Electronic Supporting Information

For

Amino-functionalization on Graphene Oxide Sheets Using an Atomic Layer
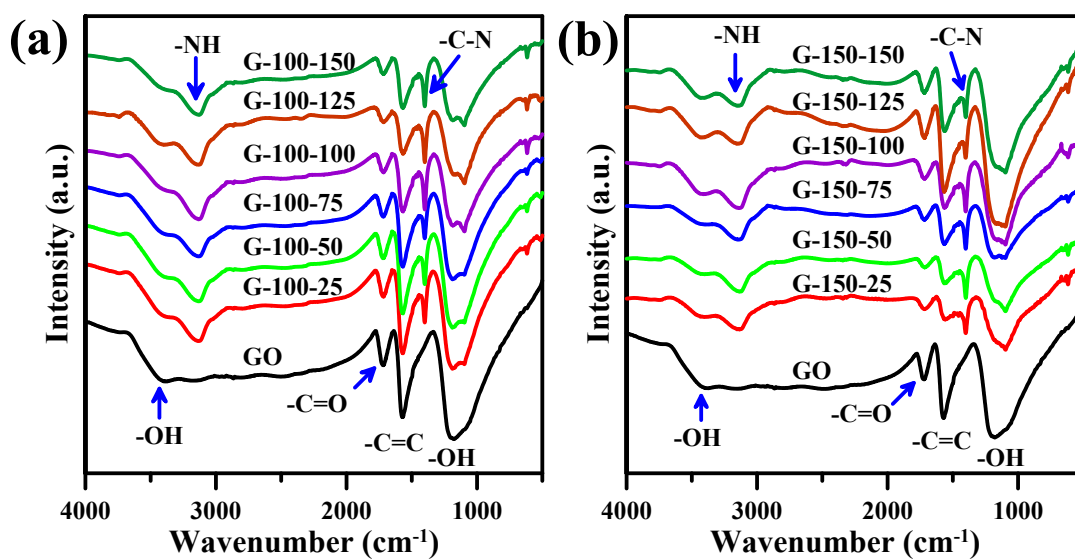
Amidation Technique

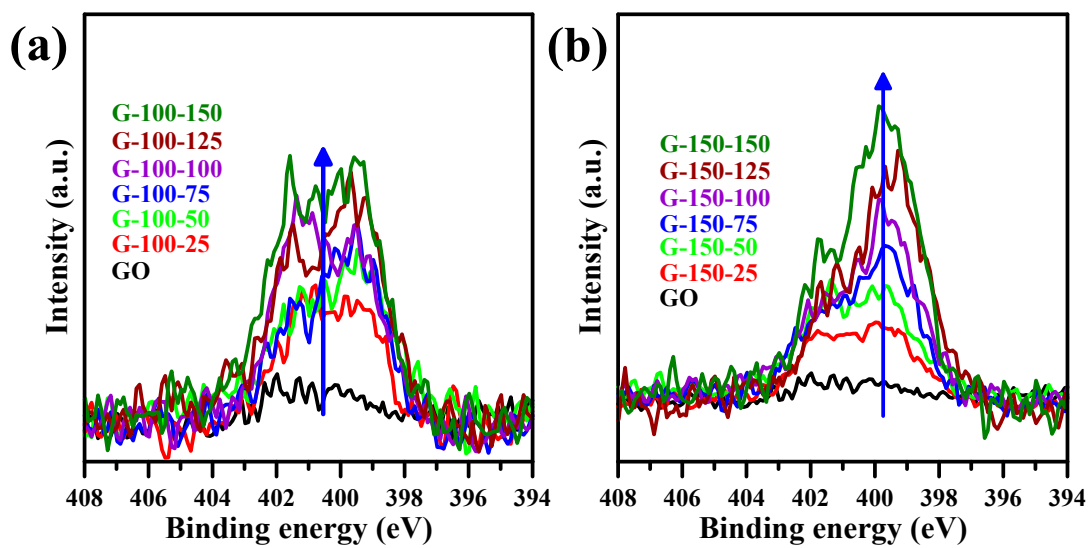Figure S1.   FT-IR spectra of pristine GO and ALN-GO samples at (a) 100 and (b) 150°C.

