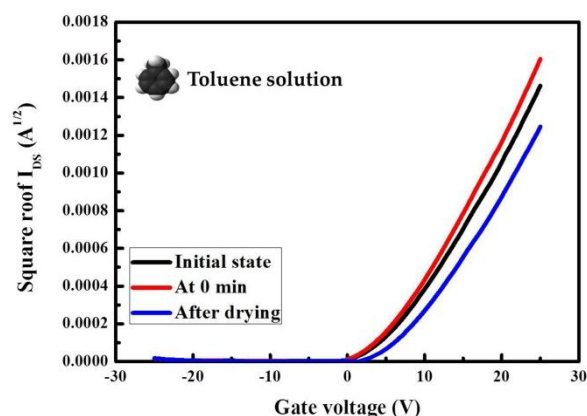


Figure S1. Transfer characteristic of the square root of drain current plotted on a linear scale of solution-processed ZnO-based Thin Film Transistor sensors for a non-polar liquid solvent of toluene with a dielectric constant value of approximately 2.4.

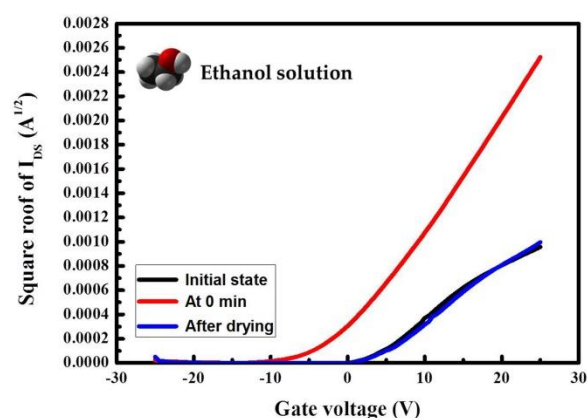


Figure S2. Transfer characteristic of the square root of drain current plotted on a linear scale of solution-processed ZnO-based TFT sensors for a polar liquid solvent of ethanol with a dielectric constant value of approximately 24.

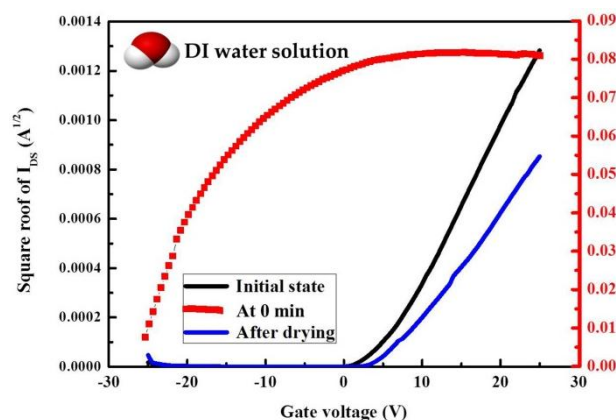


Figure S3. Transfer characteristic of the square root of drain current plotted on a linear scale of solution-processed ZnO-based TFT sensors for a DI water with high dielectric constant of approximately 80, leading to a highly charged surface on the channel surface.

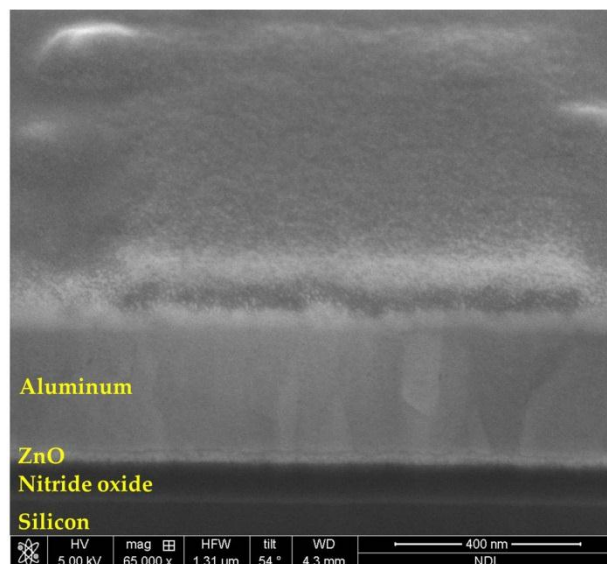


Figure S4. The thickness of ZnO channel film used was approximately 22 nm prepared by the spin-coating.



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