

Supporting Information *for the article:*

Tellurium Nanowire-Induced Room Temperature Conversion of Graphite Oxide to Leaf-Like Graphenic Structures

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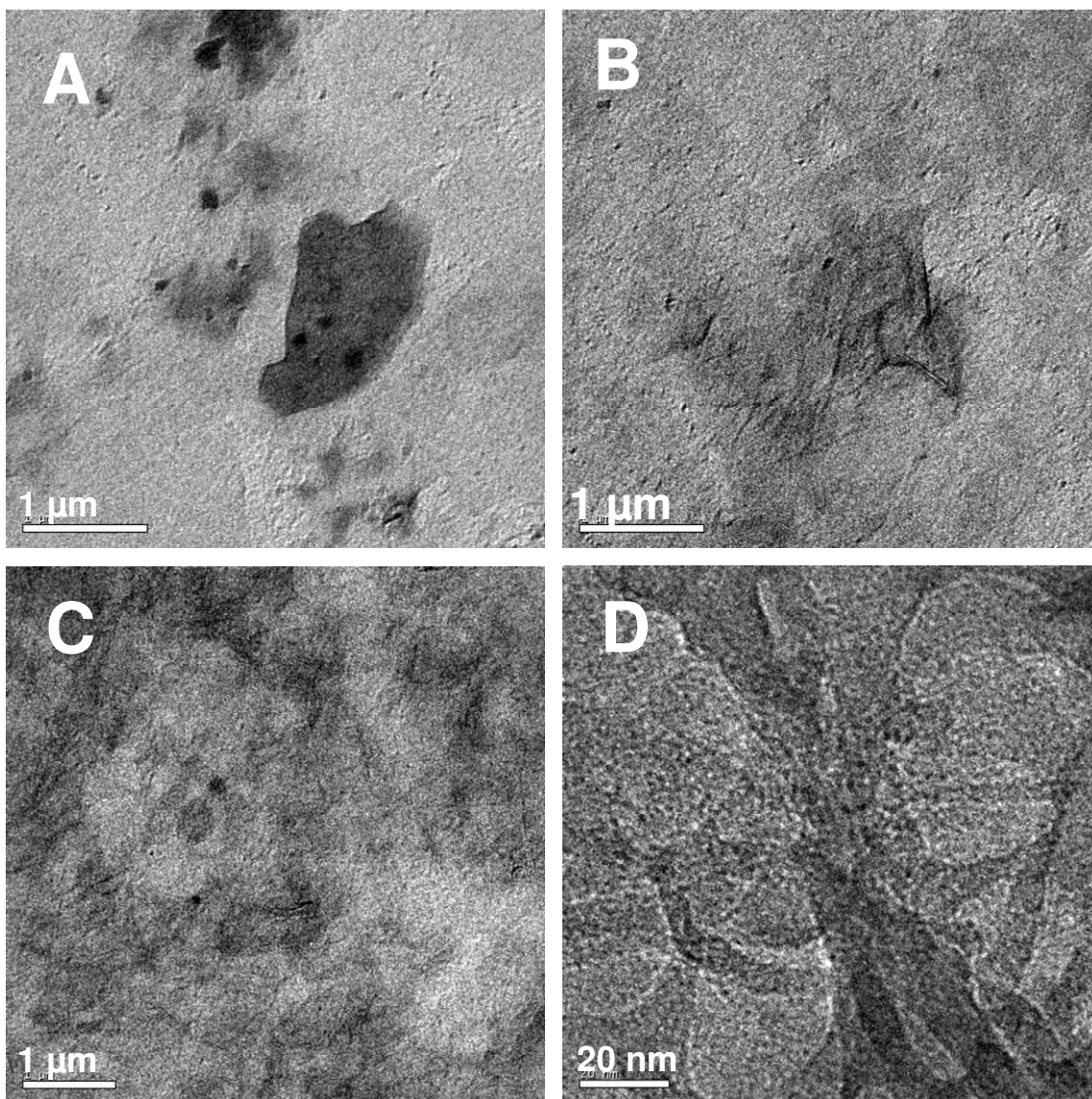


Figure S1. TEM images of GO before the reaction.

