Tailoring the Diameters of Polyaniline Nanofiber for Sensor Application

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Experimental details

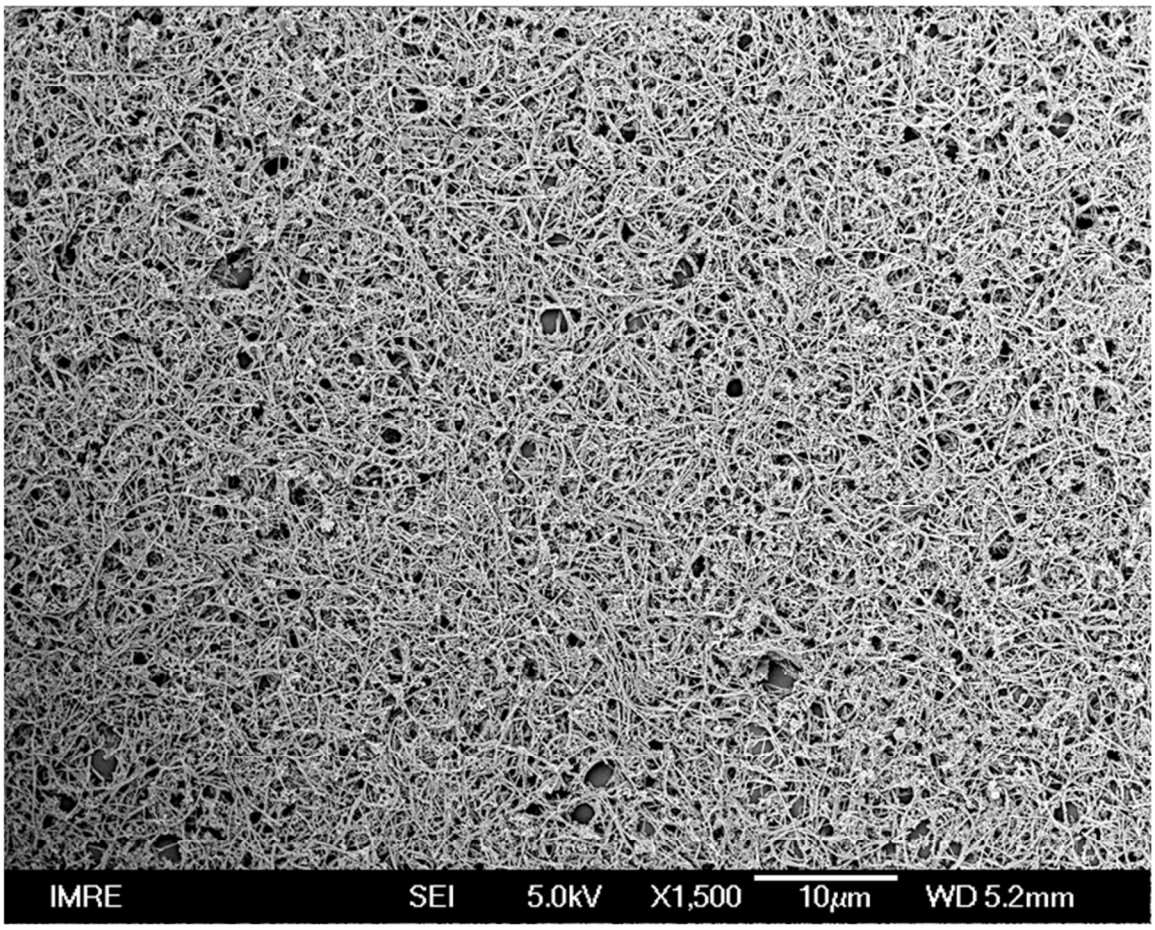

Figure S1. Low magnitude SEM image of polyaniline nanofibers prepared in ice-water bath.

