

**Supporting information for**

**Cerebrospinal fluid levels of synuclein alpha measured using poly-glutamic acid-modified gold nanoparticle-doped disposable neuro-biosensor system**

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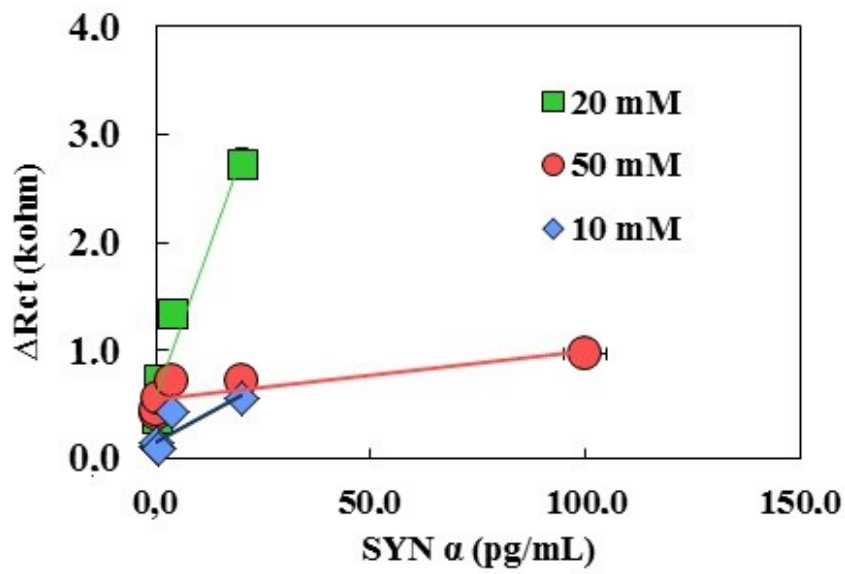


Figure 1 The effect of different monomer concentrations on the response of the neurobiosensor system.

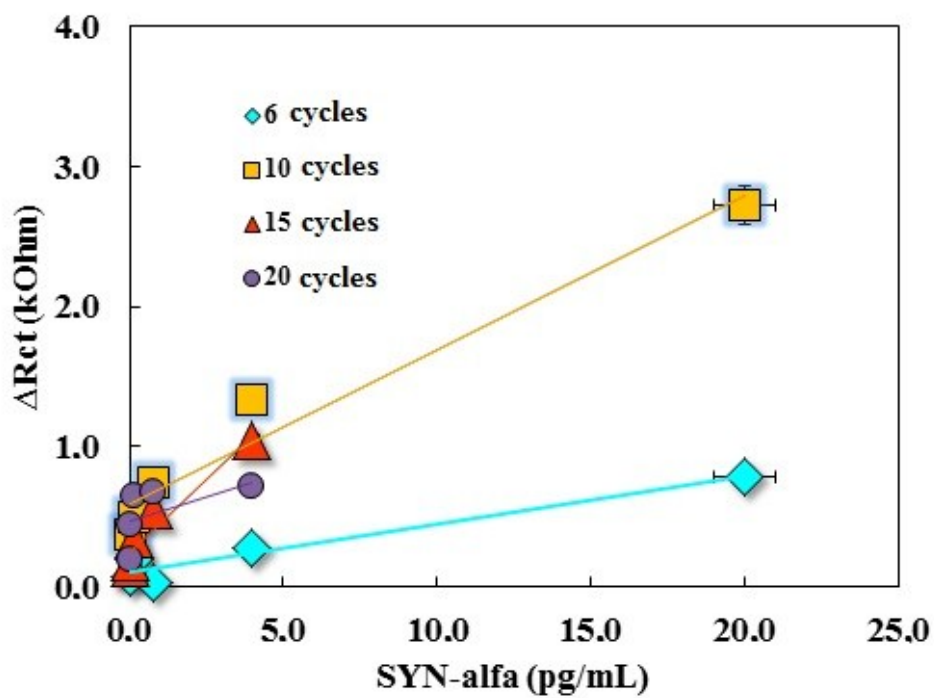


Figure 2 Effect of electropolymerization processes performed with different number of cycles on the response of the neurobiosensor system.

