

Supplementary material

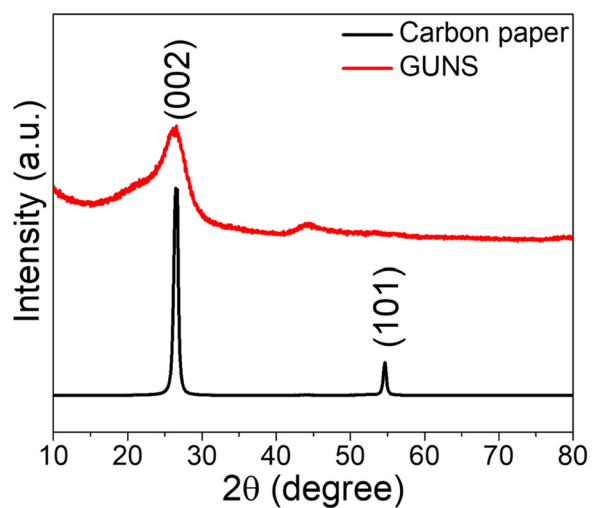


Figure S1: The XRD image of pristine carbon paper and GUNS.

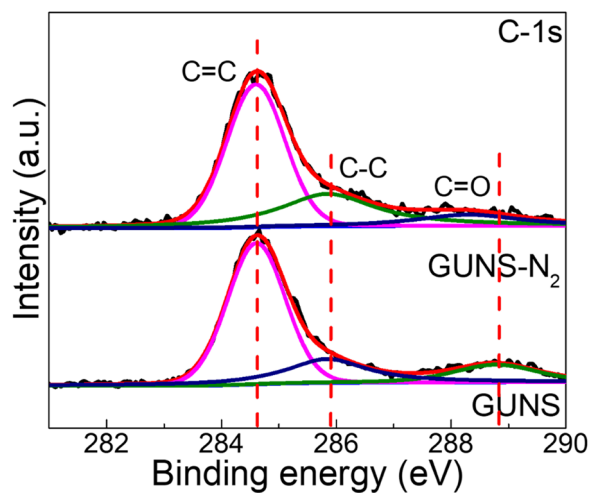


Figure S2: Deconvoluted XPS spectra of C-1s.

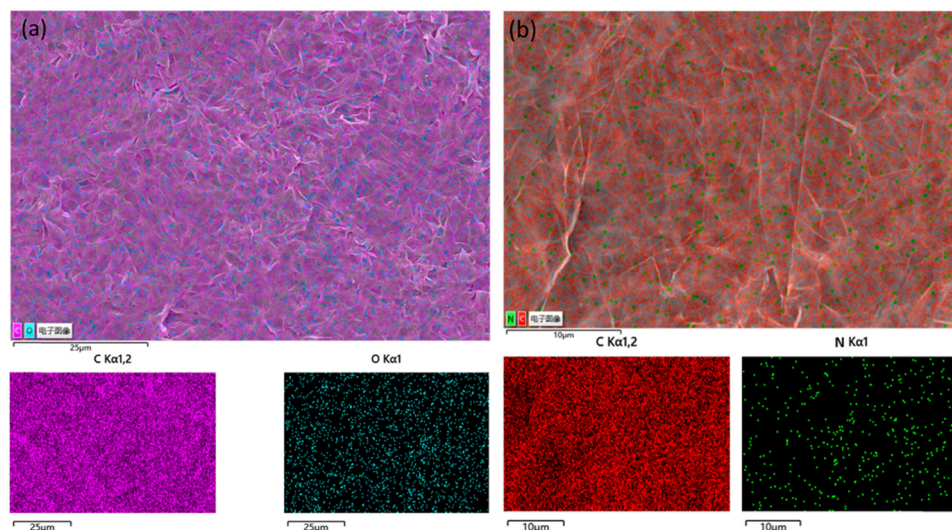


Figure S3: (a) STEM image and elemental mappings of the GUNS and (b) GUNS-N₂.

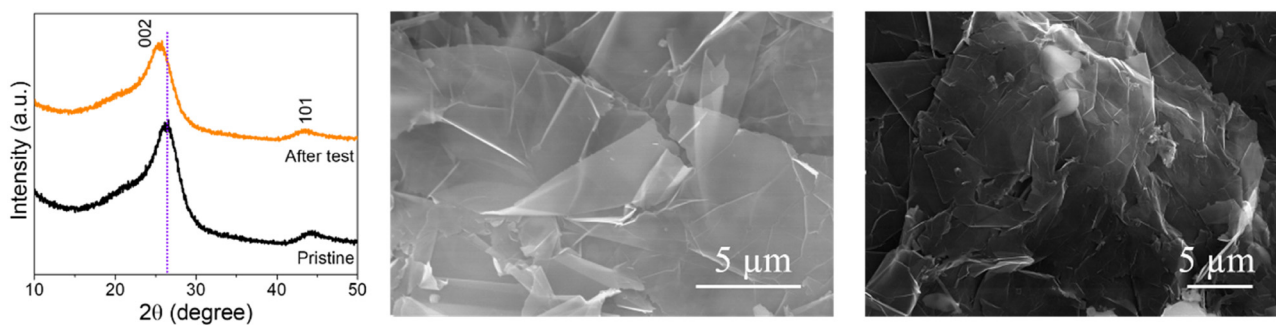


Figure S4: XRD and SEM results of pristine and after electrode test samples.

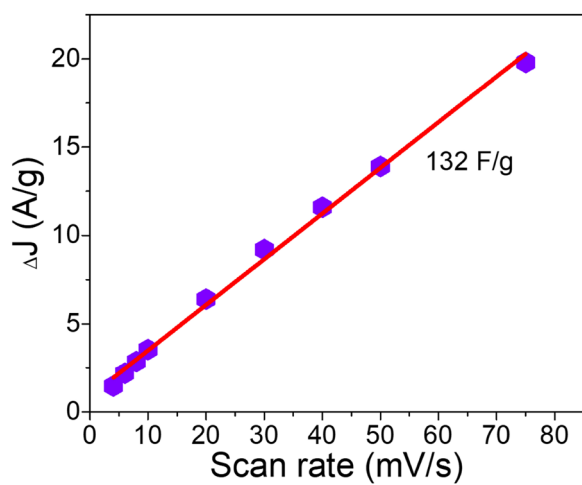


Figure S5: The C_{dl} value of GUNS.