Supplementary Material

Wet Synthesis of Graphene-Polypyrrole Nanocomposites via Graphite Intercalation Compounds

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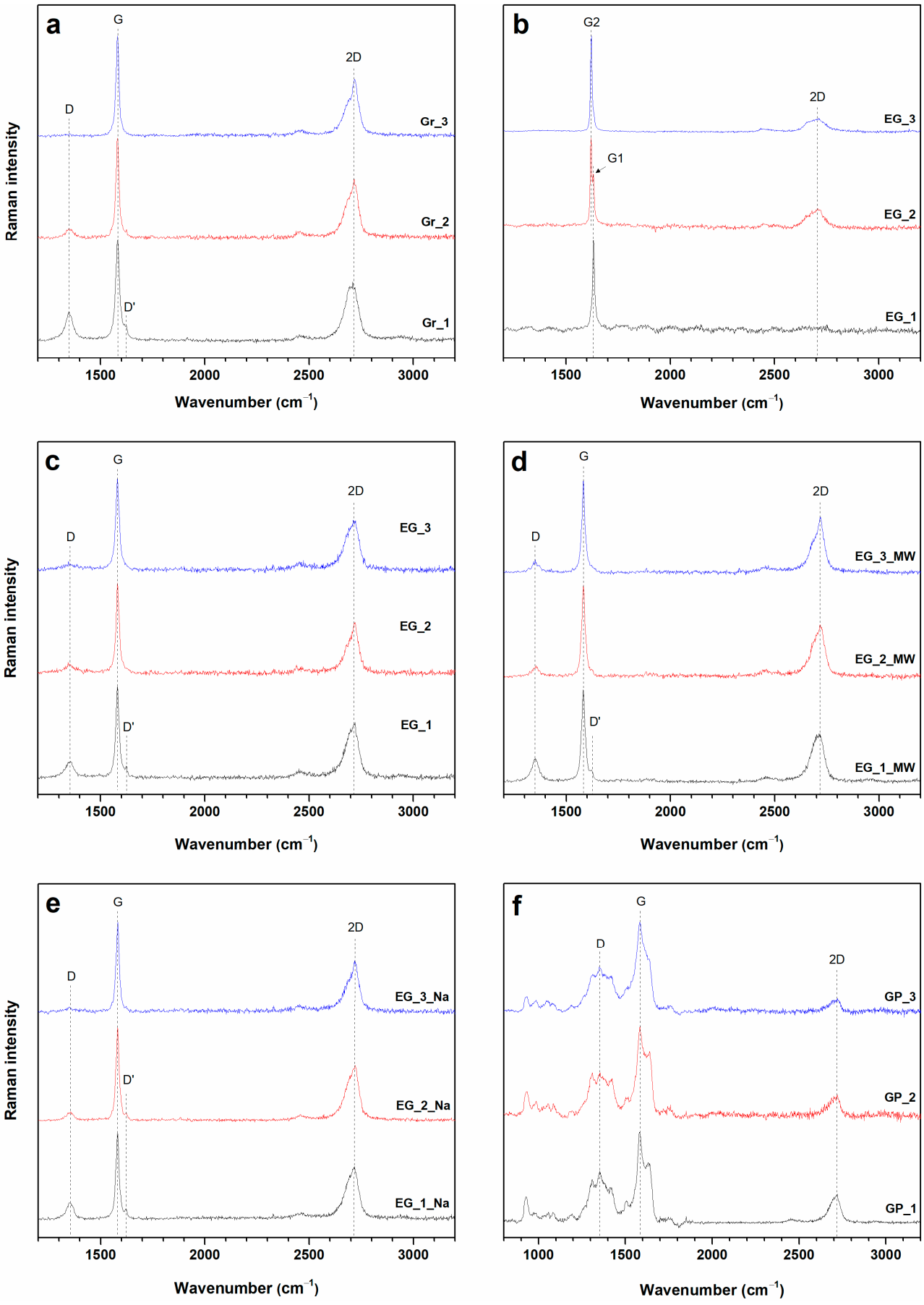

Figure S1. Raman spectra of graphite (a); GBS products (b), EG products (c), EG_MW products (d), EG_Na products (e), and EG samples modified with PPy (f).

