SUPPLEMENTARY INFORMATION

Sample-in-waveguide geometry for TXRF sensitivity improvement

Vitaly Panchuk[1,2,3], Alexander Goydenko[1], Andrey Grebenyuk[3], Andrey Legin[1,2], Sobir Irkaev[3], Dmitry Kirsanov[1,2,*] , Valentin Semenov[1,3]

1 St. Petersburg State University, Institute of Chemistry, St. Petersburg, Russia

2 Laboratory of artificial sensory systems, ITMO University, St. Petersburg, Russia

3 Institute for Analytical Instrumentation RAS, St. Petersburg, Russia

* corresponding author d.kirsanov@gmail.com

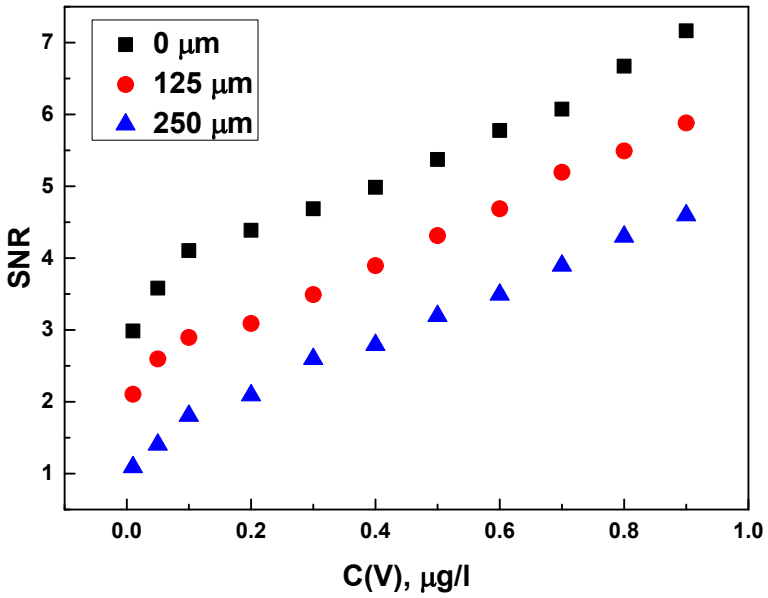

Figure 1S. Optimization of the distance between waveguide layers. Standard deviations (n=3) did not exceed 0.15 SNR.

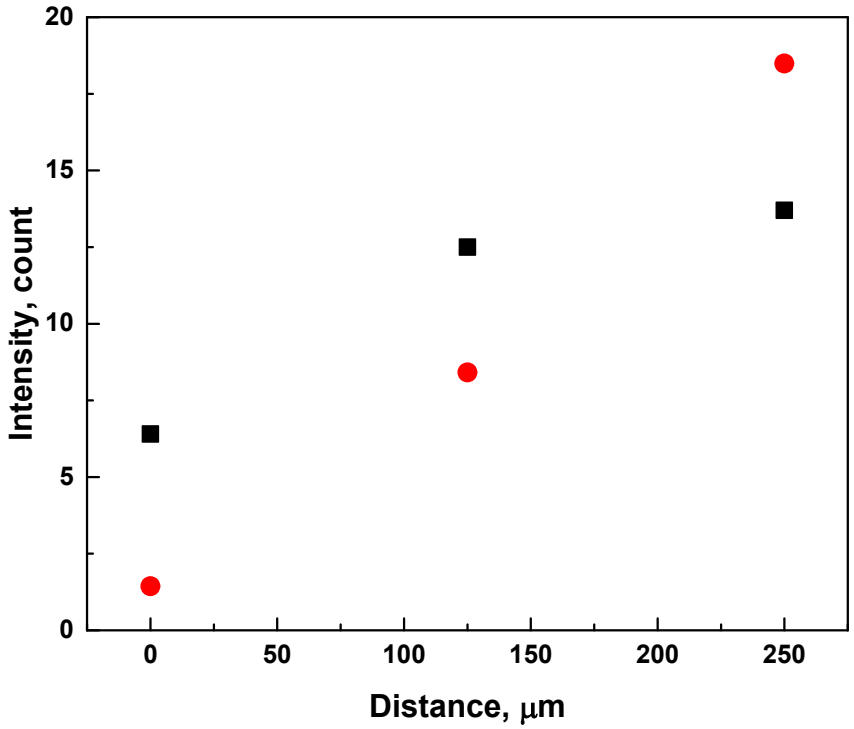

Figure 2S. Evolution of background (circles) and signal (squares) for vanadium (Kα, Kβ) line of 0.5 μg/L vanadium solution.

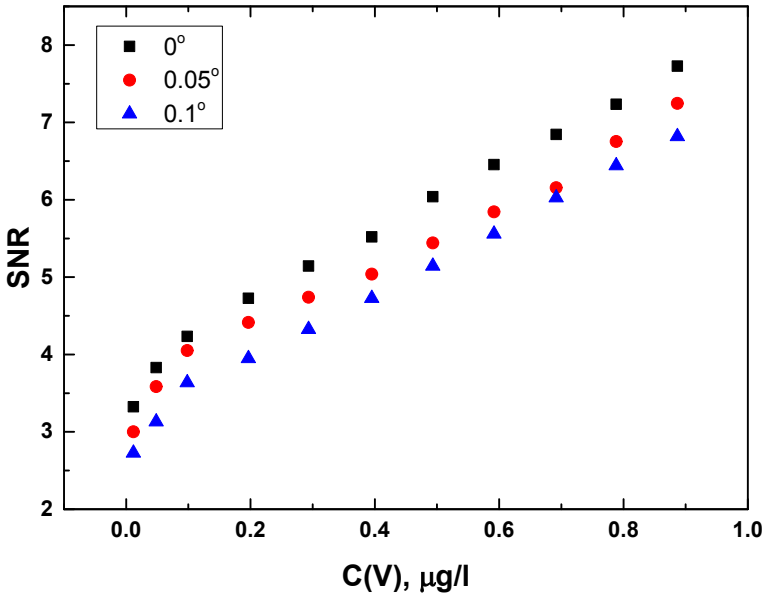

Figure 3S. Optimization of the incident radiation angle. Standard deviations (n=3) did not exceed 0.15 SNR.