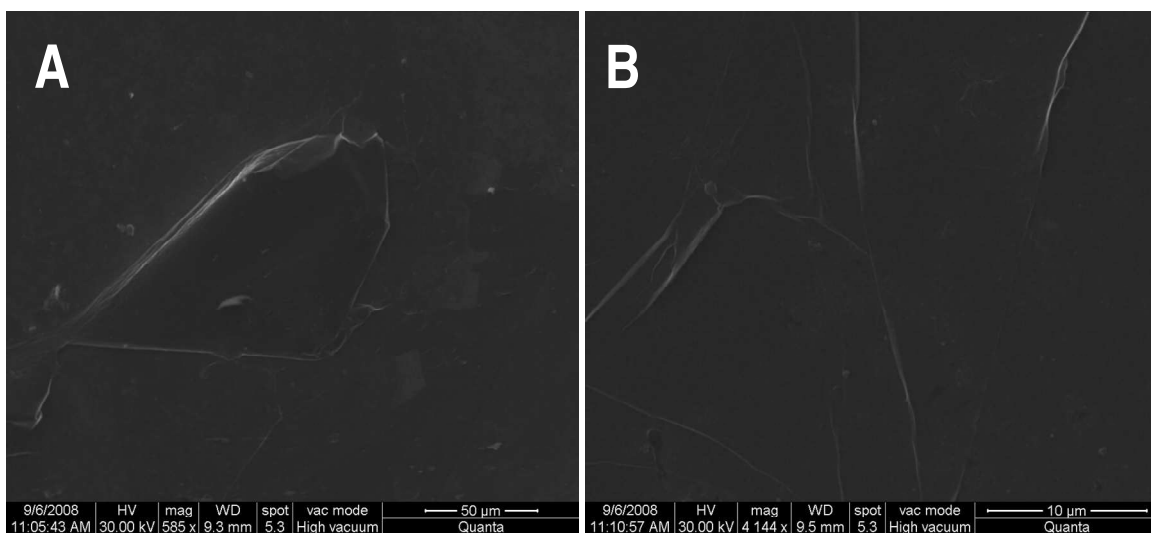


Figure S2. SEM images of GO sheets before the reaction.

