

Supplementary Material

Antimicrobial Activity of Electrospun Polyvinyl Alcohol Nanofibers Filled with Poly[2-(tert-butylaminoethyl) Methacrylate]-Grafted Graphene Oxide Nanosheets

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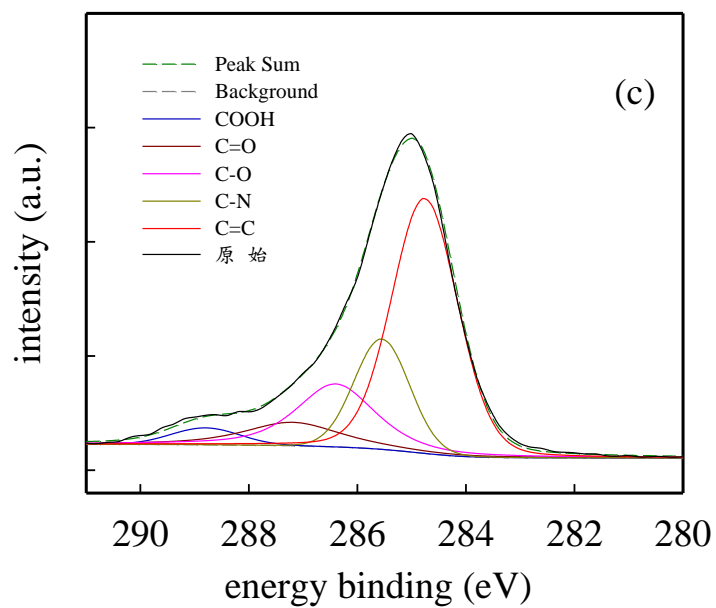
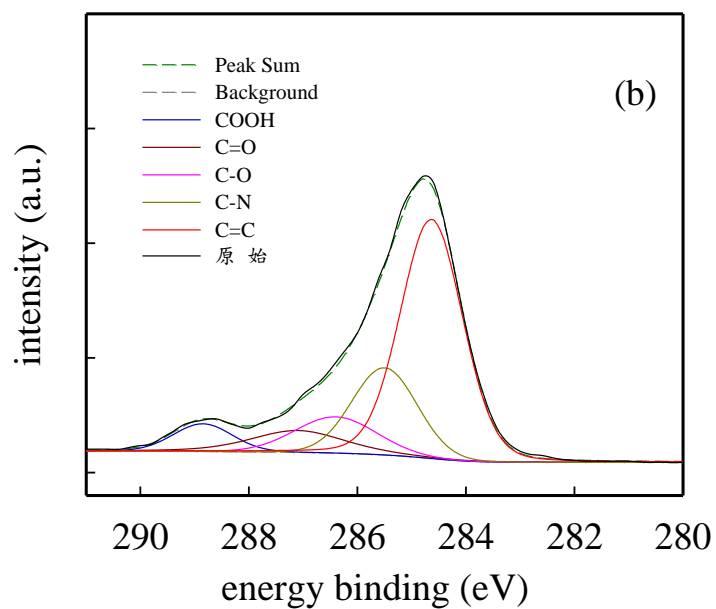
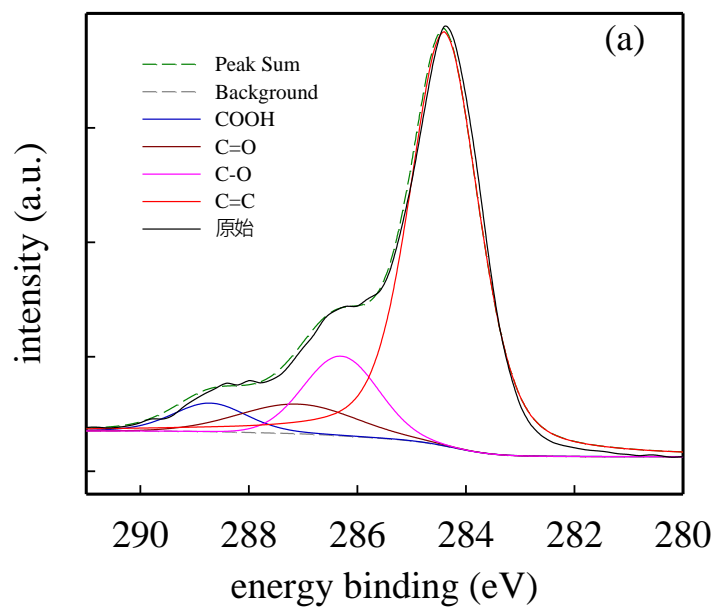