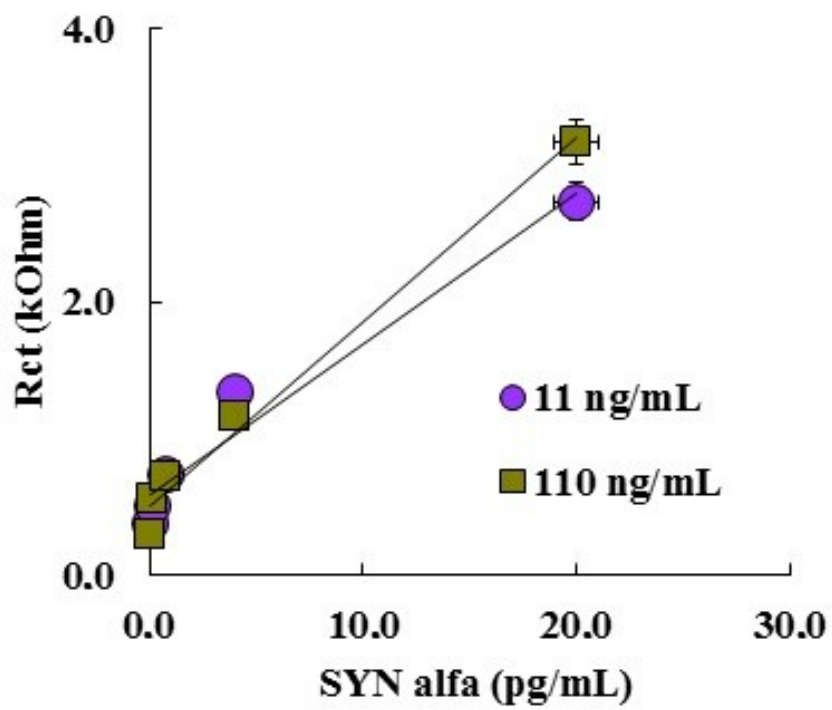


Figure 3 Calibration graphs of the neuro-biosensor system prepared with different anti-SYN-alpha concentrations.

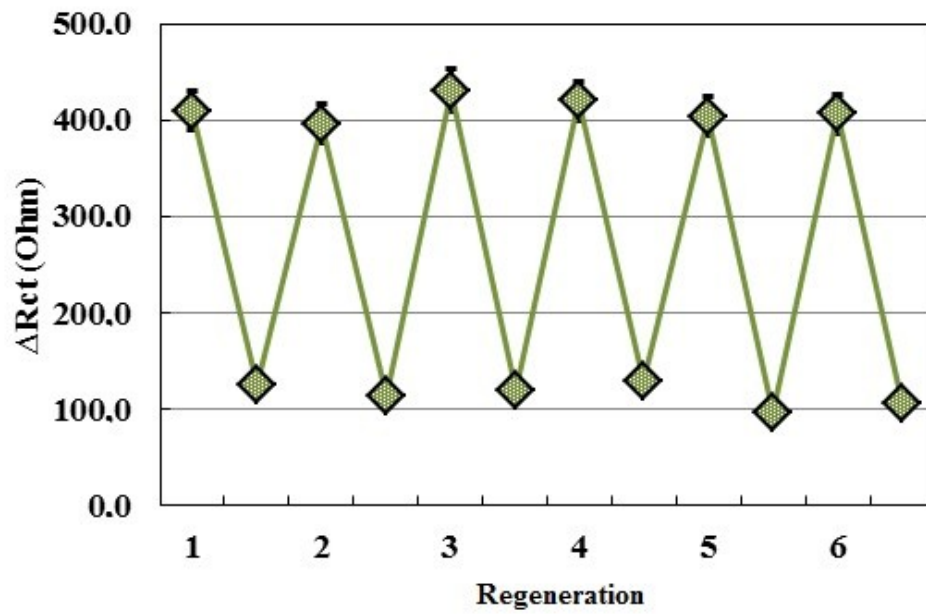


Figure 4 Regeneration capacity of SYN-alpha neurobiosensor.