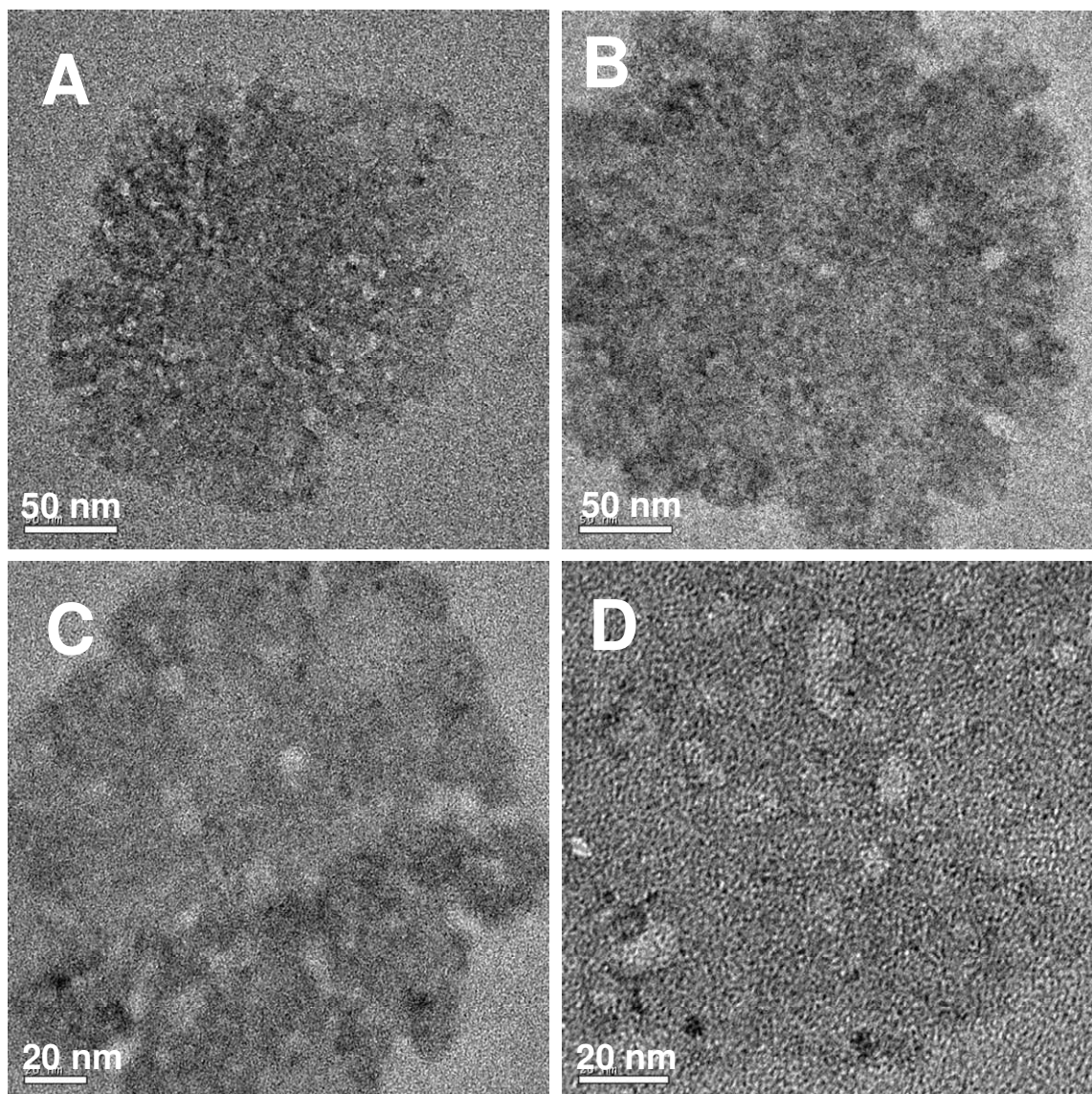


Figure S3. TEM images of leaf-like RGO structures after the completion of the reaction.

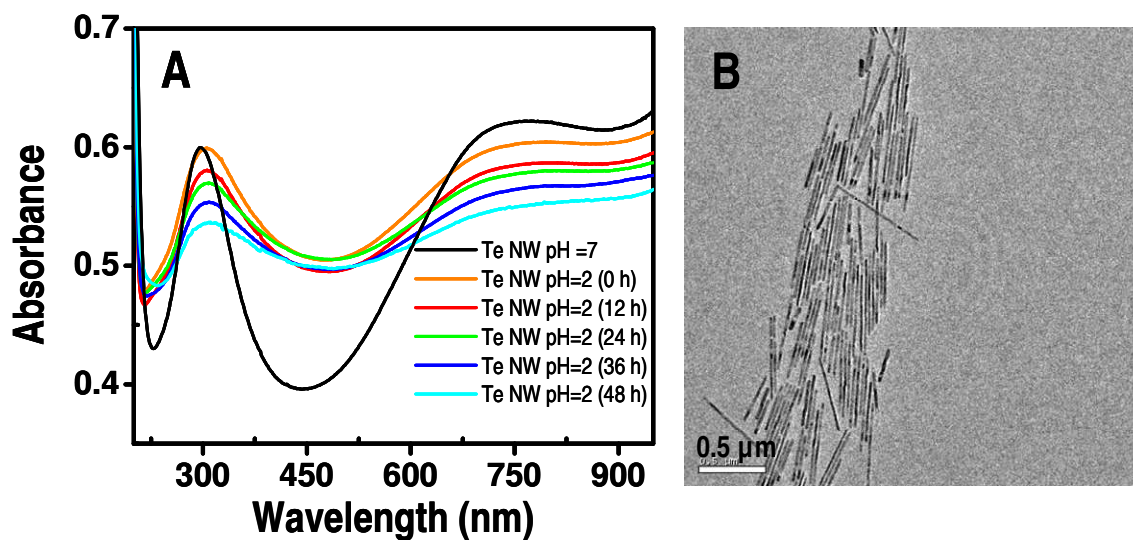


Figure S4. A) Time dependent UV/ Vis spectra of Te NW at pH = 2, showing the stability of the structure. B) Large area TEM image taken after 36 h of exposure to pH 2.

