Electronic Supplementary Material (ESI) for RSC Advances.

Three-dimensional Porous Carbon Derived from Different Organic Acid Salts for Application in Electrochemical Sensing

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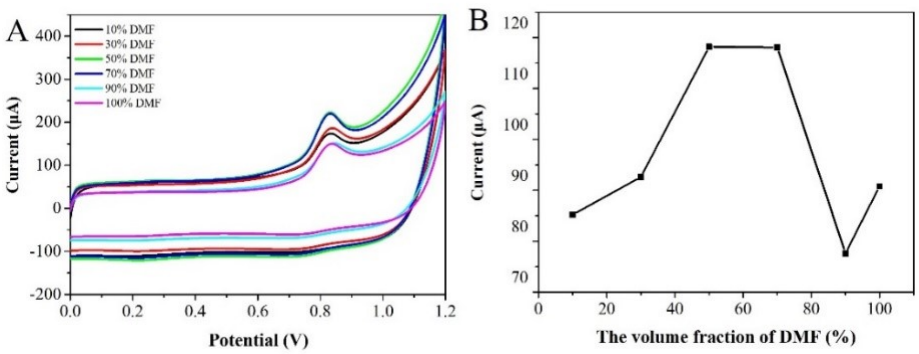

Fig.S1. (A) The CVs of the PC_{ST} /GCE in 1 mM nitrite (pH 3.0, 0.1M PBS buffer) with various volume ratios of DMF and (B)the corresponding current intensity

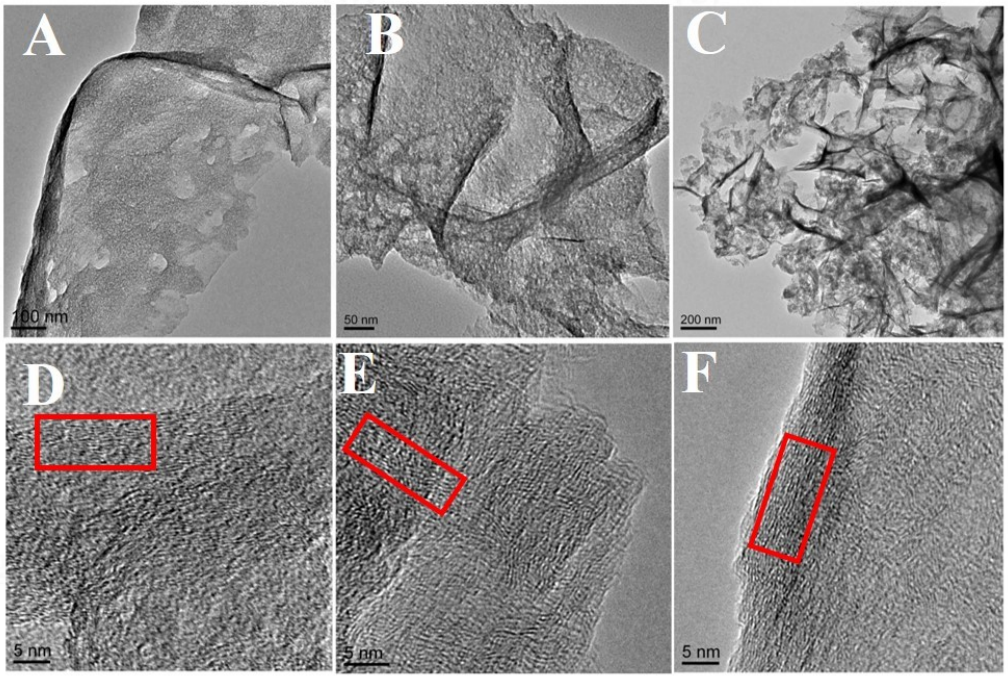

Fig.S2. TEM images of (A) $PC_{SS,}$ (B) PC_{SM} and (C) PC_{ST}; HRTEM images of (A) $PC_{SS,}$ (B) PC_{SM} and (C) PC_{ST}