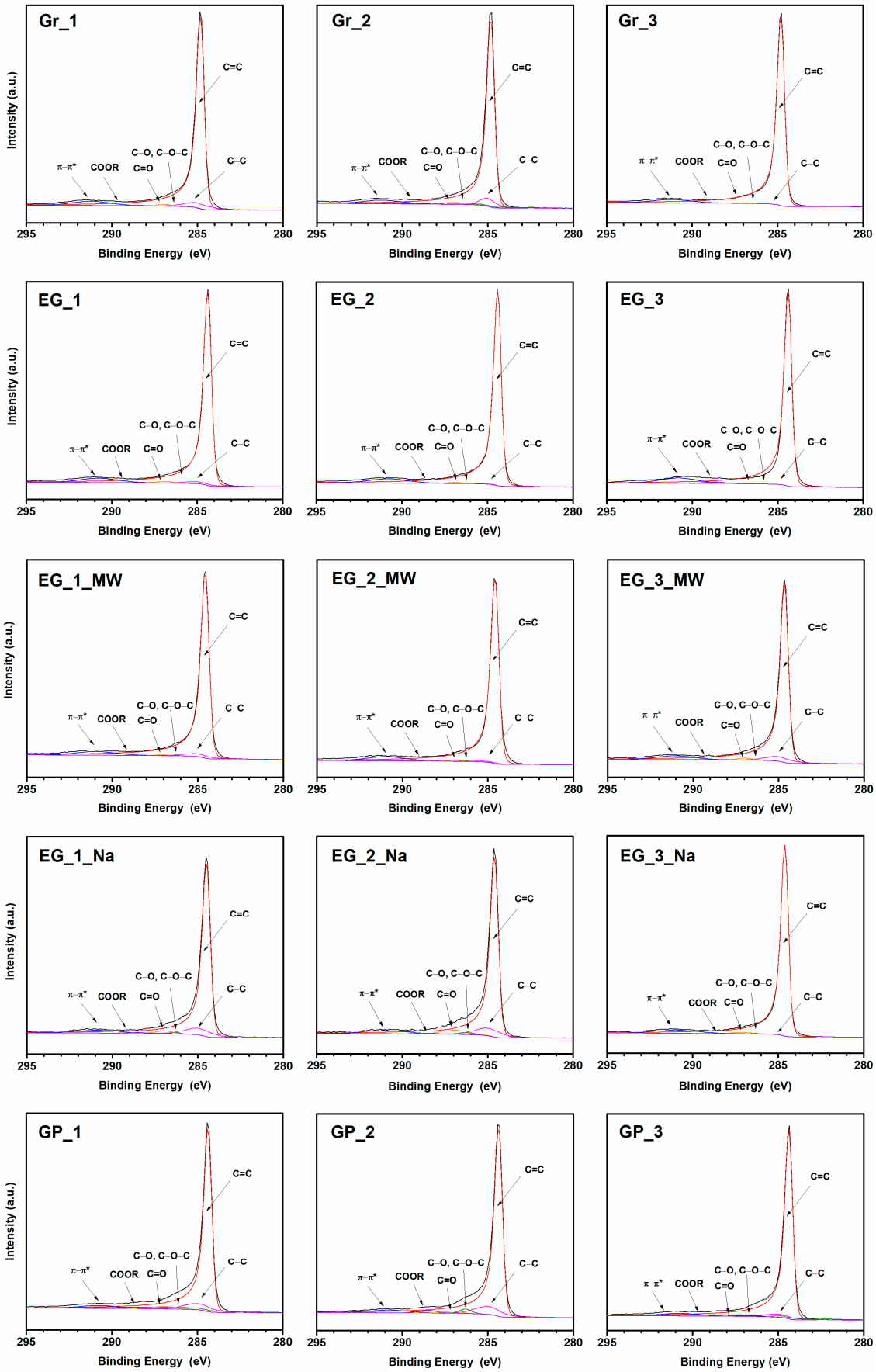

Figure S2. C 1s XPS spectra of pristine graphite, EG, and nanocomposite GP samples.

Spectra of all analysed samples are fitted into six components. The most intense peak at around 284.4 eV is assigned to the sp^2 carbon (C=C) of the graphene lattices. The peak at about 285.0 eV is related to sp^3 carbon (C–C). The C–O and C–O–C groups show a relevant binding energy at about 286.0 eV. The corresponding signals of C=O groups are located at around 287.0 eV, while COOR groups are located at around 288.5 eV. The peak at approximately 291.0 eV – 292.0 eV is the satellite of the sp^2 bonds due to π-π^* shake-up.

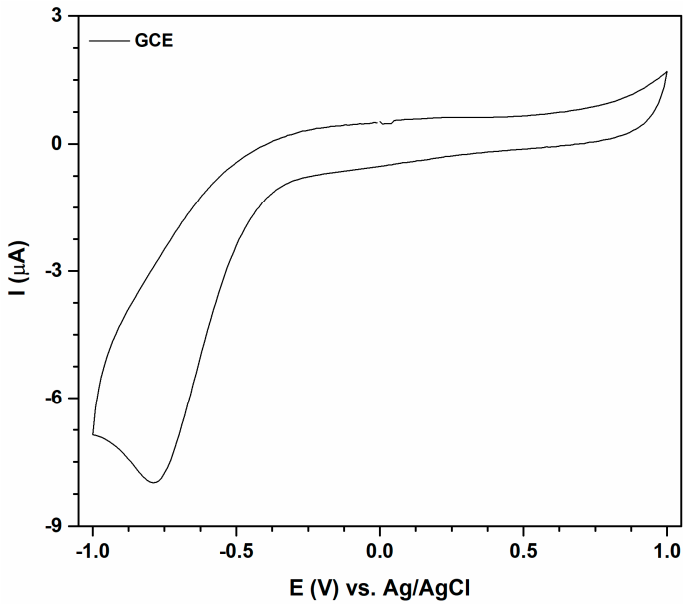

Figure S3. CV at bare GCE.