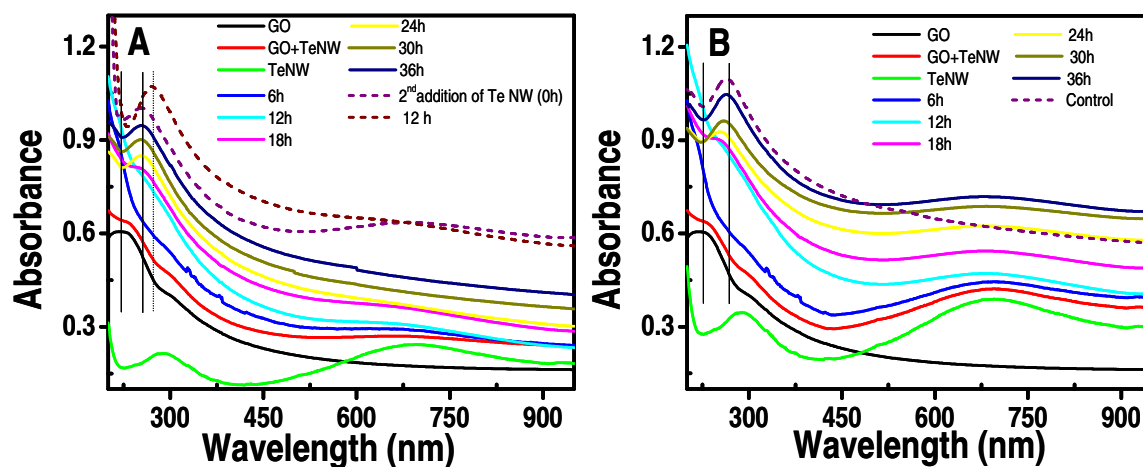


Figure S5. Time dependent UV/Vis spectra of the reaction between Te NW and GO. A) 2 mL of Te NW (less than the actual amount used for synthesis) dispersion was added to 27 mL of GO. After 36 h, 1 mL Te NW was added (denoted by dotted line). Spectrum was measured after 12 h. B) 5 mL of Te NW dispersion (more than the actual amount used for synthesis) to 27 mL of GO. Dotted line in B corresponds to original synthesis where 3 mL Te NW was added to 27 mL 0.5 wt % GO dispersion. Initial peak position of GO and that after the formation of RGO structures are marked.

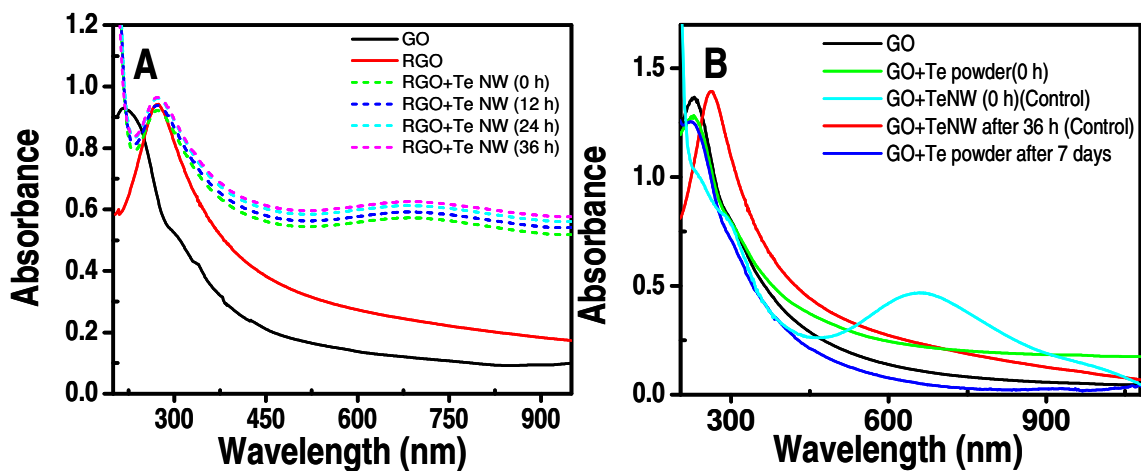


Figure S6. A) Time dependent UV/Vis spectra obtained after extra addition of 1 mL Te NW after the completion of reduction. Spectra obtained after the extra addition are given by dotted line. B) Time-dependent UV/Vis spectra of reaction between Te powder and GO.