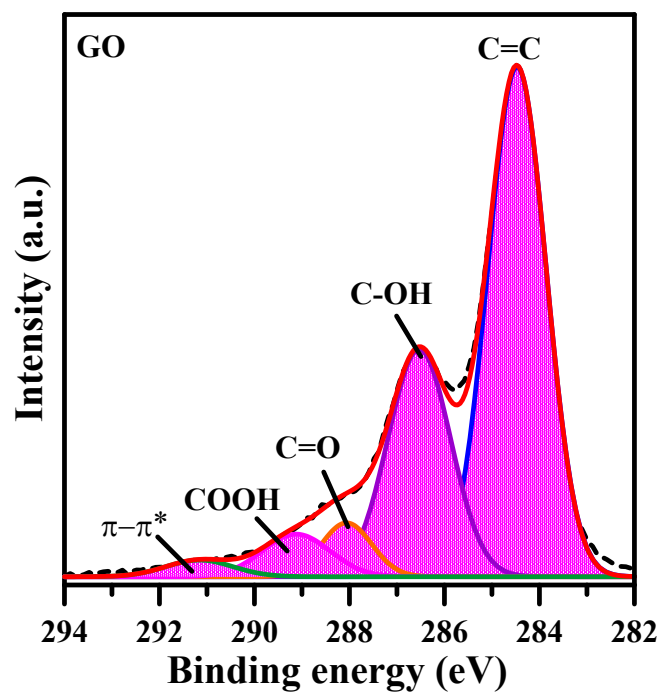Figure S2. XPS N 1s spectra of pristine GO and ALN-GO samples at (a) 100 and (b) 150°C.

Figure S3. XPS C 1s spectrum of pristine GO sample, deconvoluted using a multiple Gaussian function.
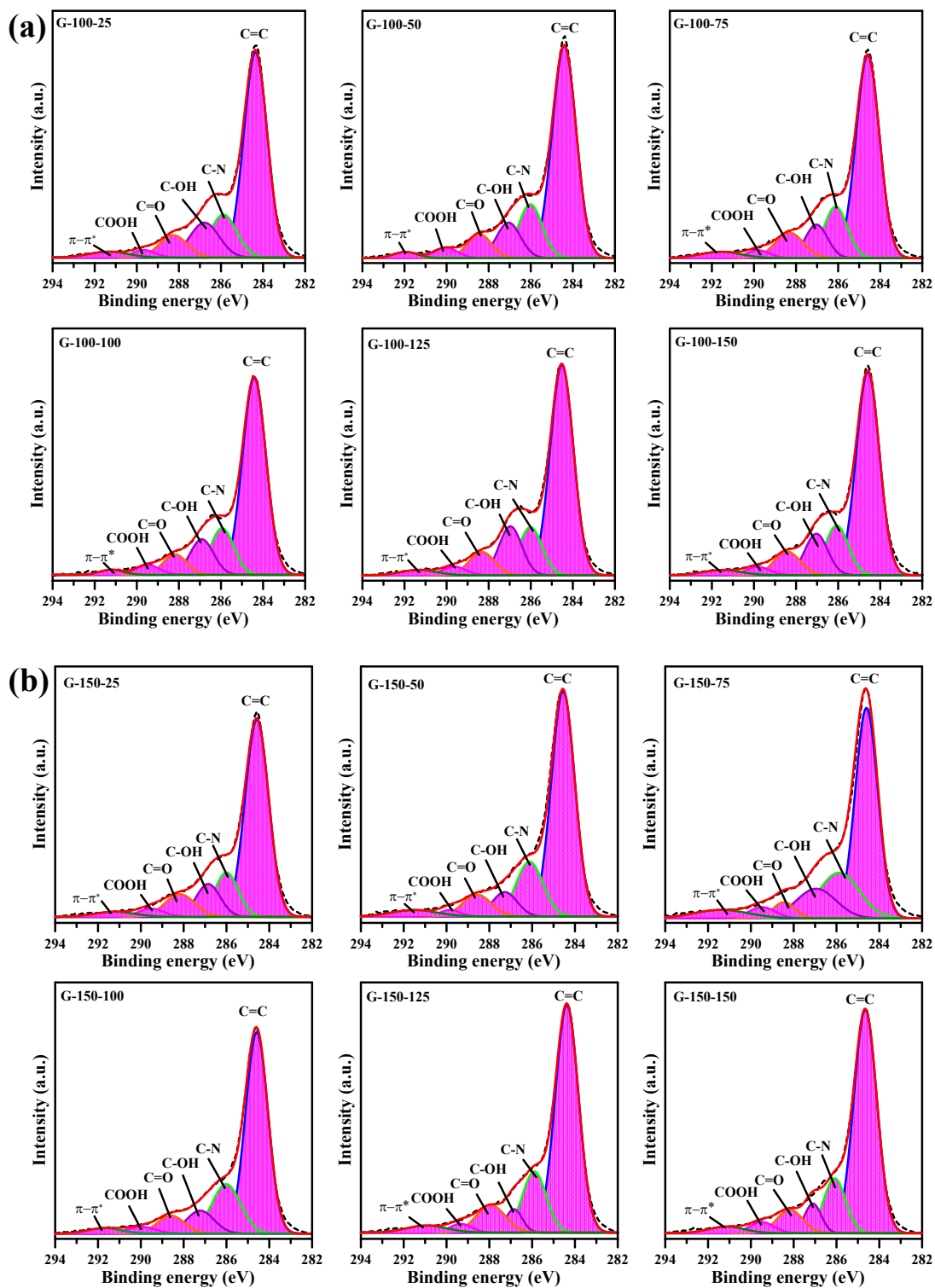