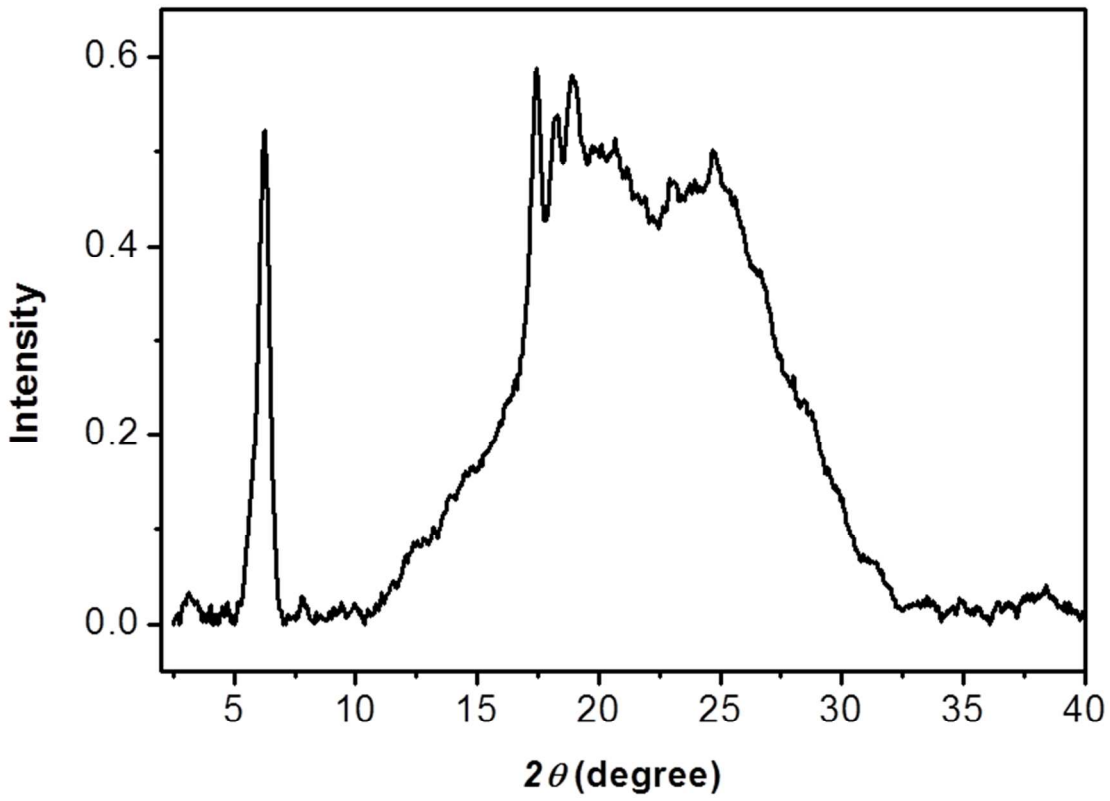

Figure S2. XRD patterns of assembles of the amphiphilic aniline–glutamic acid complex.

