

High mobility flexible graphene field-effect transistors and ambipolar radio-frequency circuits

Yiran Liang, Xuelei Liang*, Zhiyong Zhang, Wei Li, Xiaoye Huo, and Lianmao Peng

Key Laboratory for the Physics and Chemistry of Nanodevices and Department of Electronics,

Peking University, Beijing, 100871, P. R. China

Supporting Information

Formation of the PEN/PDMS/rigid substrate structure:

The PDMS base and curing agent were mixed thoroughly with the mass ratio of 10:1, and the mixture was put into a bell-jar dessicator and pumped to remove the air bubble. The clear and bubble free PDMS mixture was spin coated on the rigid substrate with speed of 4000 rpm. Then the PEN film was adhered onto the PDMS surface, and the PEN/PDMS/rigid substrate stack was baked on the hotplate at 115 °C for 10 minutes to cure the PDMS film.

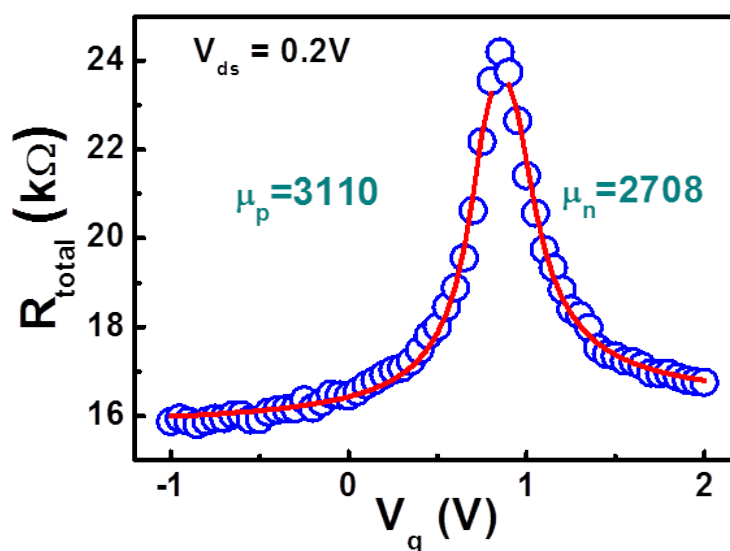


Figure S1 Mobility extraction using the diffusive transport model for device fabricated on PET substrate.