Figure S4. High-resolution C 1s spectra of ALN-GO samples operated at (a) 100 and (b) 150°C, deconvoluted using a multiple Gaussian function.
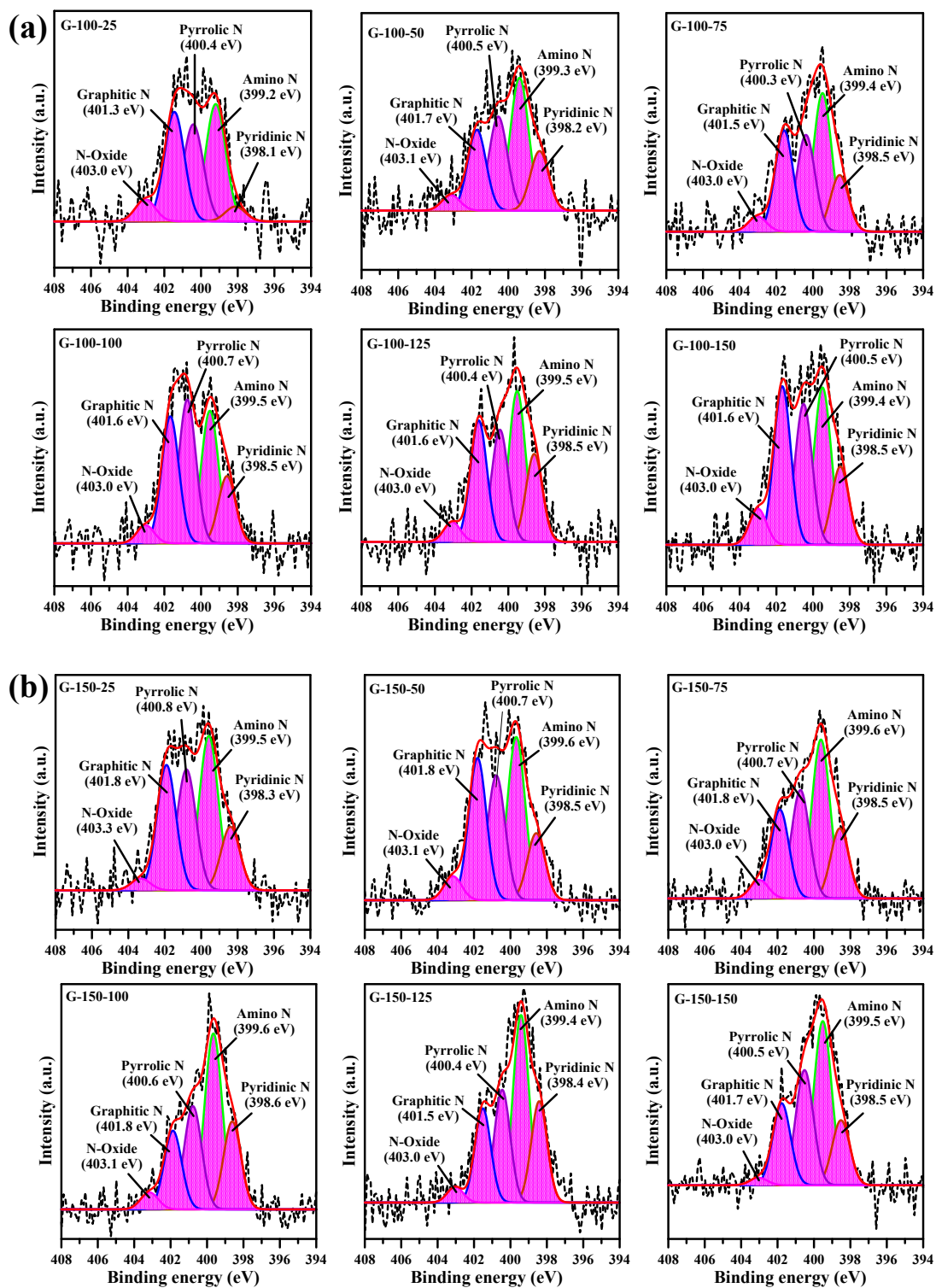
Figure S5. High-resolution N 1s spectra of ALN-GO samples operated at (a) 