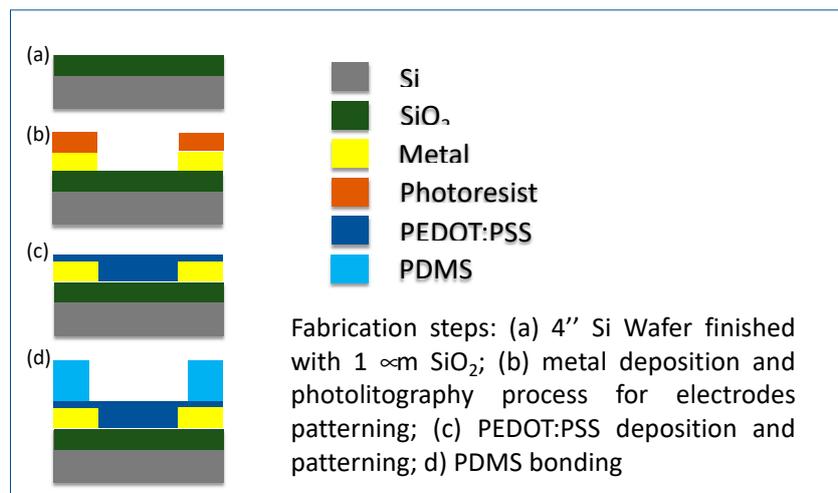


Supplementary Materials

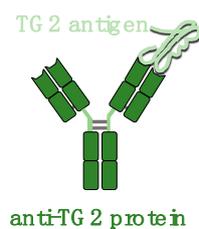
Immuno-Sensing at Ultra-Low Concentration of TG2 Protein by Organic Electrochemical Transistors

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a)



b)



c)

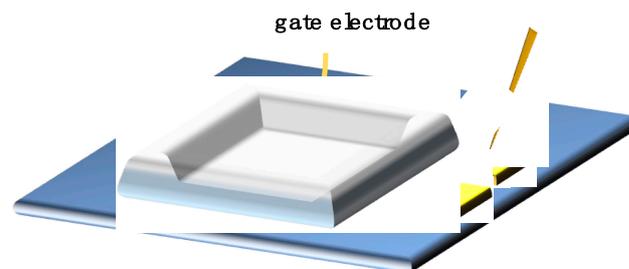


Figure S1. Experimental setup; (a) Fabrication steps; (b) anti-TG2 protein-antigen bound; (c) OEECT layout.

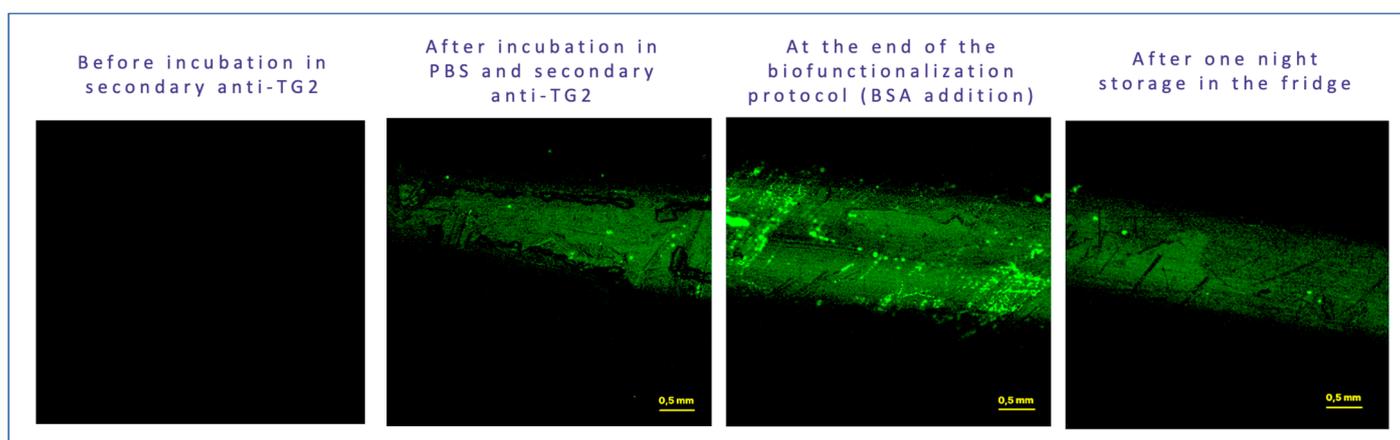


Figure S2. CLSM imaging of the gate electrode during functionalization process: from left to right: before incubation in secondary anti-TG2; after incubation in anti-TG2 PBS solution; at the end of functionalization process; after one night.