Figure S1. High magnification C 1s spectra of (a)GO, (b)GO-g-PTA-F, and (c)GO-g-PTA-A

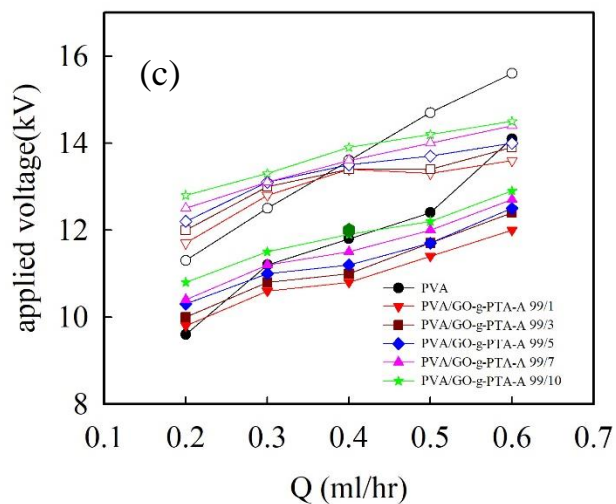
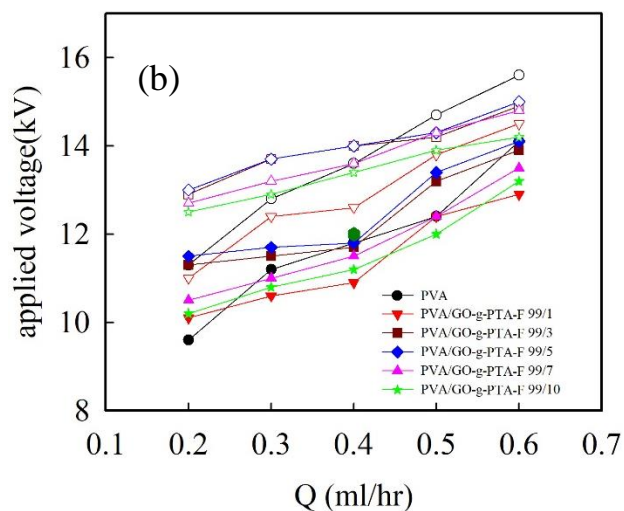
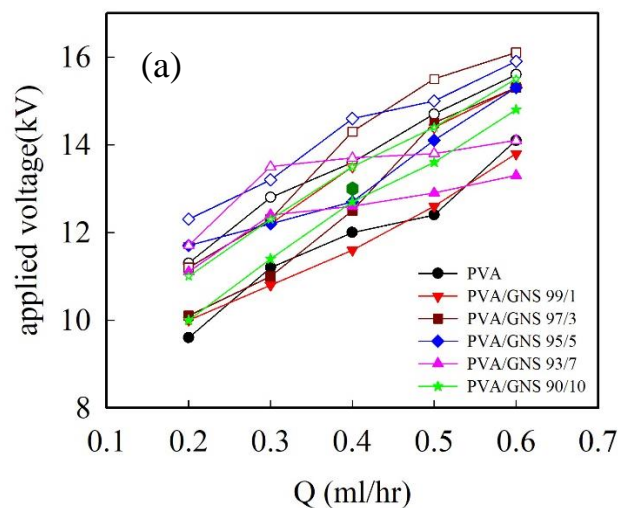


Figure S2. Functional domain for electrospinning of 7 wt % PVA solution with various (a) GNS, (b) GO-g-PTA-F, and (c) GO-g-PTA-A contents. The domains indicate the range of operating electrical fields required for the stable cone-jet mode. (Filled symbols for lower bond applied voltage and open symbols for upper bond applied voltage).

