

Supplementary Materials
to the article of Michail Sorvin, Guzeliya Galimzyanova, Vladimir Evtugyn,
Alexey Ivanov, Dmitry Shurpik, Ivan Stoikov, Gennady Evtugyn
“Potentiometric Sensor Based on Layered Pillar[6]arene - Copper Composite”

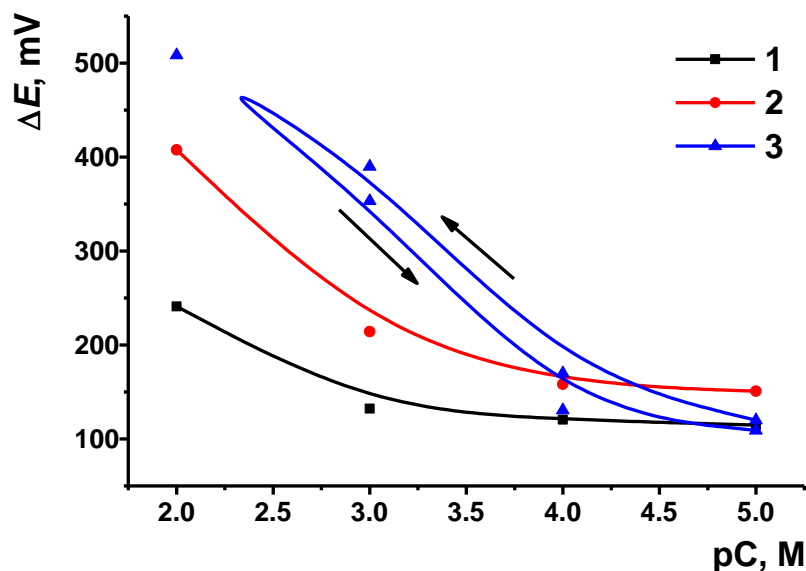


Figure S1. The dependence of the sensor signal on the concentration of FeCl_3 recorded with the GCE covered with polyaniline and 1.0 mM P[6]A. 1 – P[6]A aliquot 4 μL , Britton-Robinson buffer, pH = 4.5; 2 - polyaniline with no P[6]A, Britton-Robinson buffer, pH = 4.5; 3 - P[6]A aliquot 4 μL , 0.1 M NaCl. Arrows indicate the direction of the concentration change

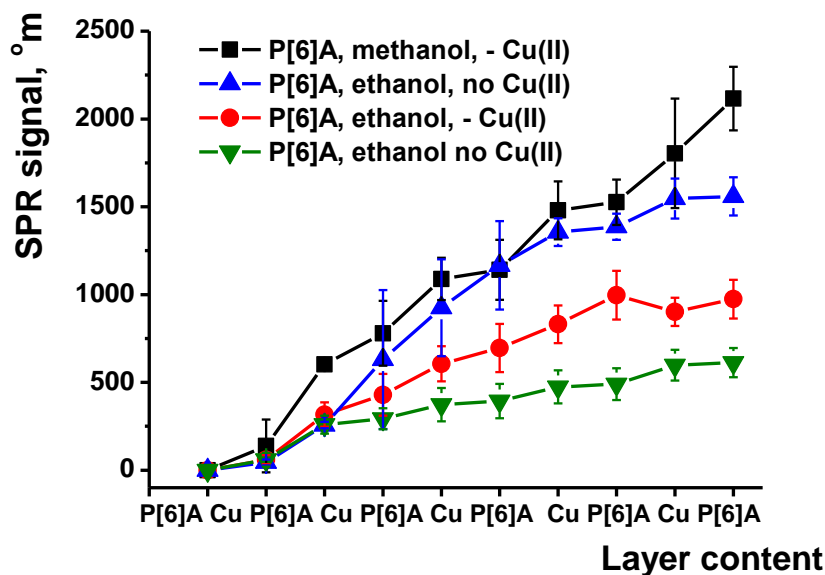
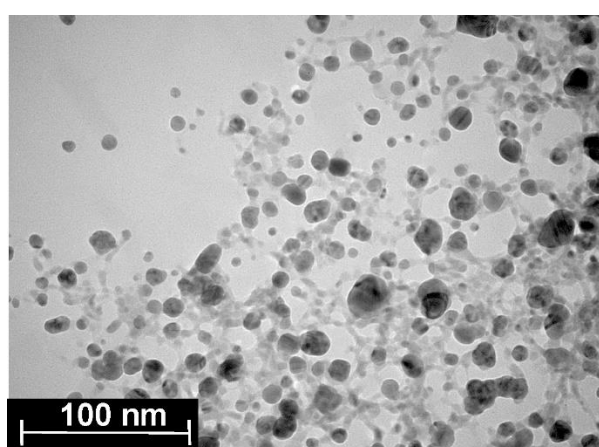


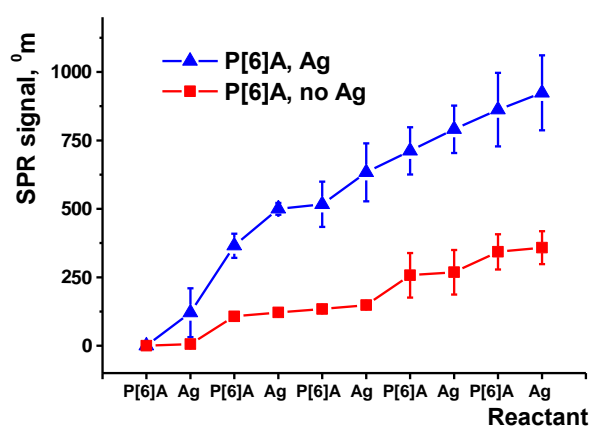
Figure S2. The dependence of the SPR signal on the addition of 1.0 mM P[6]A in ethanol and methanol and 1.0 mM CuCl_2 in deionized water, SPR chip modified with the MUC, PSS and PAA. Average \pm s.d. for three replications

Table S1. Concentrations of CuCl₂ solution used for dynamic response assessment (legend to Figure 3(b))

Aliquot Number	Total CuCl ₂ concentration, M	Aliquot Number	Total CuCl ₂ concentration, M
1	1×10^{-7}	9	5×10^{-5}
2	2×10^{-7}	10	2×10^{-4}
3	5×10^{-7}	11	5×10^{-4}
4	1×10^{-6}	12	1×10^{-4}
5	2×10^{-6}	13	1×10^{-3}
6	5×10^{-6}	14	2×10^{-3}
7	1×10^{-5}	15	5×10^{-3}
8	2×10^{-5}	16	1×10^{-2}



(a)



(b)

Figure S3. (a) TEM image of the P[6]A – Ag⁺ mixture, formvar/carbon supported copper grids 200 mesh (b) The dependence of the SPR signal on the addition of 1.0 mM P[6]A in ethanol and 1.0 mM AgNO₃ in deionized water, SPR chip modified with the MUC, PSS and PDPA. Average \pm s.d. for three replications