

## SUPPORTING INFORMATION

# 3D Graphene Oxide-Polyethylenimine Scaffolds for Cardiac Tissue Engineering

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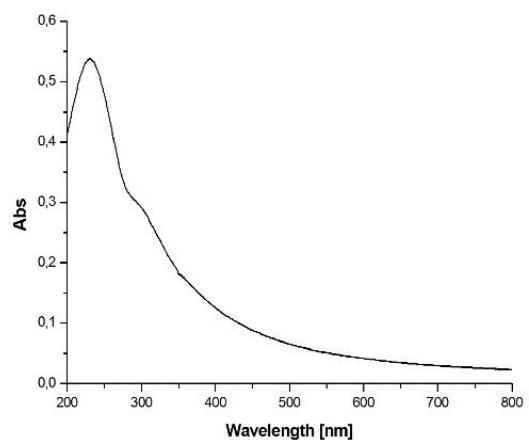
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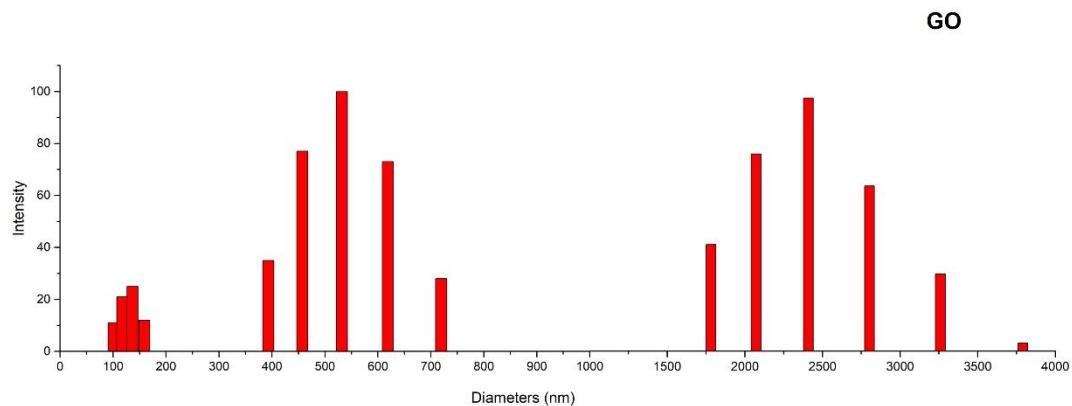
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## 1. UV-vis spectrophotometry



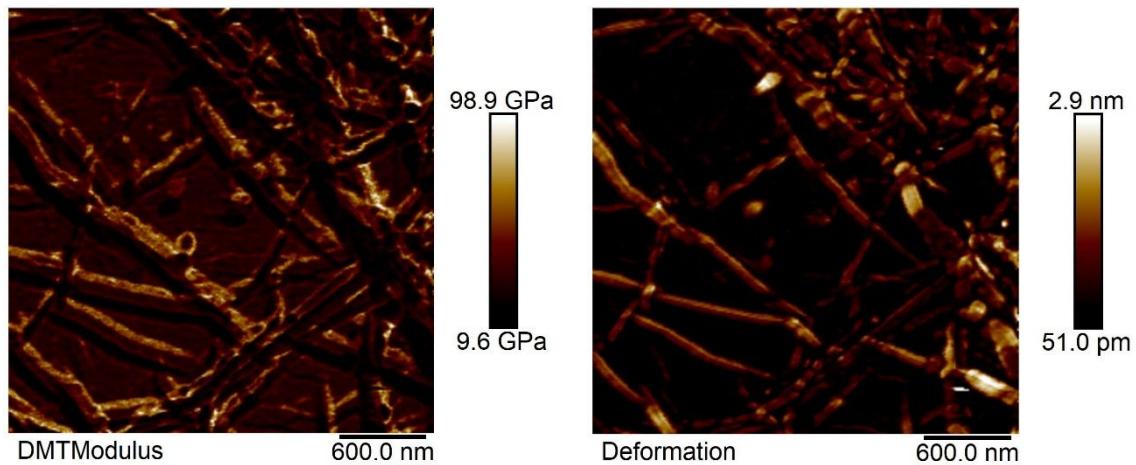
**Figure S1.** UV-vis spectra of 10 µg/mL GO dispersion.