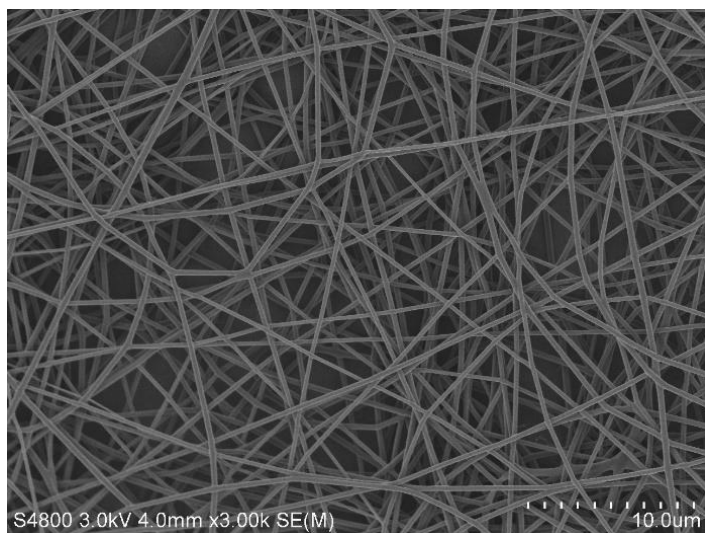


Figure S3. SEM images of PVA fiber products collected from the electrospinning of the 7 wt% PVA solutions.

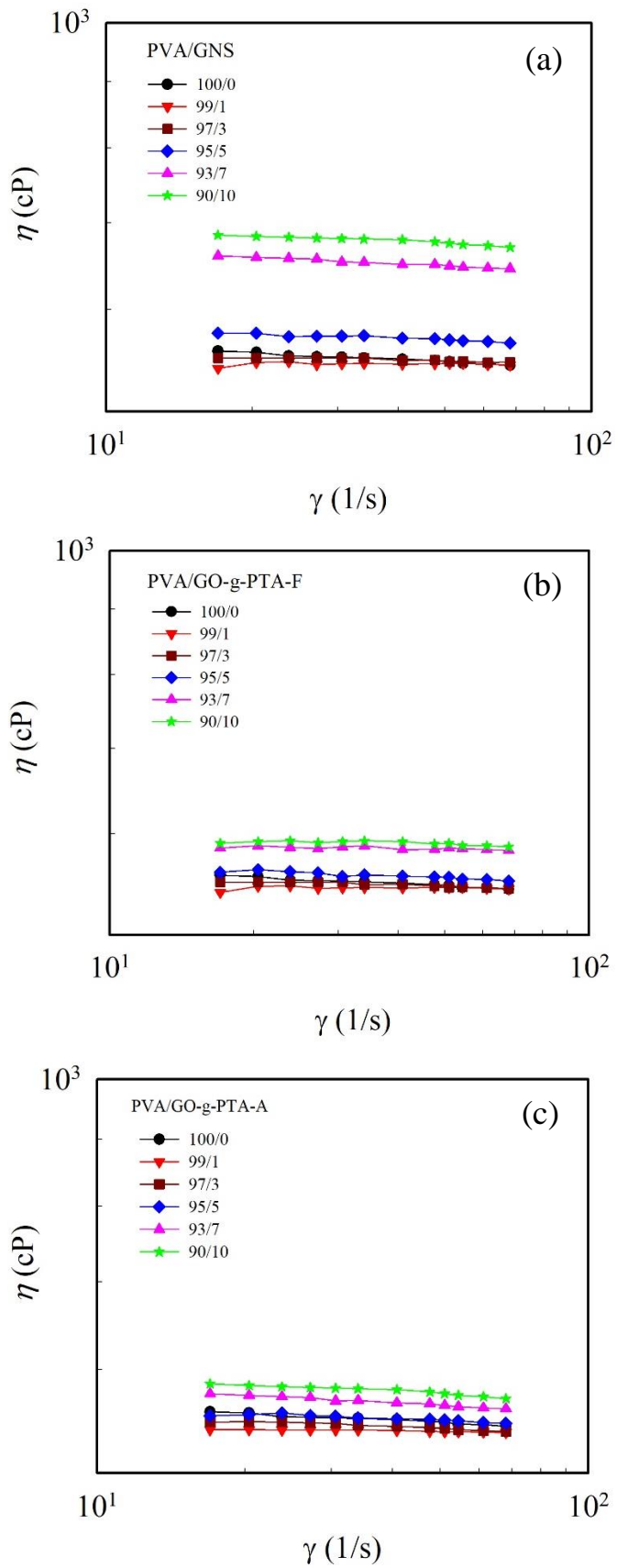


Figure S4. Viscosity of (a)PVA/GNS, (b)PVA/GO-g-PTA-F, and (c)PVA/GO-g-PTA-A solutions.