100 and (b) 150°C, deconvoluted using a multiple Gaussian function.
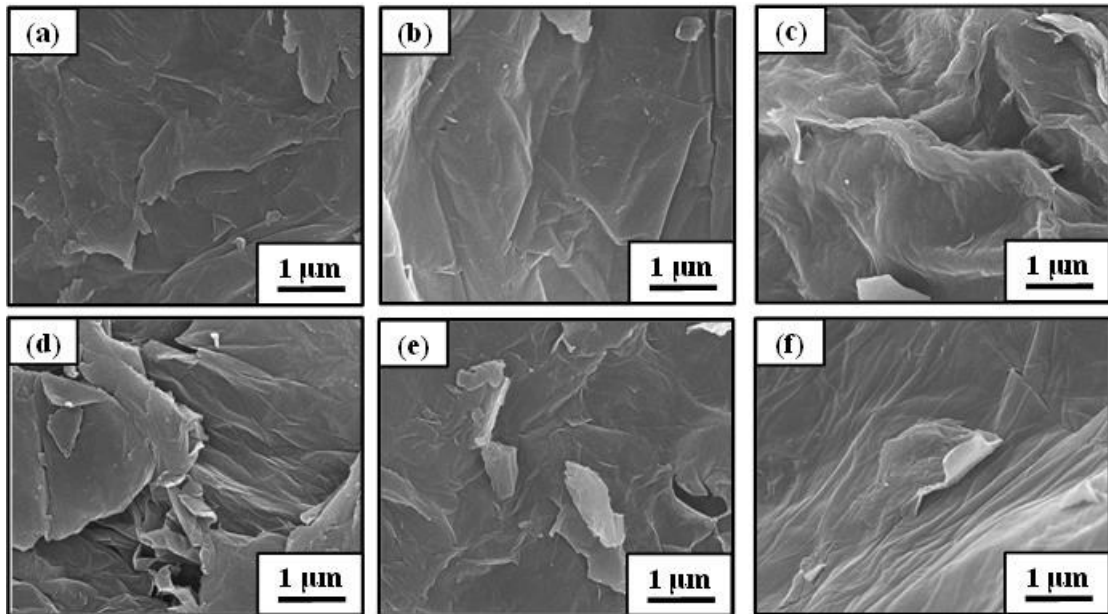
Figure S6.   FE-SEM images of ALN-GO samples operated at 100°C: (a) G-100-25, (b) G-100-50, (c) G-100-75, (d) G-100-100, (e) G-100-125, and (f) G-100-150.
