

ARTICLE

Nanosized Graphane ($C_1H_{1.14}$)_n by Hydrogenation of Carbon Nanofibers by Birch Reduction Method

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SUPPORTING INFORMATION

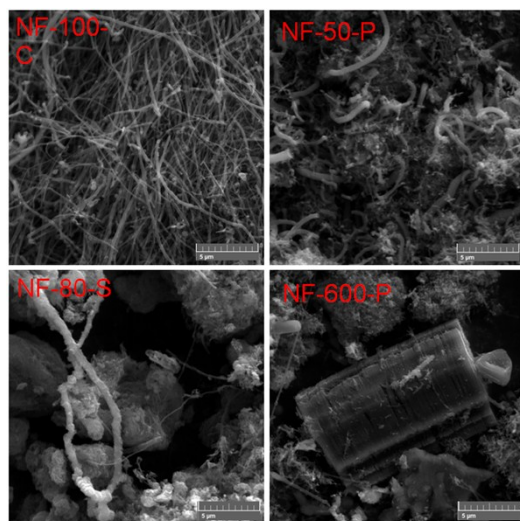


Figure SI 1 The SEM images of graphite nanofibers used for hydrogenation. The scale bar corresponds to 1 μm.

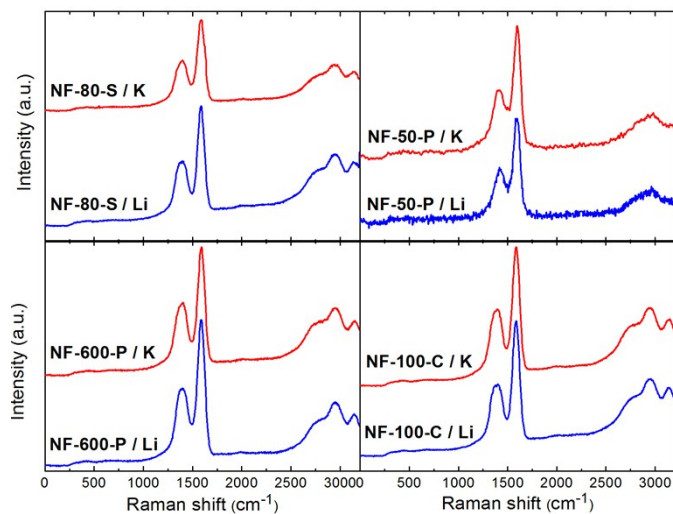


Figure SI 2 The Raman spectra of hydrogenated graphite nanofibers measured with He-Cd laser (325 nm, 2 mW).

