## Supplementary Materials: Development of In-Situ Poled Nanofiber-Based Flexible Piezoelectric Nanogenerators for Self-Powered Motion Monitoring

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**Figure S1.** FESEM image showing the PVDF GO NF with **A**) 2 wt% GO aligned, **B**) 7 wt% GO aligned, **C**) 2 wt% GO random, **D**) 7wt% GO random.



Figure S2. FTIR showing the characteristic peak of GO in the PGRNF and PGANF.



**Figure S3.** Comparison of the relative proportion of  $\beta$  phase obtained from both XRD and FTIR.



Figure S4. Photograph showing the flexibility of PEGANF FENGs.



**Figure S5.** The piezoelectric voltage generated from the PEGANF FENG under different mechanical vibration frequencies