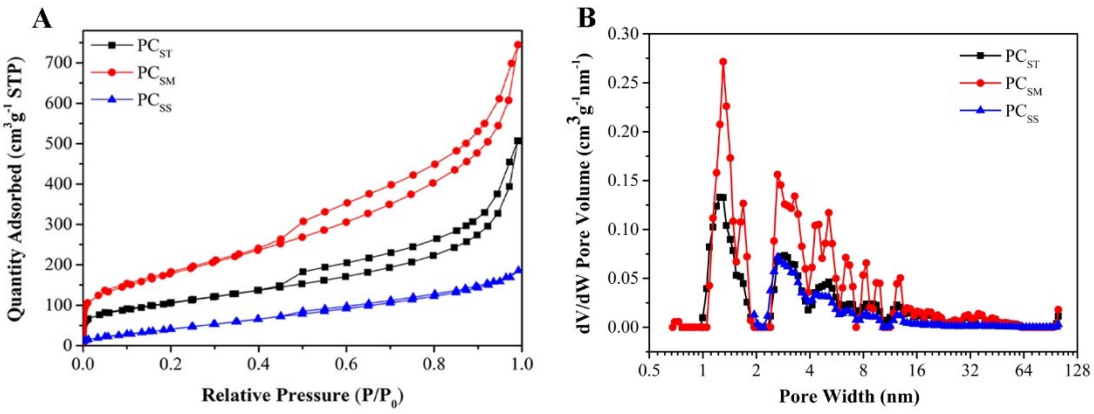

Figure S3. (A) N_2 adsorption−desorption isotherms of PC_{ST} (blank), PC_{SM} (red), PC_{SS} (blue) (B) The corresponding DFT pore size distribution curves.