## 2. DLS analysis

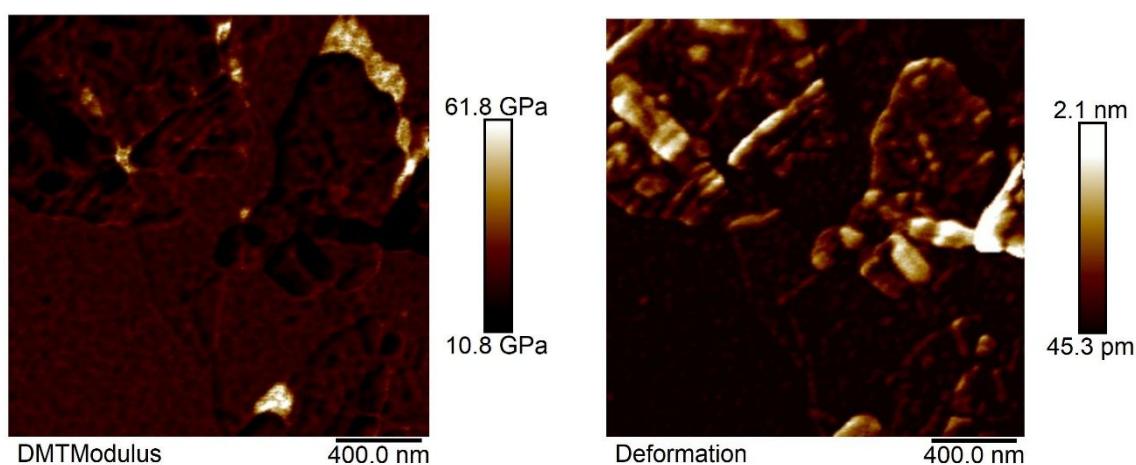


**Figure S2.** DLS measurement of commercial GO aqueous dispersions.

### 3. AFM analysis

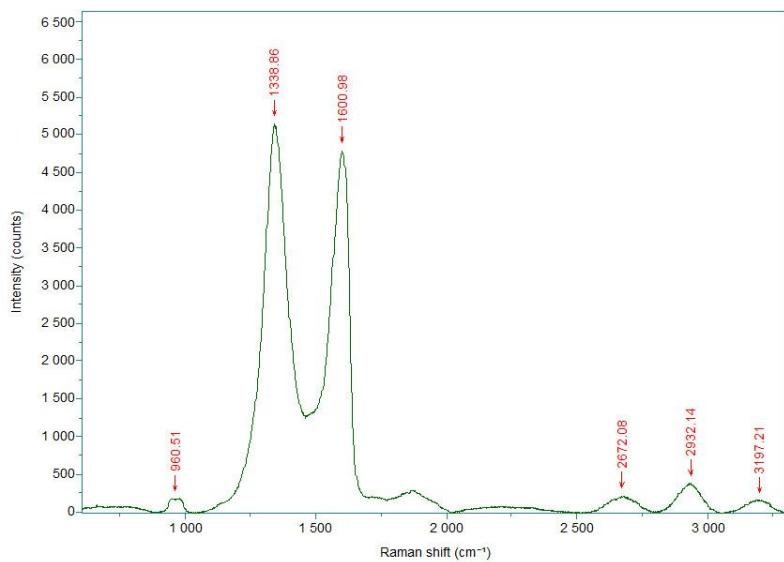


**Figure S3.** PFQNM mode DMT Modulus and Deformation channels of  $\text{GO}_1\text{-PEI}$  sample.

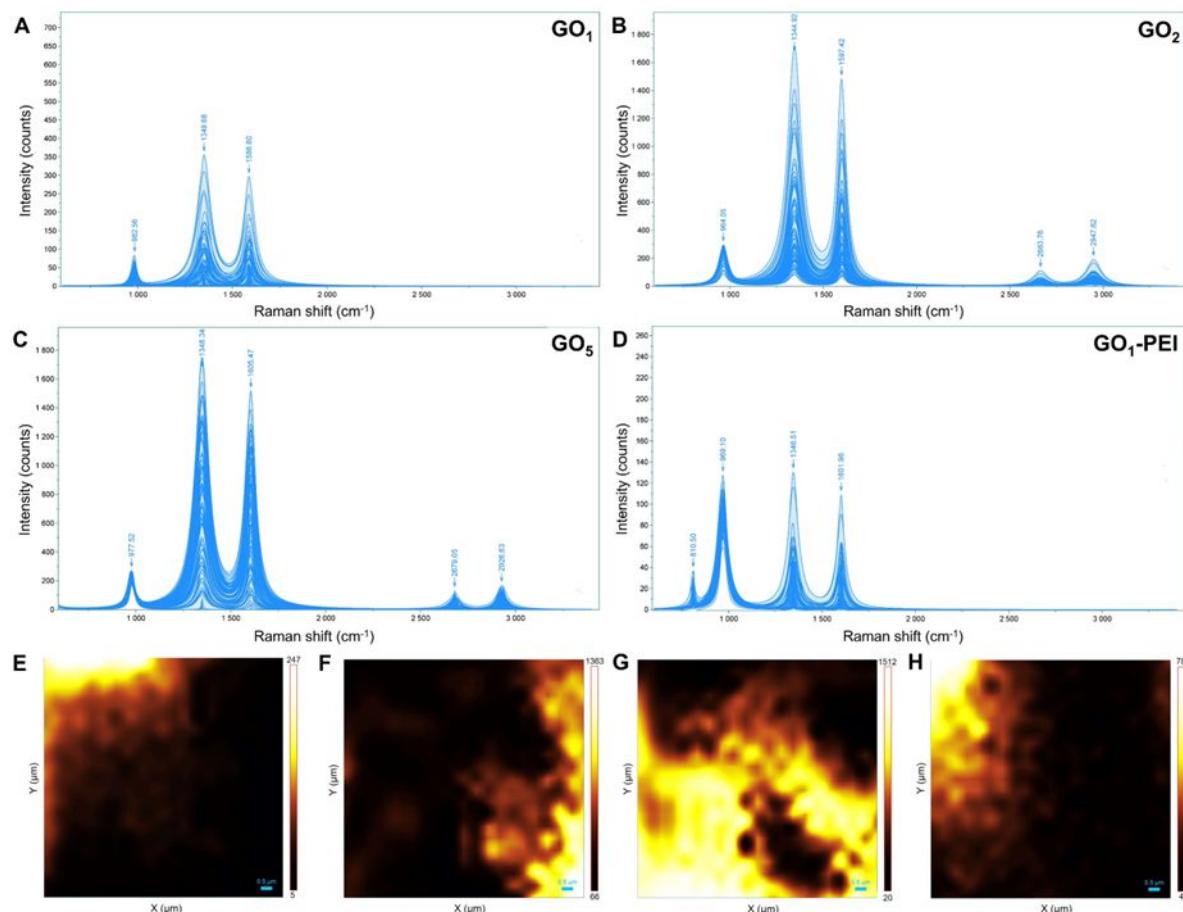


**Figure S4.** PFQNM mode DMT Modulus and Deformation channels of  $\text{GO}_1$  sample.

