Supplementary material for: Direct measurement of K+ ion efflux from neuronal cells using graphene-based ion sensitive field effect transistor

Figure S1, Li *et al*.



Fig. S1. Photolithographic microfabrication process step flow of the GISFETs array.



Fig. S2. Optical images of various photolithographic processing steps for the G-ISFET array fabrication. (a) Patterned graphene. (b) Ti/Ni metal stack pattern forming source/drain contacts of the FET. (c) SU-8 photoresist pattern for encapsulation of devices leaving only active sensing window (blue rectangle). (d) ISM film coating and chip wire-bonding to the chip carrier.



Fig. S3. K⁺ ion sensing performances of the single GISFET compared with three devices from GISFET array. A least square fit line (red, dashed) to all the data points is also shown.