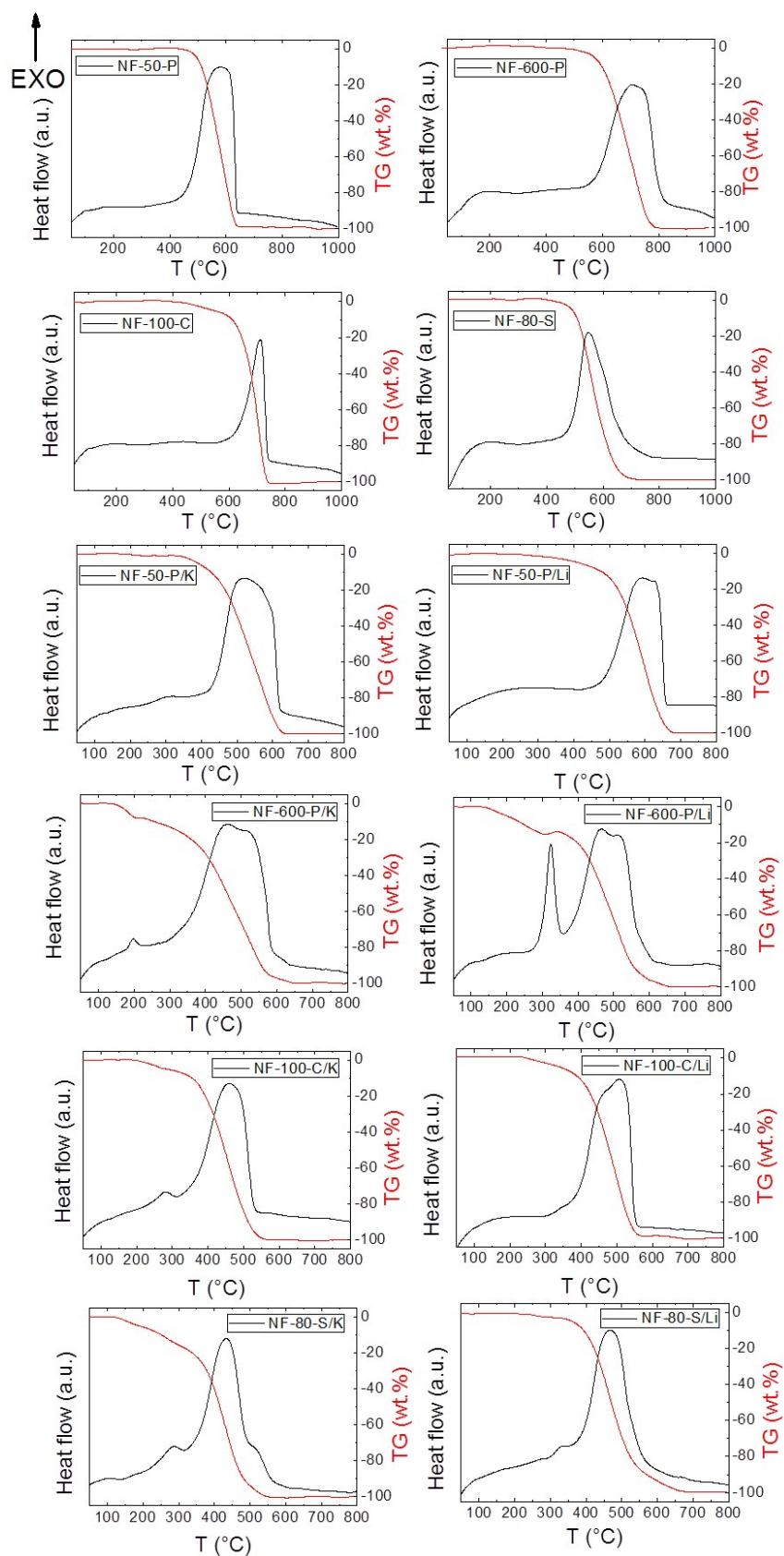


Figure SI 3 Simultaneous thermal analysis of graphanes and the starting materials in air atmosphere.

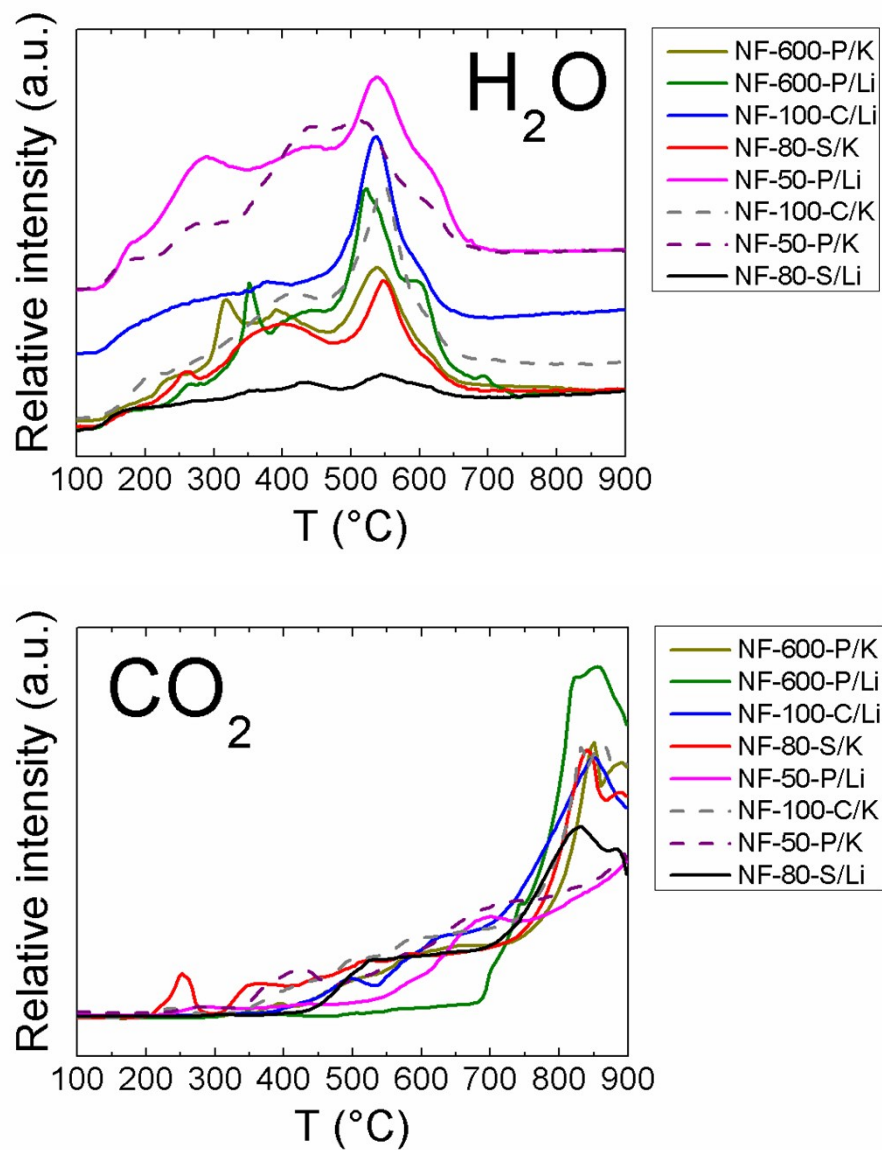


Figure SI 4 Temperature dependence of relative intensity of the evolved water and carbon dioxide.