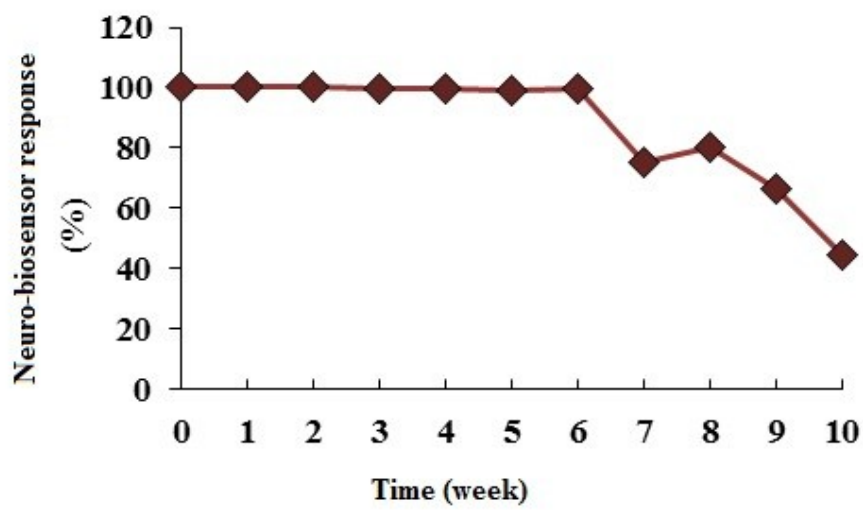
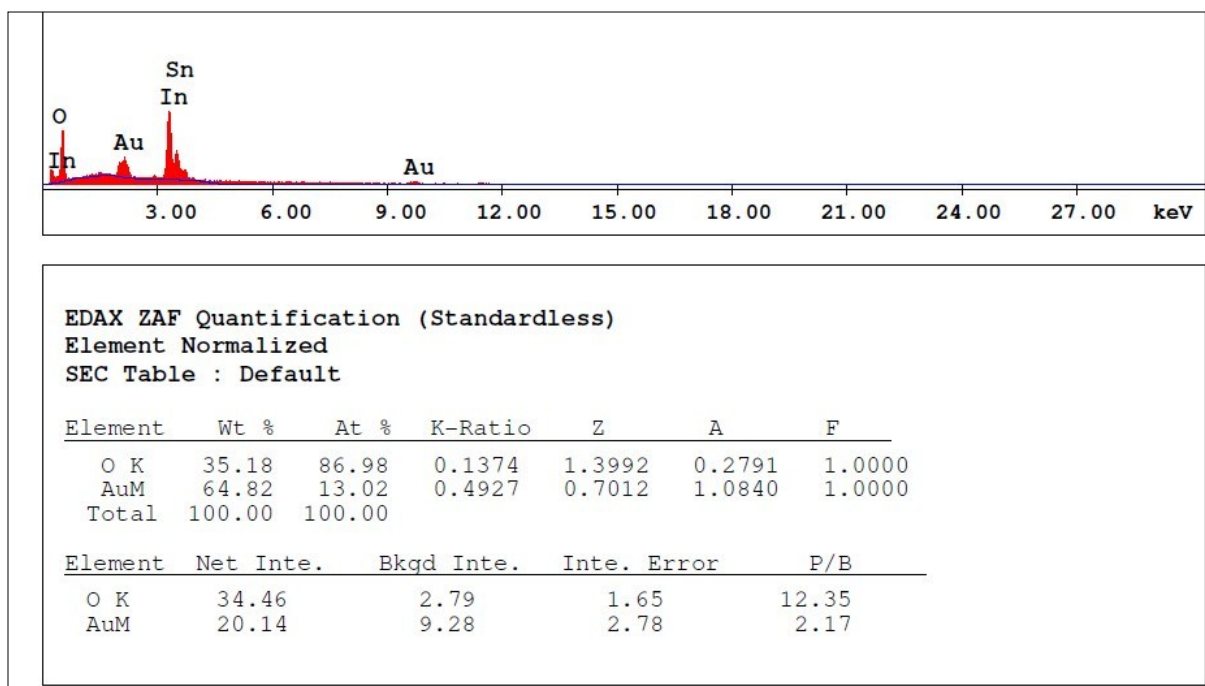


Figure 5 Storage stability of SYN-alpha neurobiosensor



**Figure 6** EDX spectrum of gold nanoparticle deposition on ITO electrode surface.

Table 1. The clinical details of the individuals who donated the CSF

<b>Samples (healthy individuals)</b>	<b>Gender</b>	<b>Age</b>
1	Female	46
2	Male	54
3	Male	56
4	Male	62
<b>Samples (patients with PD)</b>	<b>Gender</b>	<b>Age</b>
1	Male	76
2	Male	68
3	Male	78
4	Male	66