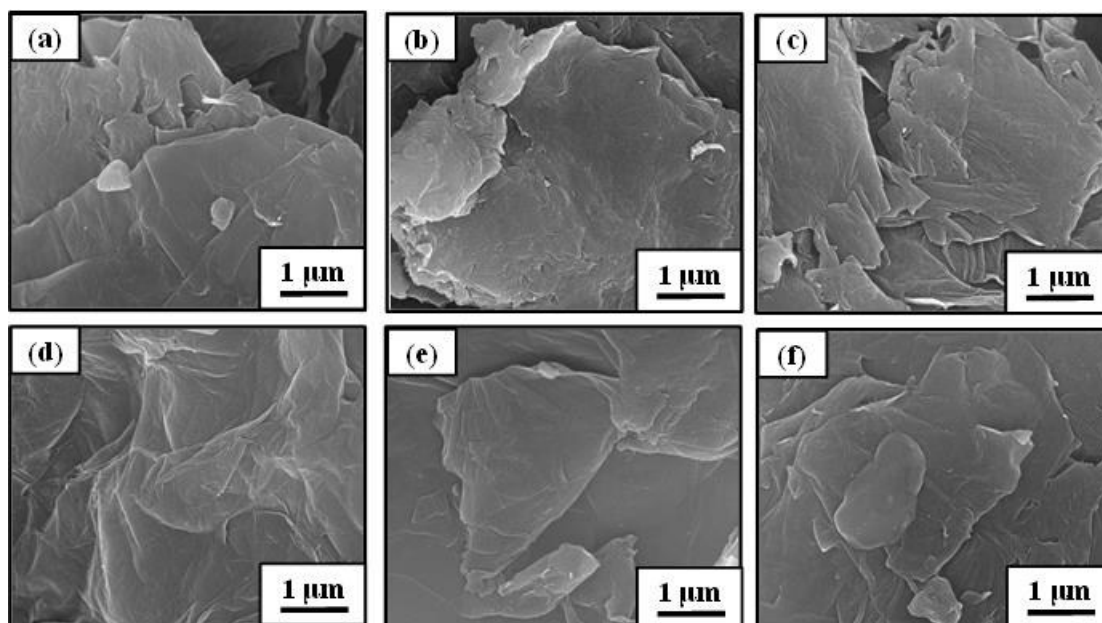
Figure S7.   FE-SEM images of ALN-GO samples operated at 150°C: (a) G-150-25, (b) G-150-50, (c) G-150-75, (d) G-150-100, (e) G-150-125, and (f) G-150-150.
