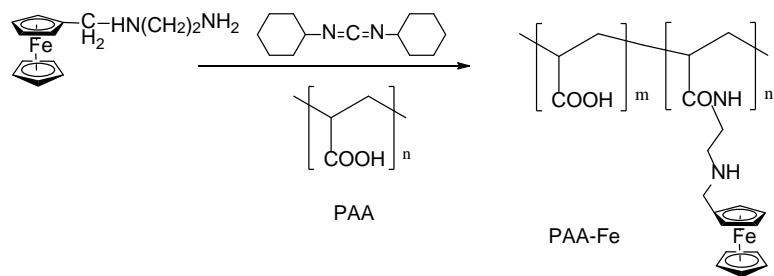


## Supporting Information

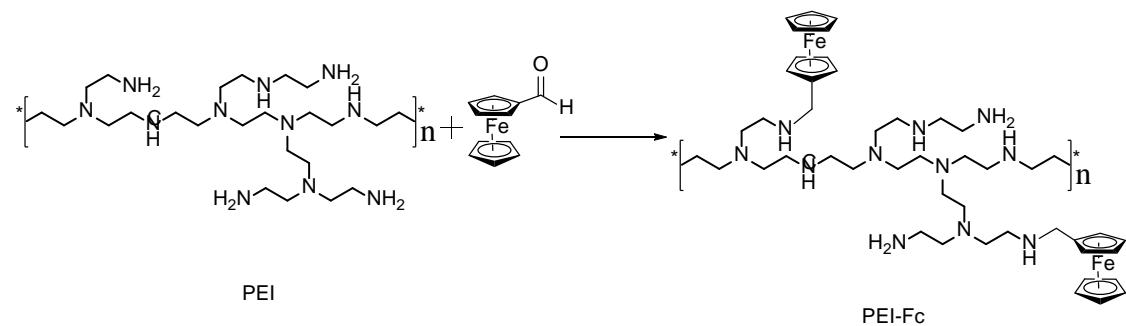
### Ferrocene-modified Polyelectrolyte Film coated Electrode and its Application in Glucose Detection

Yonggang SHANGGUAN <sup>\*</sup>, Zhiping JIANG, Qiang ZHENG

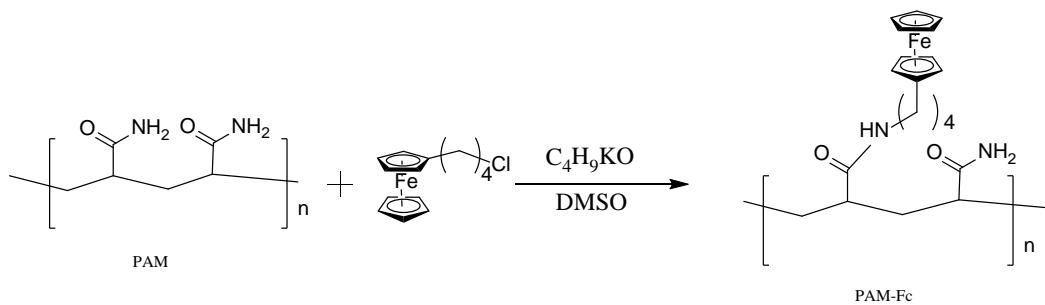
MOE Key Laboratory of Macromolecular Synthesis and Functionalization, Department of Polymer Science and Engineering, Zhejiang University, Hangzhou 310027, People's Republic of China