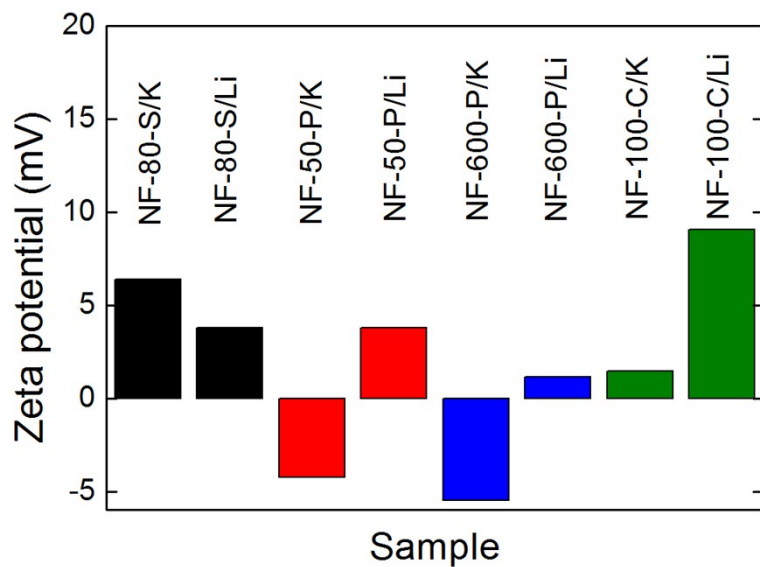


Figure SI 5 The ζ -potential of hydrogenated graphite nanofibers.

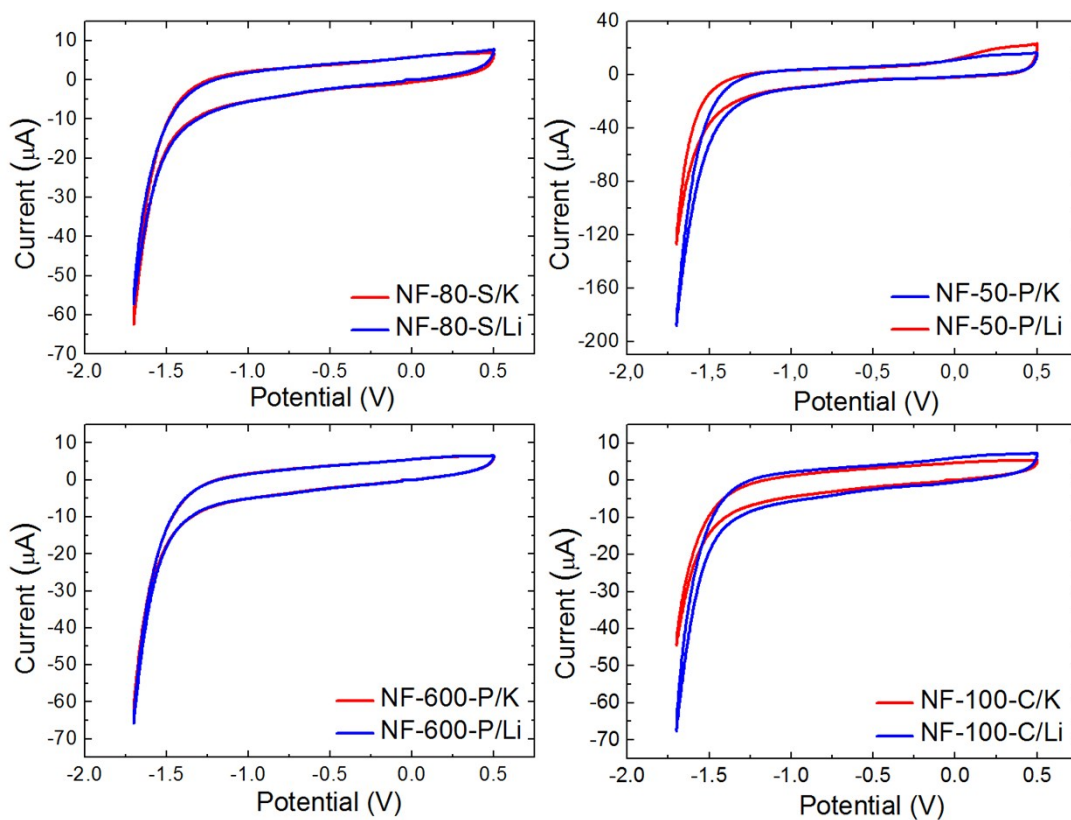


Figure SI 6 The inherent electrochemistry of hydrogenated graphite nanofibers. Measurement was performed in PBS ($c=0.05$ M, $\text{pH}=7.2$).