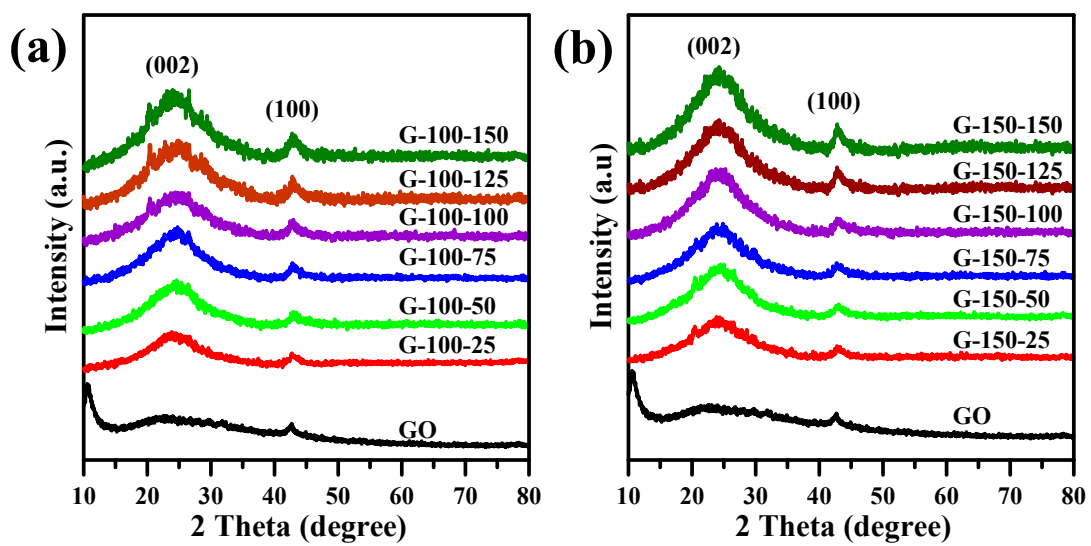
Figure S8.   Typical XRD patterns of pristine GO and ALN-GO samples operated at
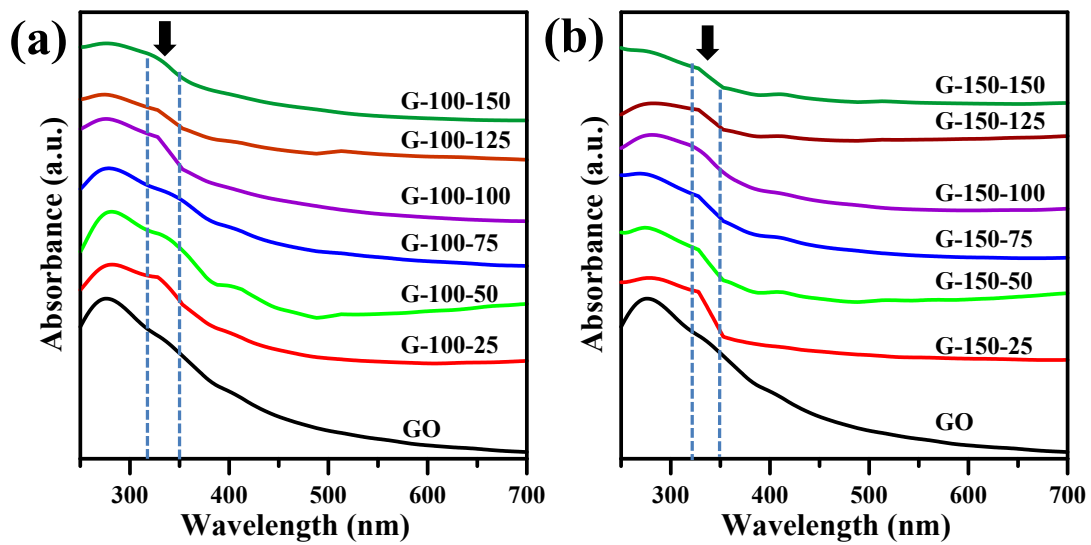
(a) 100 and (b) 150°C.

Figure S9.   UV-vis absorbance spectra of ALN-GO samples operated at (a) 100, (b) 150, and (c) 200°C. The arrows indicate the absorbance of C=N groups after ALN treatment.