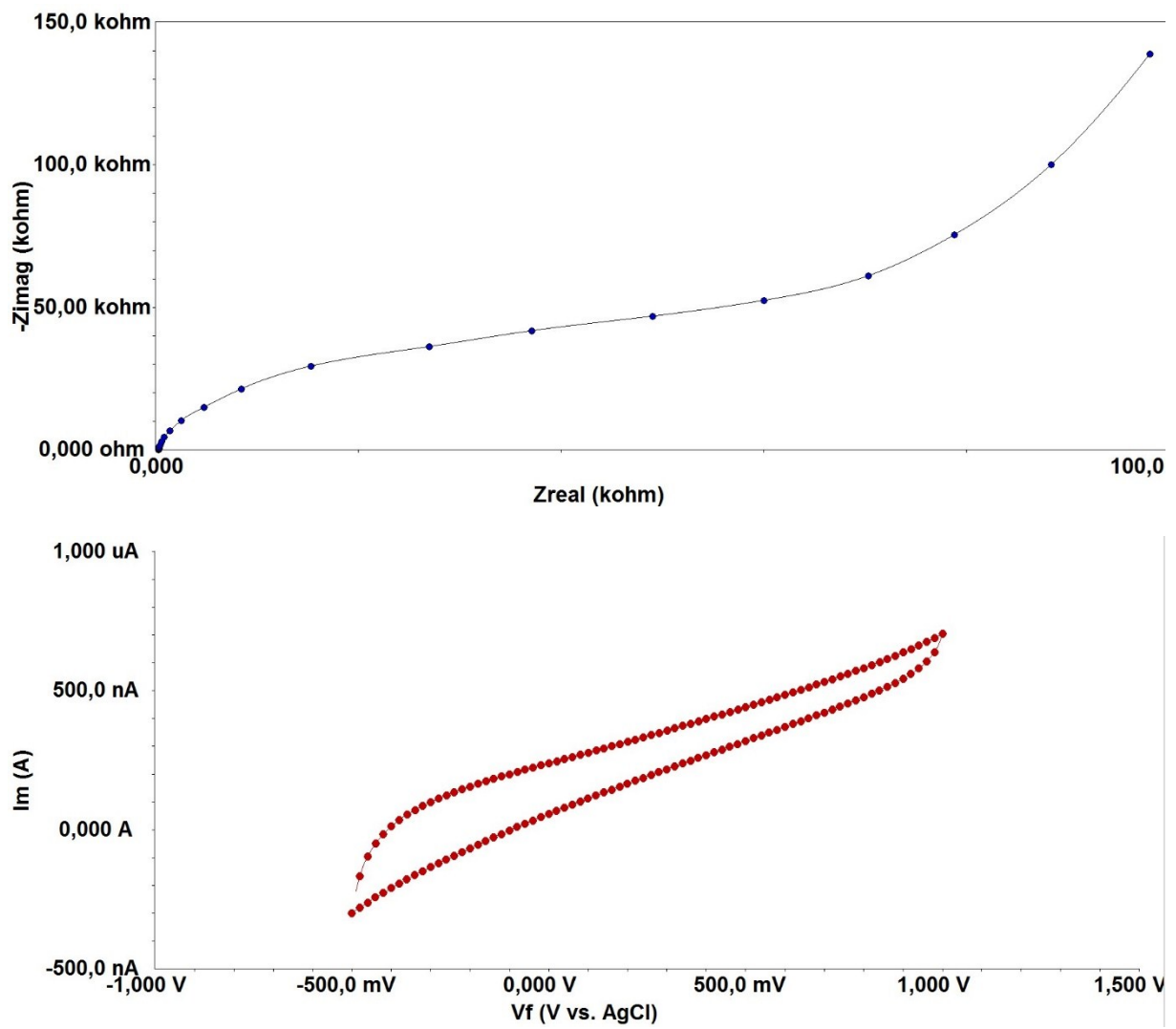


Figure 7. EIS spectra and CV voltammogram of bare ITO electrode.