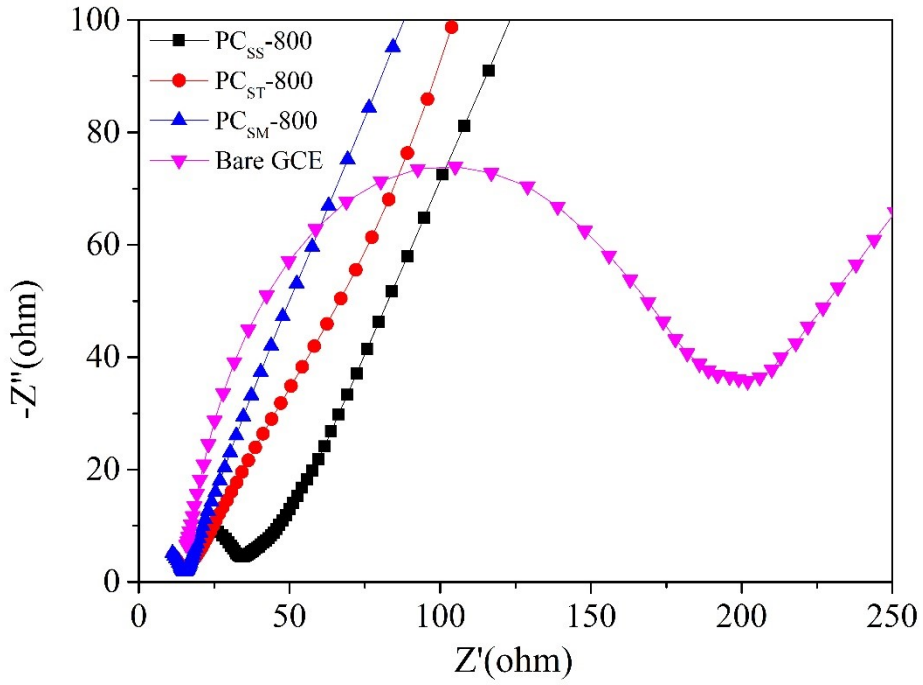

Fig. S4. The enlarged EIS curves of different electrodes

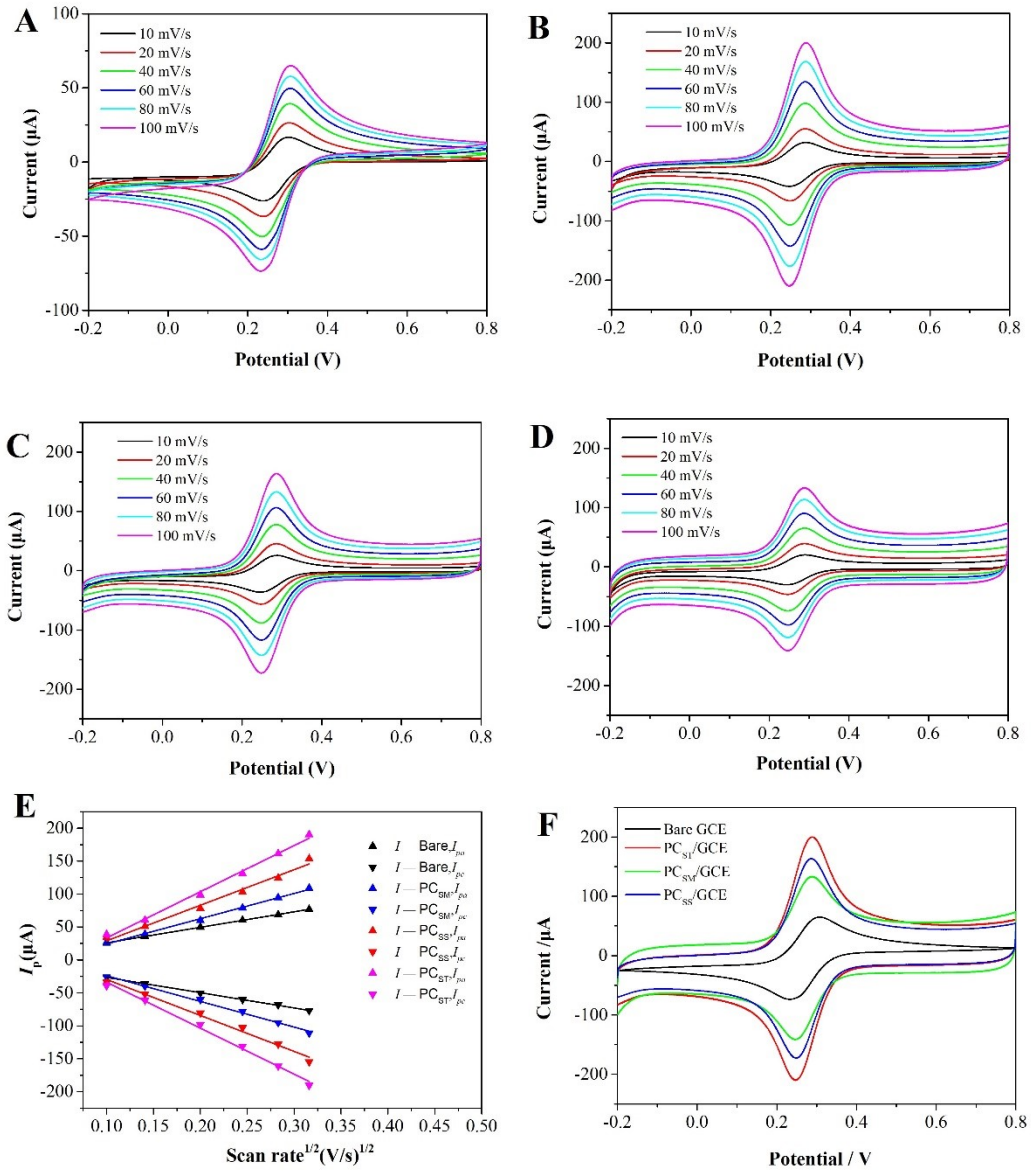

Figure S5 (A-D) Cyclic voltammograms of different electrodes recorded (A:bare GCE; B: PC_{ST} / GCE;C: PC_{SM} /GCE; PC_{SS}/GCE) at different scan rates. (E) Linear relationship between anodic/cathodic peak currents (*I*pa, *I*pc) and the square root of scan rates. （F）Cyclic voltammograms image comparison.

Table S1. Chemical composition of porous carbon material analyzed by XPS

Sample	XPS Atomic %		
	C	O	Na
PC_{ST}	81.15	11.95	6.9
PC_{SM}	80.99	15.24	3.76
PC_{SS}	80.63	13.42	5.94