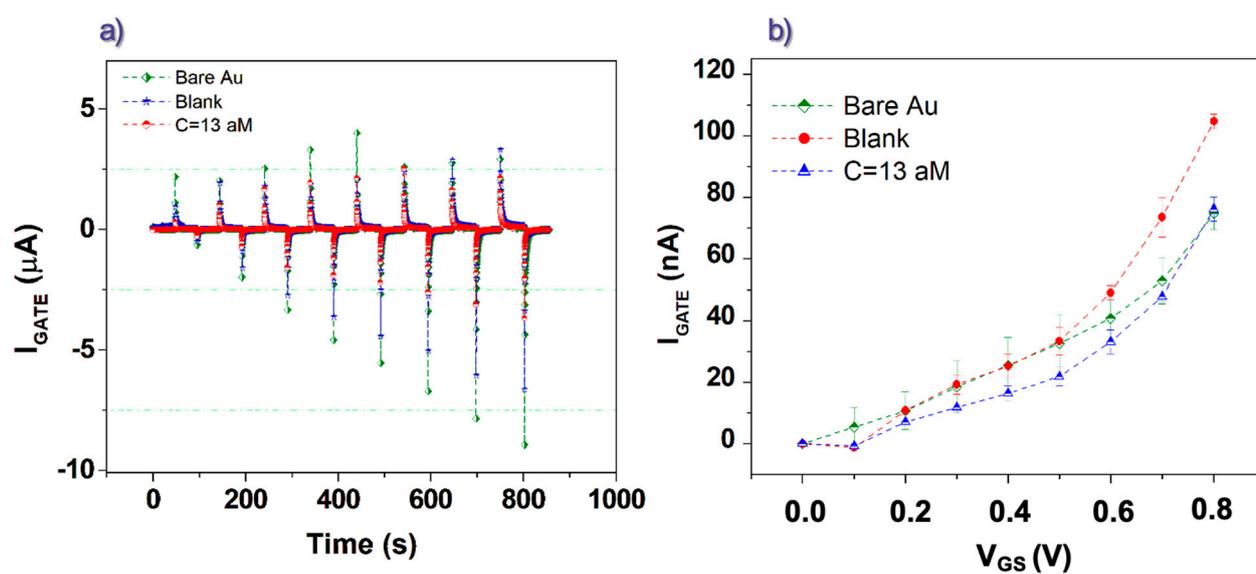


Figure S3. (a) I_{GATE} vs. time (pulse) curves corresponding to the I_{DS} measurements shown in Figure 2a of the main text. (b) Average I_{GATE} values as a function of V_{GS} . Error bars represent the standard deviations.

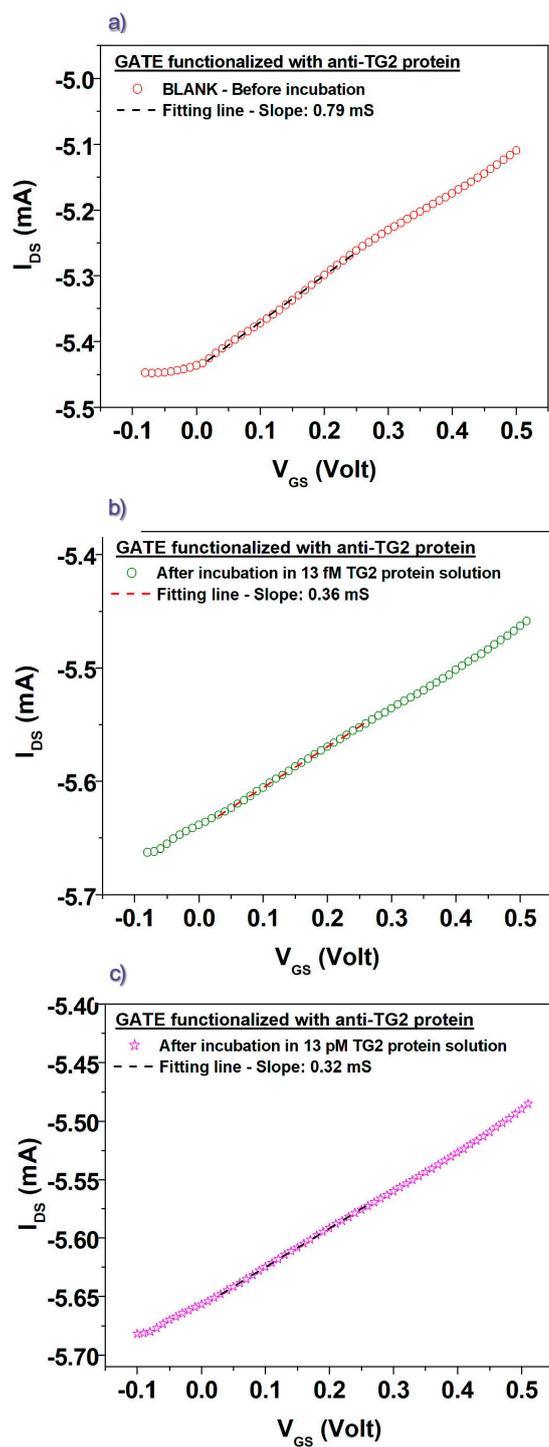


Figure S4. Linear fitting in the low V_{GS} region of transfer curves (at $V_{DS} = -0.1$ V) obtained for a gate electrode functionalized with anti-TG2 antibody (a) before any incubation step (Blank), (b) after incubation in a TG2 protein solution with femtomolar concentration, (c) after incubation in a TG2 protein solution with picomolar concentration.