Supplementary Materials

Quantitative detection of trace mercury in environmental media using three-dimensional configuration of electrochemical sensor with anionic intercalator

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Characteristic of Au nanoclusters

Assuming that the nanoclusters were standard cylinders with a diameter of 120 nm and length of 150 nm, and covered 80% of the gold electrode surface, there were 5.0×10^{10} Au nanoclusters on the surface of the gold electrode with a diameter of 3 mm. The total surface area would be 5.0 times larger than that of the original electrode surface, i.e. the proposed electrode offered more reaction sites for self-assembly of the DNA probes.

Figure 1S Effect of pH to the mercuric sensor





Figure 2S Optimizing of concentration and self-assembly time of capture probe (P1)

Figure 3S Effect of reaction time between the sensor and mercury ions



Figure 4S Effect of the salt concentration and immersing time to AQDS intercalating

