

Electronic Supplementary Information

Polyaniline nanofibres for fluorescent nucleic acid detection

Sen Liu,^a Lei Wang,^a Yonglan Luo,^a Jingqi Tian,^{ab} Hailong Li,^{ab} and Xuping Sun^{*a}

^a State Key Lab of Electroanalytical Chemistry, Changchun Institute of Applied Chemistry, Chinese Academy of Sciences, Changchun 130022, Jilin, China

^b Graduate School of the Chinese Academy of Sciences, Beijing 100039, China

Tel/Fax: 0086-431-85262065. E-mail: sunxp@ciac.jl.cn.

Preparation of PANI nanofibres. PANI nanofibres were prepared using a modified oxidative template method¹: In a typical synthesis, 0.2187 g of cetyltrimethylammonium bromide (CTAB) was dissolved in 60 mL of 1M HCl. After being stirred for 10 min under ice bath, 5 mL of 0.5 M ammonium peroxydisulfate (APS) aqueous solution was added into the mixture. After being stirred for another 10 min under ice bath, the mixture was cooled to 4 °C and kept at that temperature over a period of 1 h. Then 5 mL of 0.09 M aniline aqueous solution was added into the as-prepared solution. Self-assembly was conducted at 4 °C over a period of 24 h, and the resulting dark green precipitate of polyaniline was washed with 1 M HCl and

acetone twice by centrifugation and then redispersed in water for characterization and further use.

Reference

- 1 Z. Liu, X. Zhang, S. Poyraz, S. P. Surwade and S. K. Manohar, *J. Am. Chem. Soc.*, 2010, **132**, 13158.

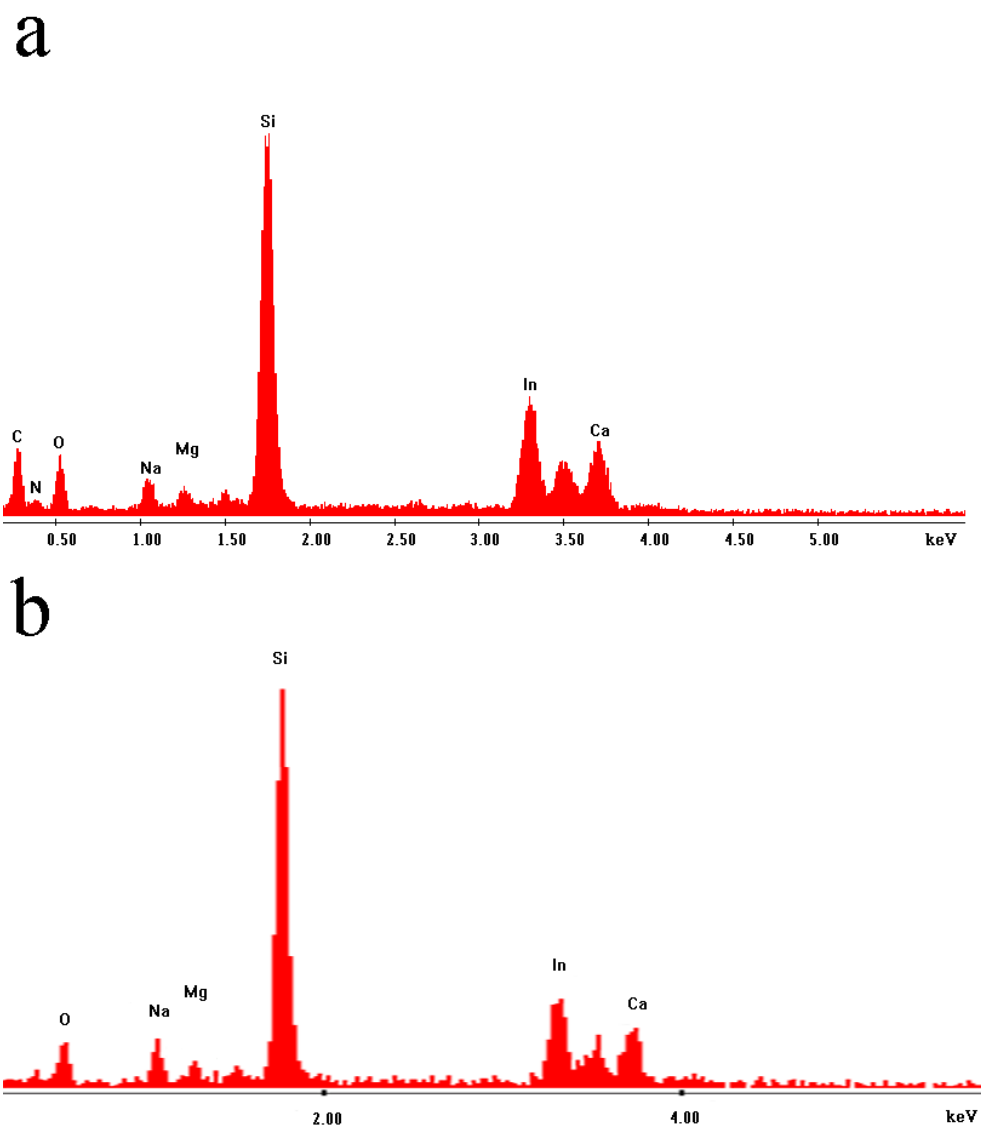


Fig. S1 EDS of (a) the nanofires coated on ITO and (b) bare ITO.