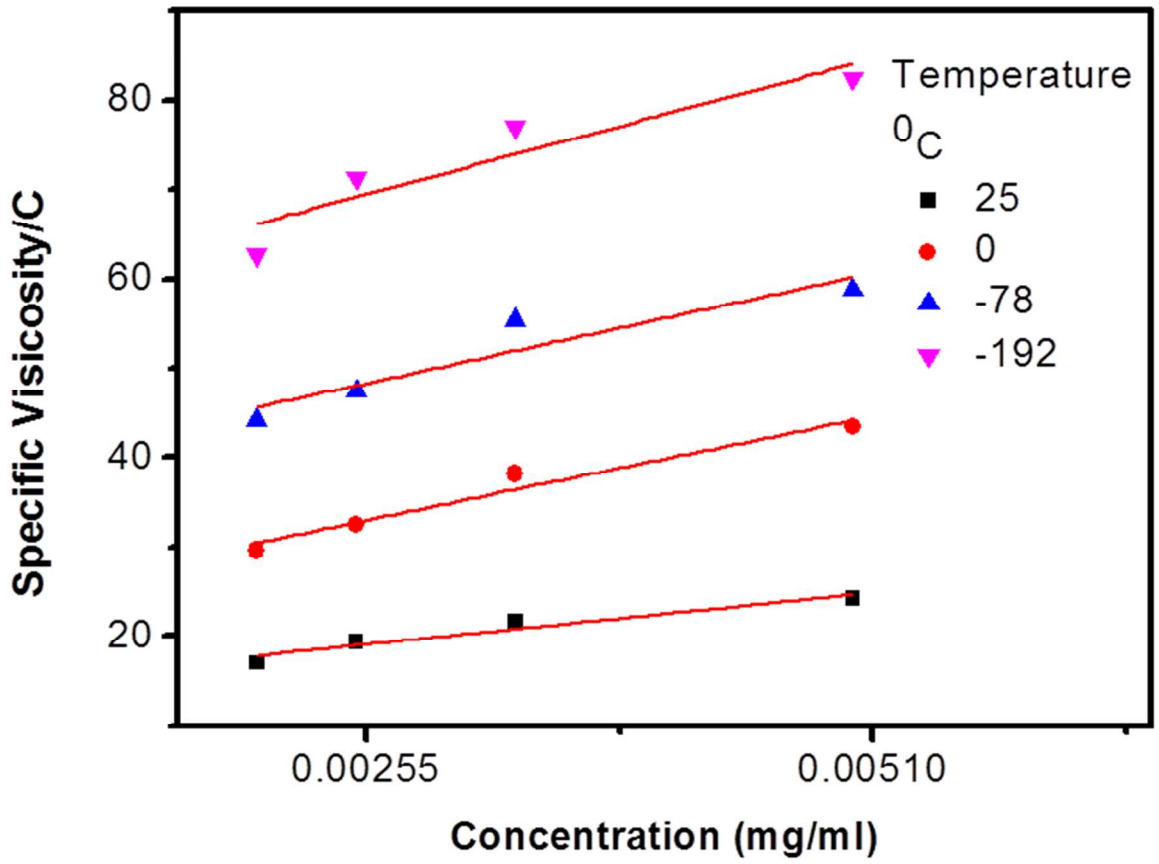

Figure S3. Specific viscosity change as function of polymer concentrations of PANI nanofibers synthesized at different temperatures.

Table S1. Intrinsic viscosity results of PANI nanofibers synthesized at different temperatures

Polymerization temperatures (°C)	Intrinsic Viscosity
25	13.22
0	21.28
-78	36
-192	54.32

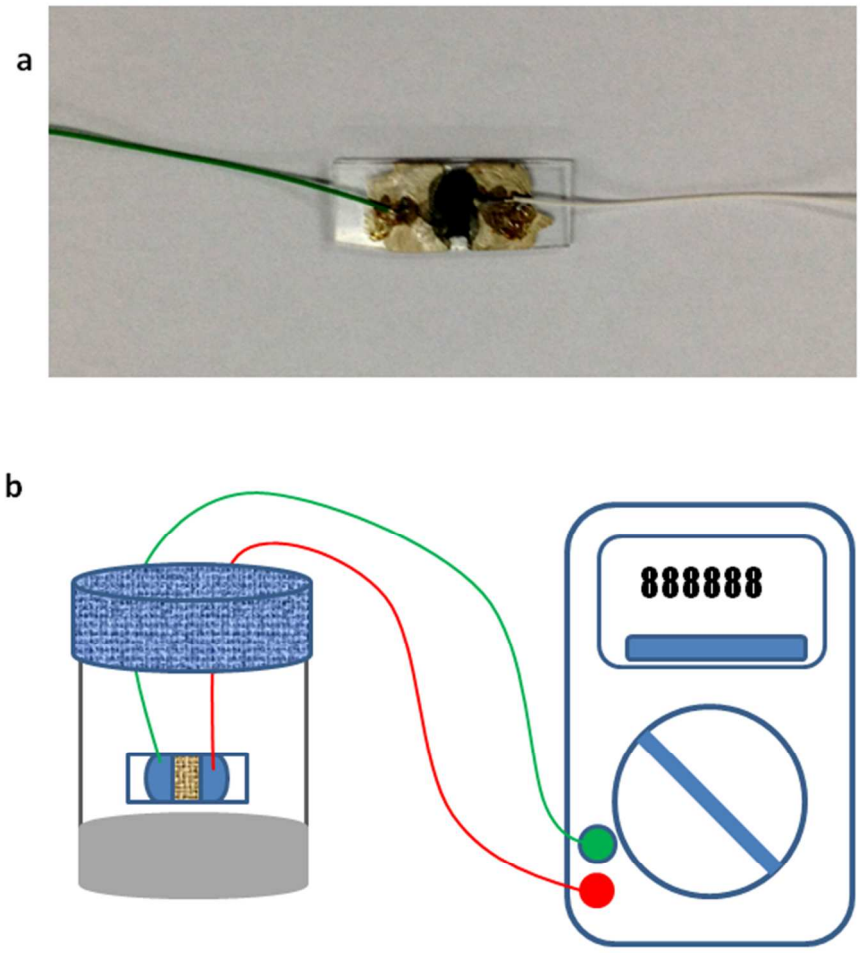

Figure S4. The home-made gas sensor and testing: (a) the gas sensor build on a glass slide with two silver paste electrodes and a film of the dedoped polyaniline nanofibers; (b) the apparatus for gas sensitivity measurement: the sensor was put in a sealed chamber that contains a solution of 1 M HCl, and the resistance was measured by using a digital multimeter.