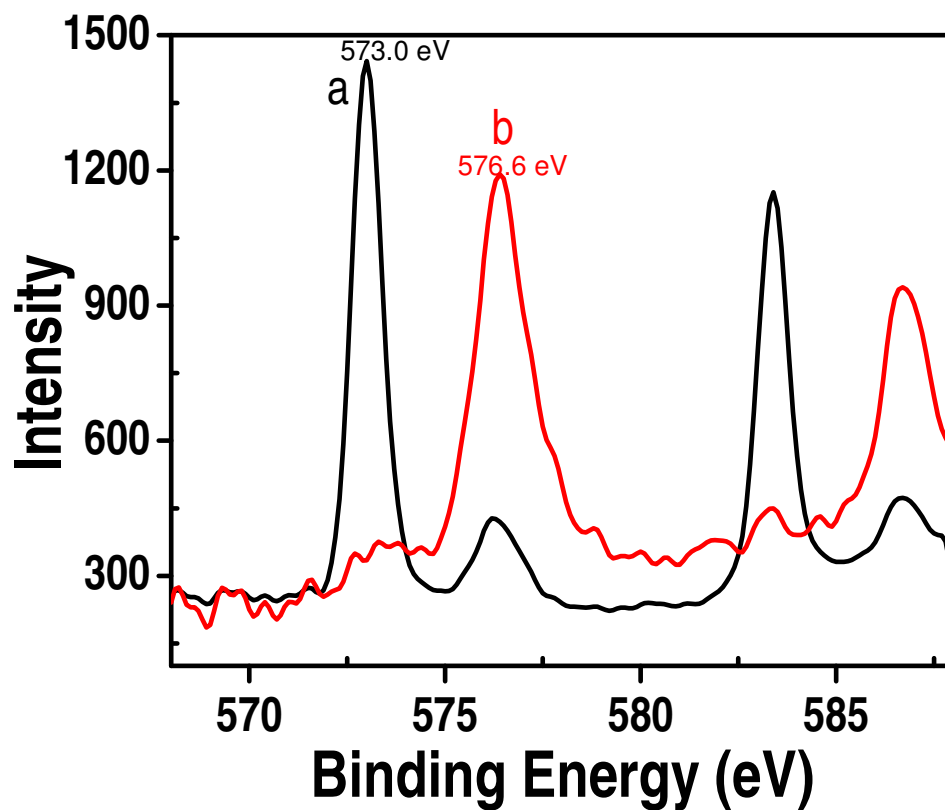


Figure S7. XPS spectrum in the Te 3d region a) before and b) after reaction.

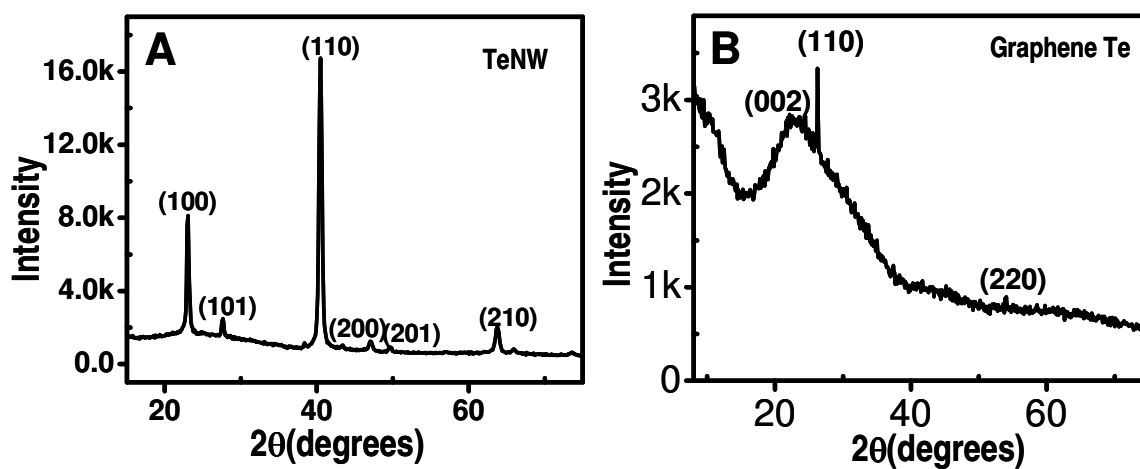


Figure S8. XRD patterns of A) Te NWs before the reaction and B) after the reaction showing the presence of graphenic (002) and of TeO₂ [(110) and (220)] reflections. Peaks are labeled.