## **Supporting Information**

for

## Nanoscale mapping of dielectric properties based on surface adhesion force measurements

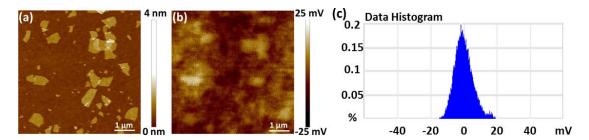
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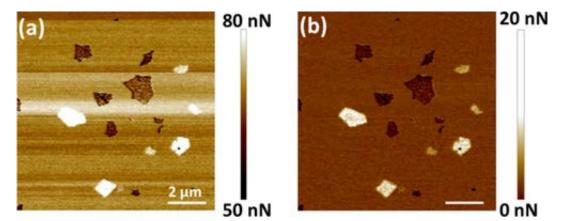
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## Additional experimental data



**Figure S1:** The contact potential difference between the tip and the sample. (a) Height image of GO/RGO hybrid sample in KPFM mode. (b) The corresponding surface potential image to (a). (c) The distribution of surface potential in (b). The measured contact potential difference between the AFM tip and GO/RGO in KPFM mode is between -16 mV and 19 mV.



**Figure S2:** System drift of the raw adhesion image. (a) Raw adhesion image of hybrid GO and rGO sample. (b) Adhesion image after first-order flatten correction of (a).