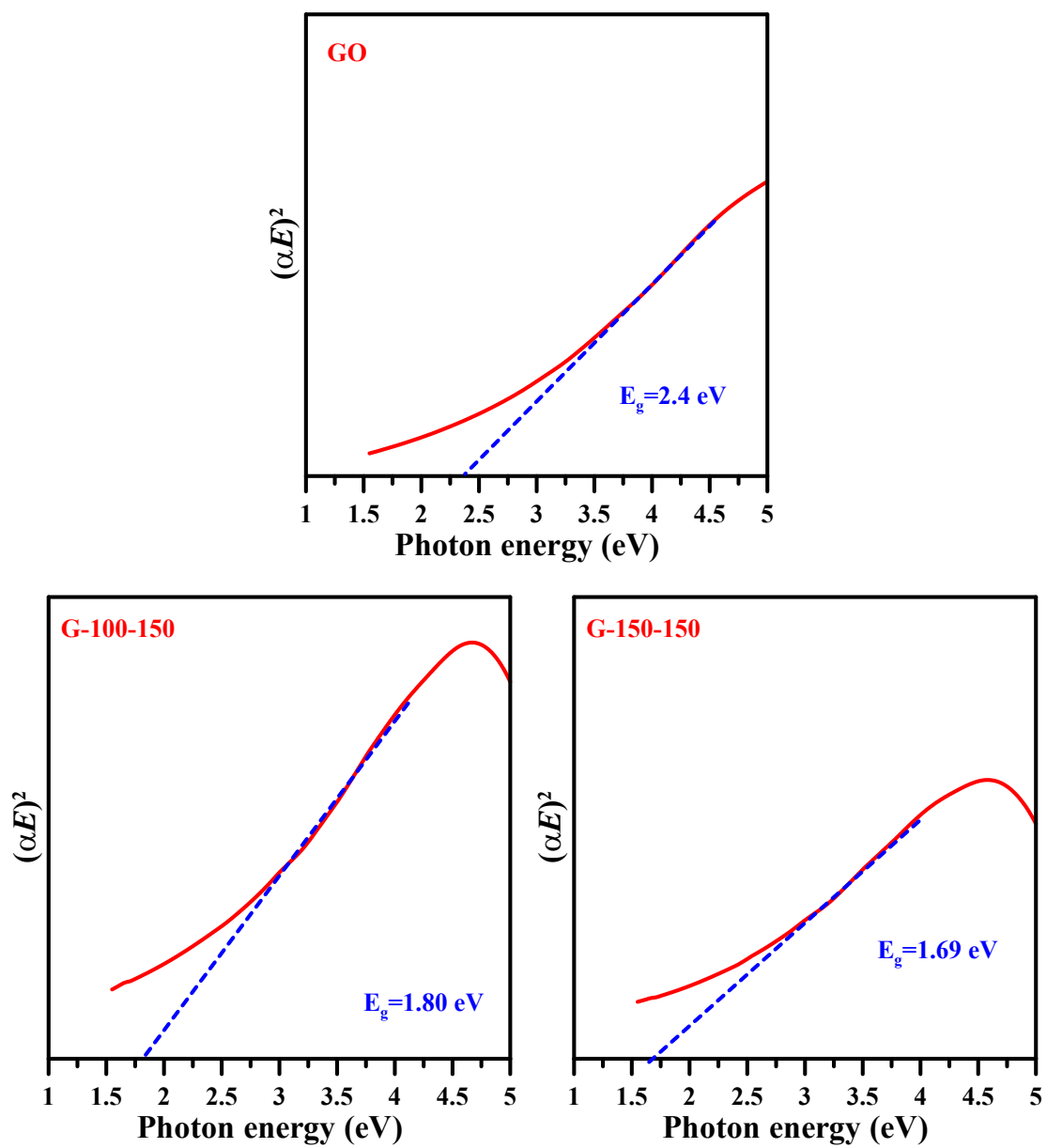
Figure S10.   Tauc's plots of pristine GO and ALN-GO samples operated at 100 and 150°C.