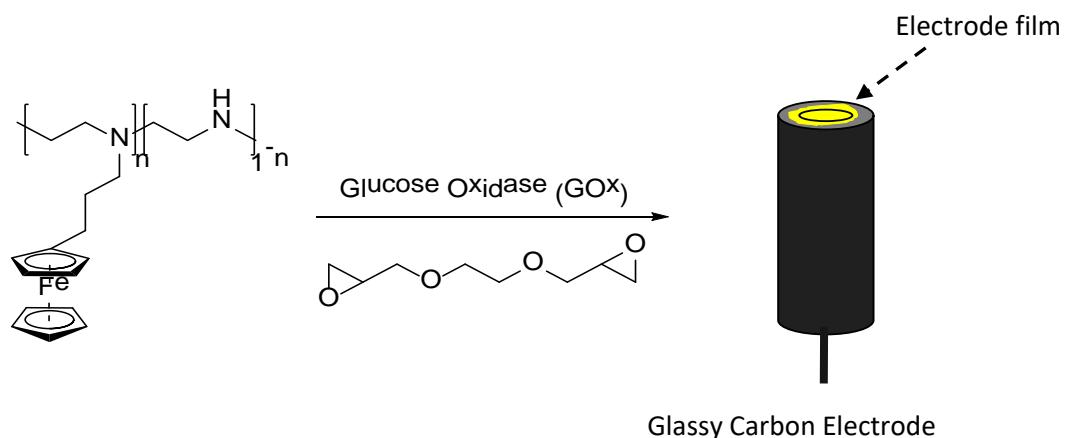
**Scheme S1.** Schematics for the preparation of PAA-Fc



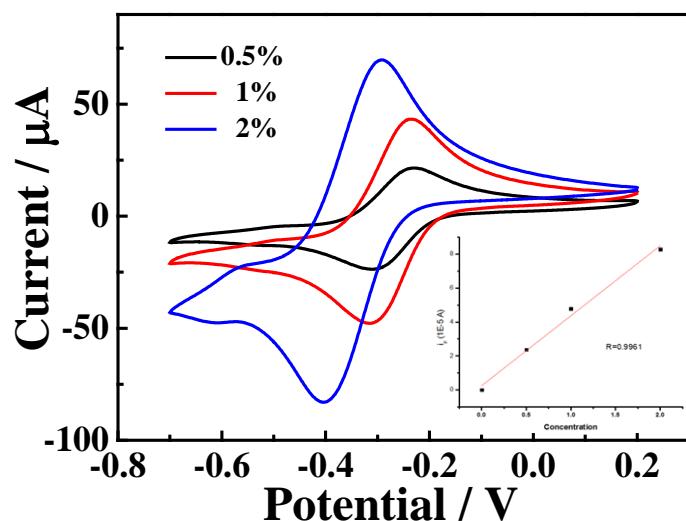
**Scheme S2.** Schematics for the preparation of PEI-Fc



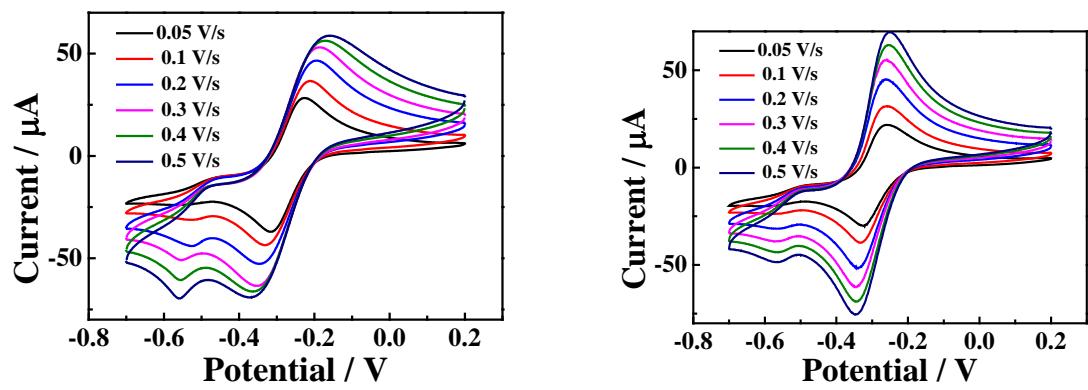
**Scheme S3.** Synthetic Protocol for the PAM-Fc with Ferrocene Butyryl Chloride Modification