#### 4. Raman spectroscopy

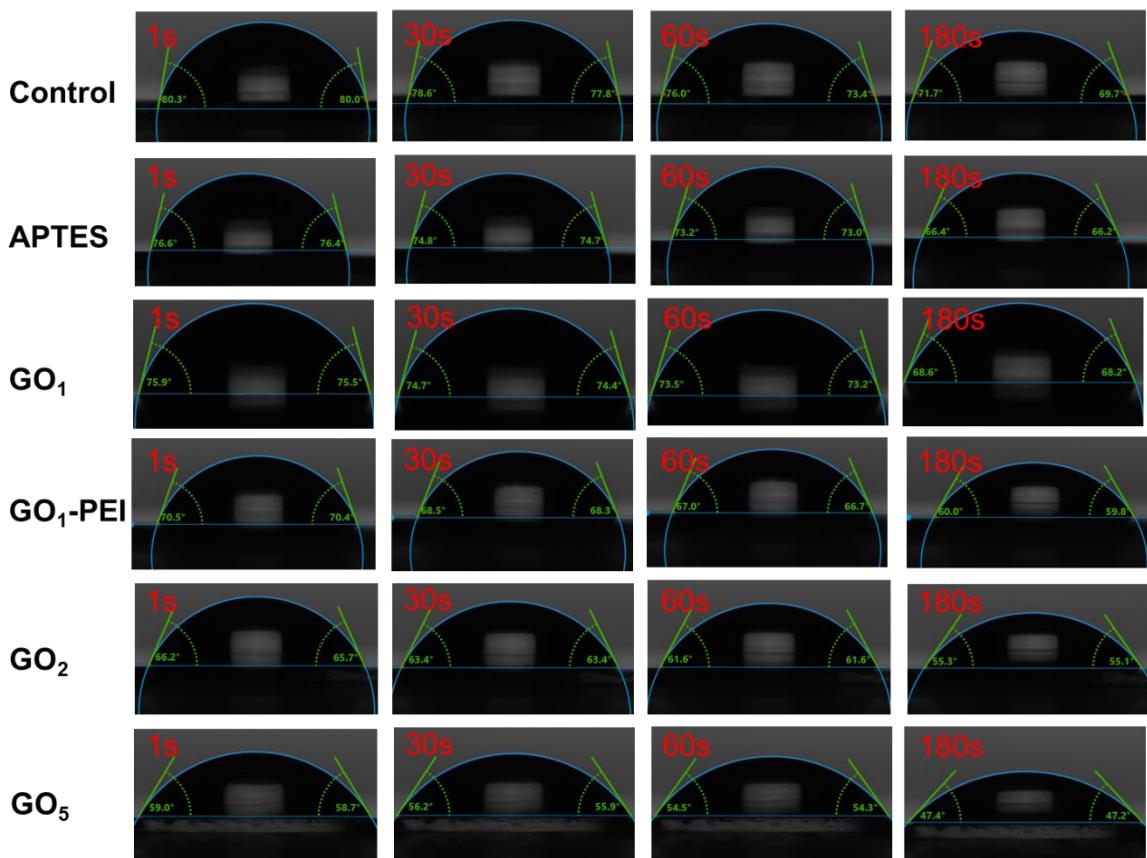


**Figure S5.** Raman spectra of commercial GO deposited onto silicon wafer.

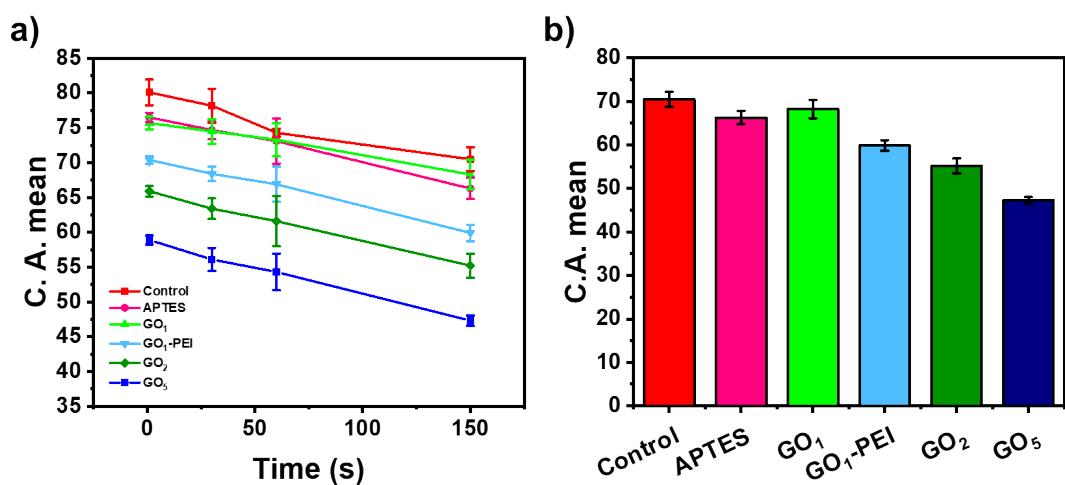


**Figure S6.** Cumulative Raman spectra for an area of 100 μm<sup>2</sup> of (A) GO<sub>1</sub>, (B) GO<sub>2</sub>, (C) GO<sub>5</sub> and (D) GO<sub>1</sub>-PEI substrates and relevant Raman mapping of G band intensity on the same 100 μm<sup>2</sup> region of (E) GO<sub>1</sub>, (F) GO<sub>2</sub>, (G) GO<sub>5</sub> and (H) GO<sub>1</sub>-PEI substrates. Scale bar 0.5 μm.

## 5. Water contact angle measurements



**Figure S7.** Water contact angle measurements for the investigated samples at different times.



**Figure S8.** a) C.A. mean values for the investigated samples at different times and b) comparison of C.A. values determined at 150 s for the investigated samples.