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Incorporating a microcellular structure into PVDF/graphene-nanoplatelet composites to tune their electrical conductivity and electromagnetic interference shielding properties

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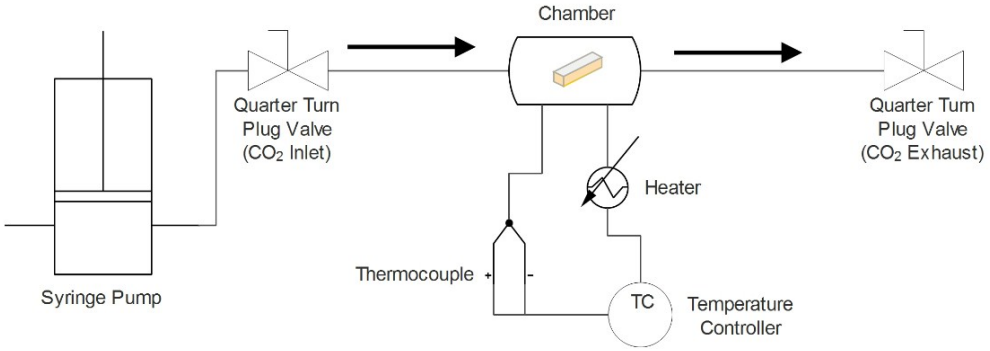

Figure S1 The schematic illustration of a home-made batching foaming instrument.

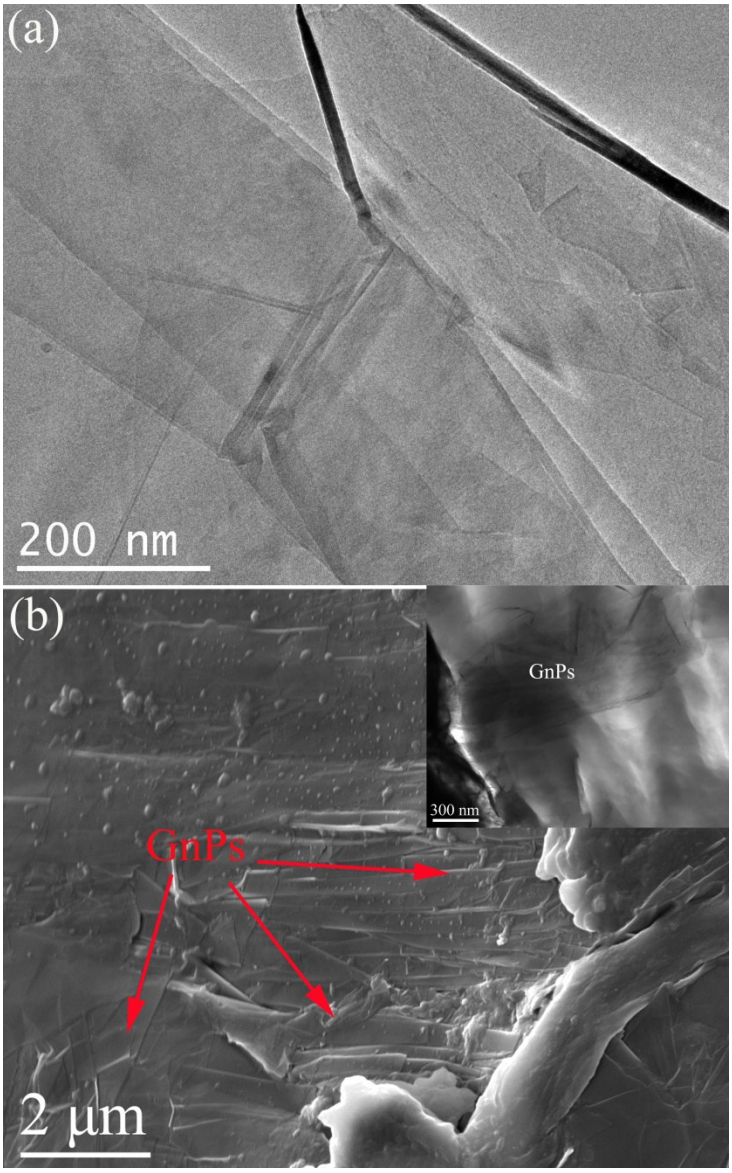

Figure S2 (a) TEM image of raw GnP nanomaterials; (b) SEM image of a PVDF/10wt% GnP solid nanocomposite. The inset in Figure S2b is a TEM image of the PVDF/10wt% GnP composite.