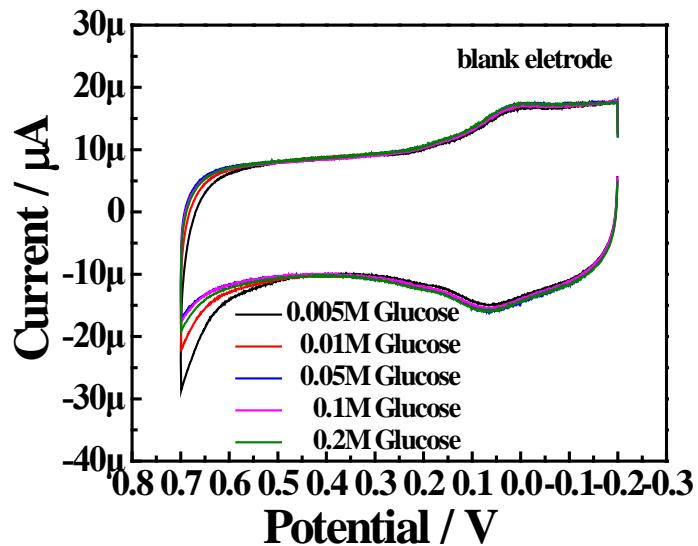
**Scheme S4.** Protocol for the Enzyme Electrode Preparation



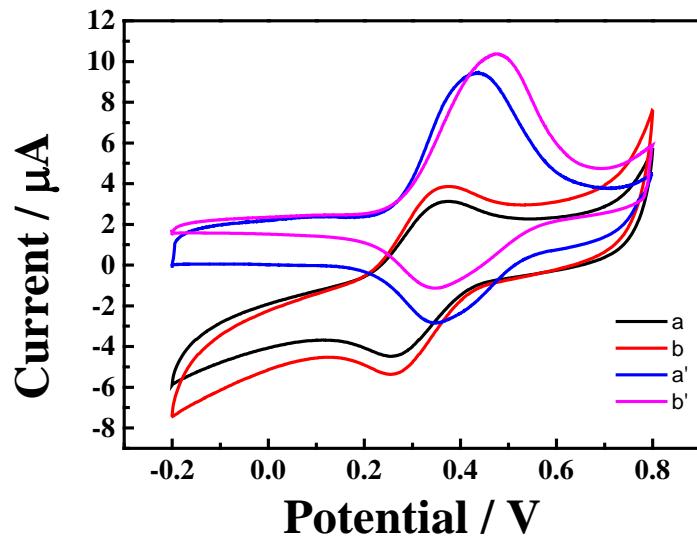
**Fig. S5.** Cyclic voltammograms of different concentration PAA-Fc in PBS solution under 0.1V/s scan rate. Inset: Plot of the oxidation peak currents vs. concentration of PAA-Fc



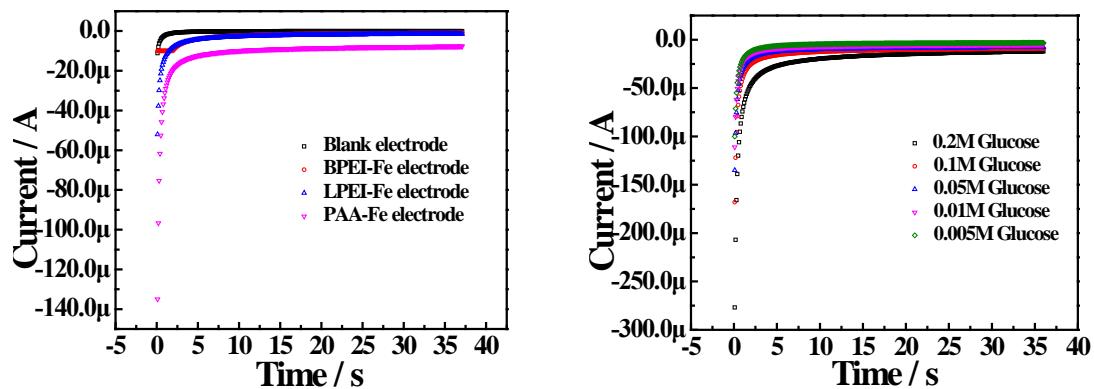
**Fig. S6.** Cyclic voltammograms of 1% PAM-Fc and PEI-Fc in PBS solution



**Fig. S7.** Cyclic voltammograms of blank electrodes without polyelectrolyte under different glucose concentration



**Fig. S8.** Cyclic voltammograms of the GOx/CNT/PAA-Fc and GOx/CNT-GO/PAA-Fc composite film in the absence (a, b) and presence (a', b') of 3.0 mmol/L glucose in PBS (pH=7.2) at 100 mV/s



**Fig. S9.** Performance of different modified electrode (response for 5mM glucose) and different concentration of glucose (use PAA-Fc electrode)