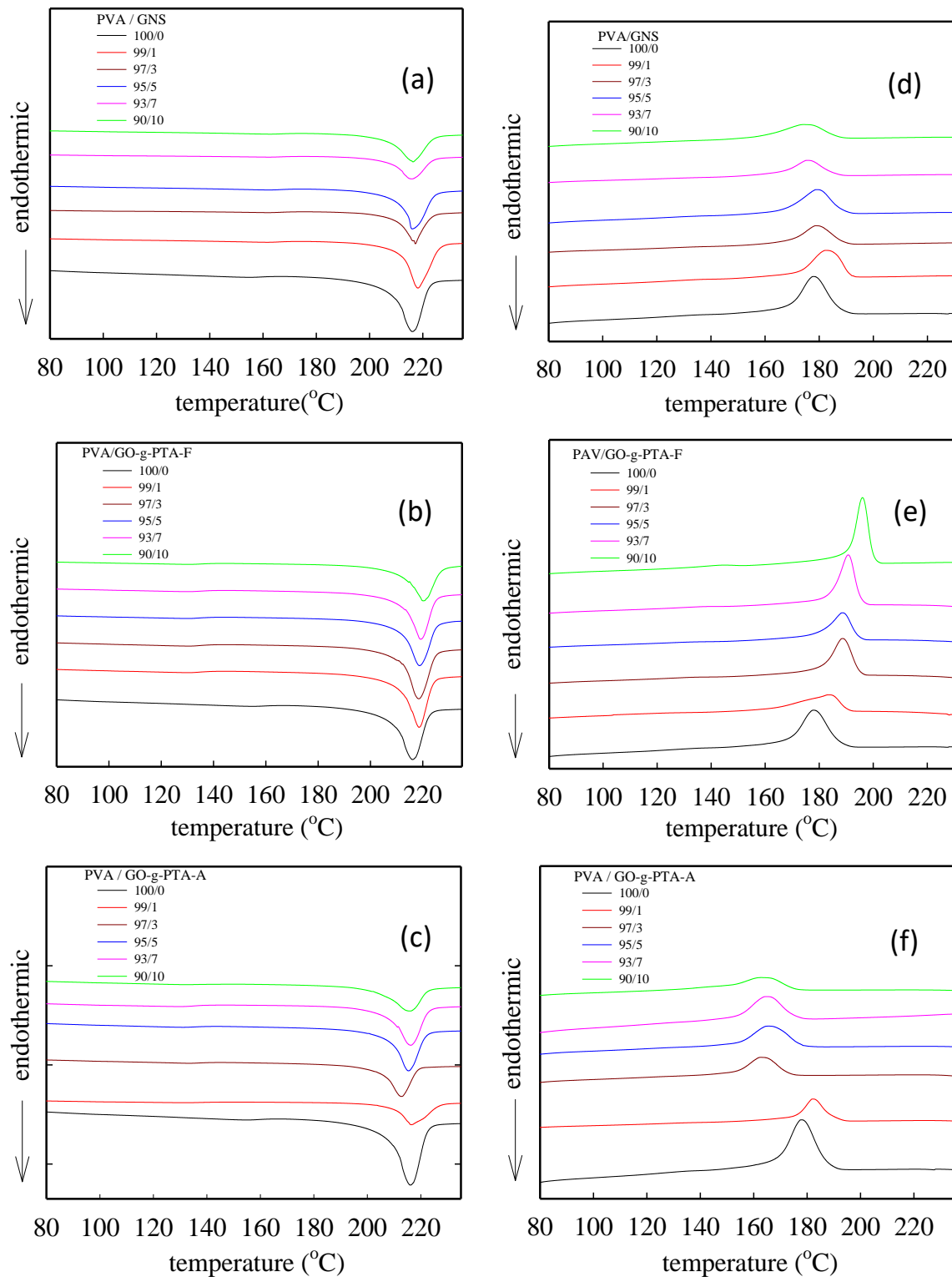


Figure S5. DSC heating traces of electrospun PVA composite nanofibers filled with various (a) GNS, (b)GO-g-PTA-F, and (c) GO-g-PTA-A contents. and DSC cooling traces of electrospun PVA composite nanofibers filled with various (d) GNS, (e)GO-g-PTA-F, and (f) GO-g-PTA-A contents.