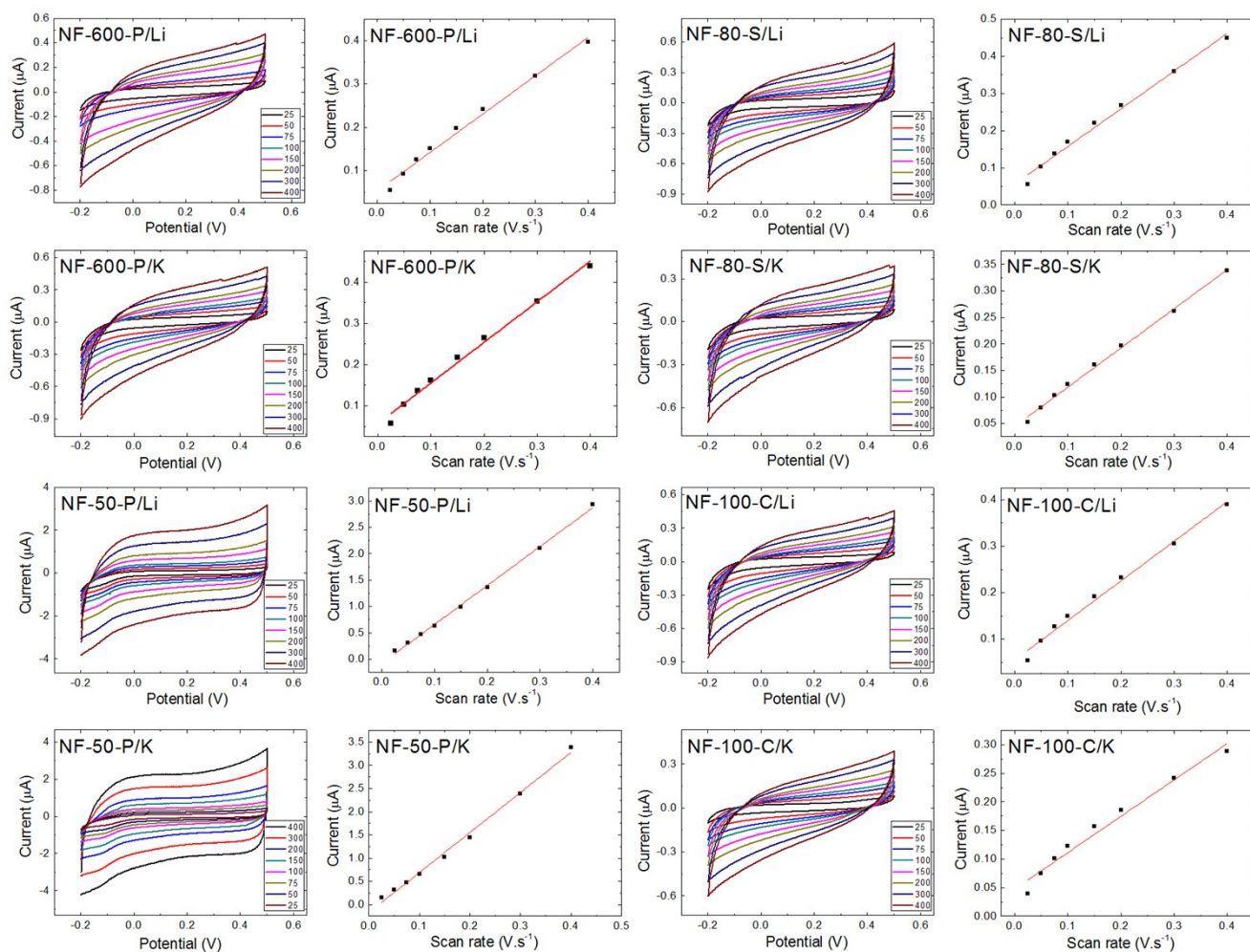


Figure SI 7 The cyclic voltammograms at different scan rate in the range of 25 to 400 $\text{mV}\cdot\text{s}^{-1}$ and the corresponding dependence of current on the scan rate. Measurement was performed in PBS ($c=0.05$ M, $\text{pH}=7.2$).