Supporting Information

Perfluorosulfonic acid polymer based eATRP for ultrasensitive detection of CYFRA21-1 DNA

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Table of contents:

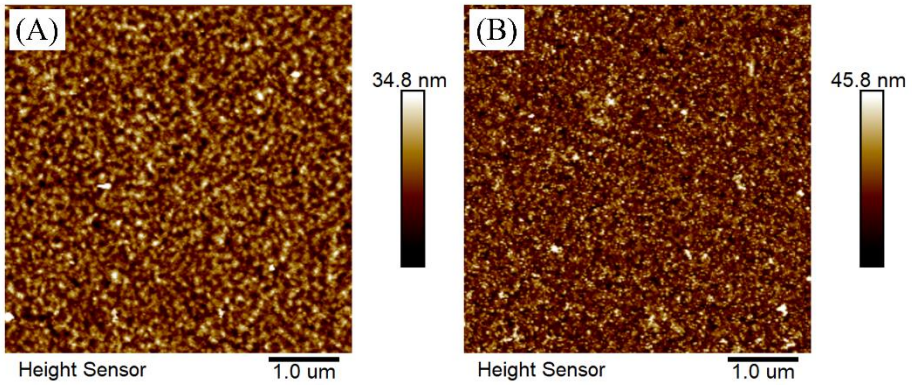

Fig. S1: AFM images of PNA/MCH/DNA/Zr^{4+}/Nafion-modified electrode (A), the PNA/MCH/DNA/Zr^{4+}/Nafion/FMMA-modified electrode after 40 min eATRP reaction (B). The

scale bars showing surface roughness are placed on the side of the images.

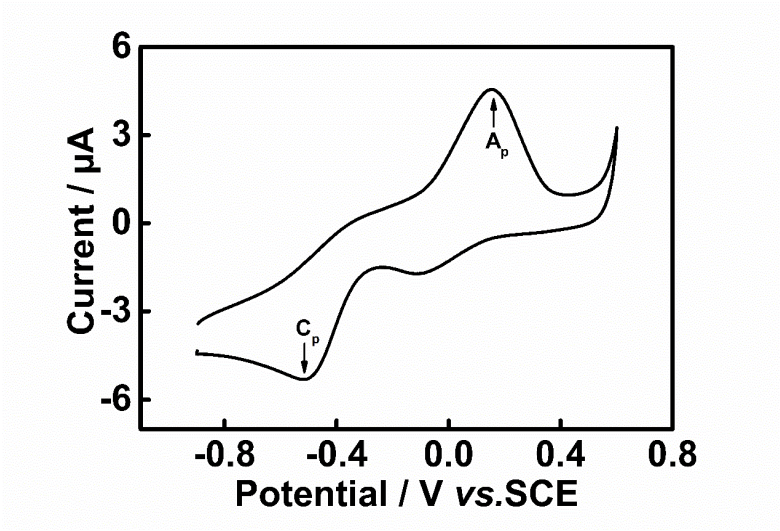

Fig. S2: The cyclic voltammogram of the PNA/MCH/DNA/Zr^{4+}/Nafion-modified electrode in the FMMA-free eATRP cocktail.

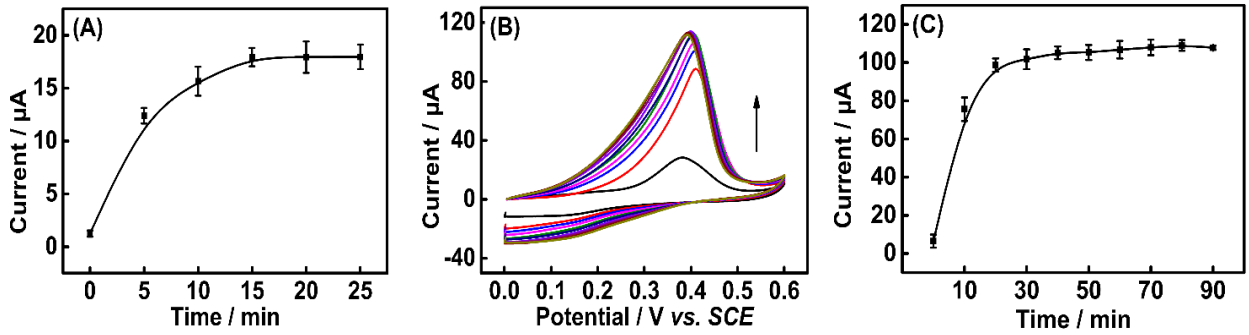

Fig. S3: (A) The plots of peak current versus initiator reaction time. (B) The cyclic voltammogram of PNA/MCH/DNA/Zr^{4+}/Nafion/FMMA-modified electrode in the eATRP cocktail for the monitoring of the aggregation of ferrocenylmethyl methacrylate on the electrode surface. CV was applied every ten minutes at scan rate of 1000 mV s^{-1}. (C) The plots of peak current versus eATRP time.