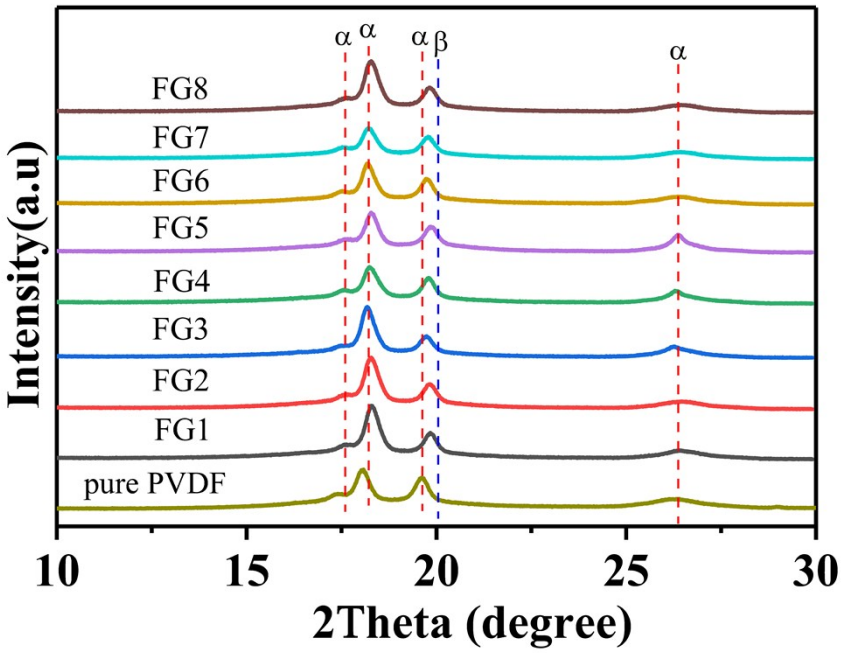

Figure S3 XRD patterns of pure PVDF and various foamed PVDF/GnP nanocomposites prepared at different saturation temperatures.

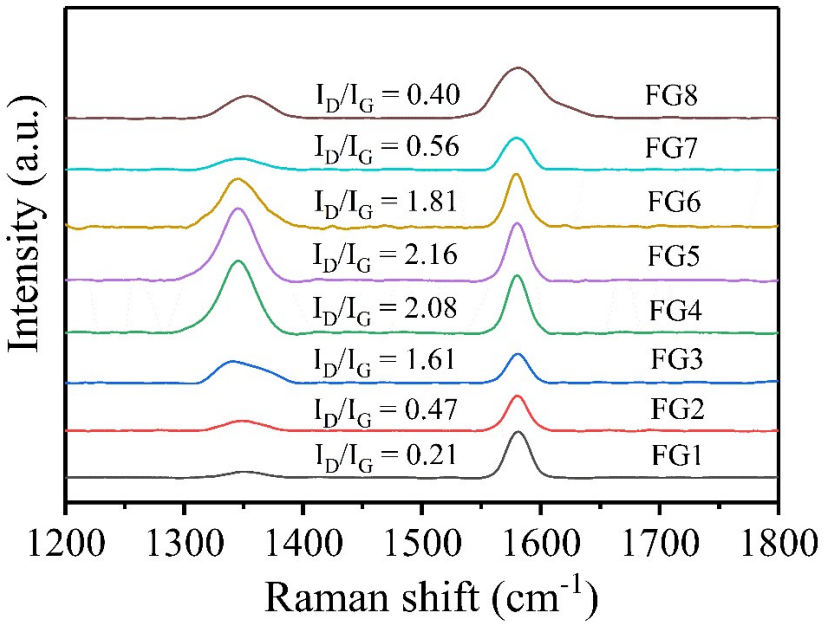

Figure S4 Raman spectra of various foamed PVDF/10wt% GnP nanocomposites prepared at different saturation temperatures.

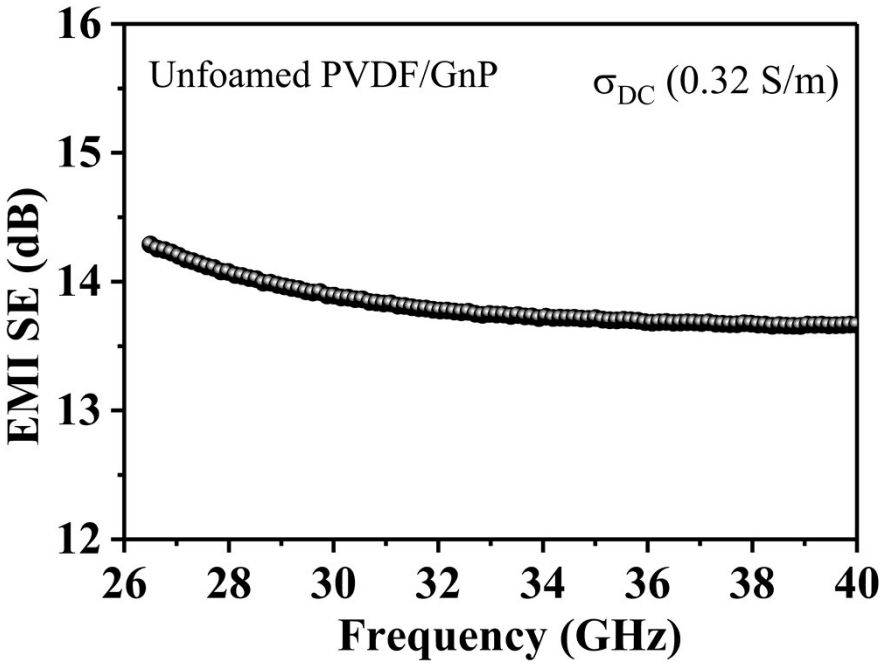

Figure S5 Electrical conductivity and EMI SE properties of the unfoamed PVDF/GnPs composite