

Supporting Information

Development of a Molecular Recognition Electrode and Investigation of a Biomolecular Application in Non-Aqueous Media

-Electrochemical Detection of Uremia-Related Substances Excreted via ATP-Binding Cassette Transporter G2-

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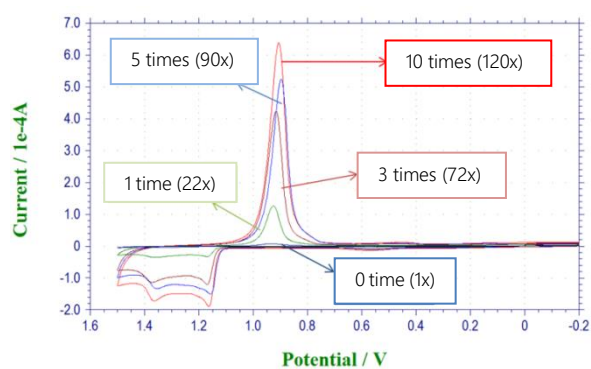
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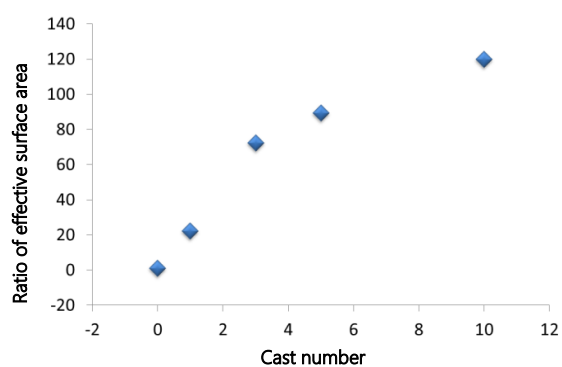


Figure S1 (A) Cyclic voltammograms of AuNP electrodes with different NP cast number in 0.1M H_2SO_4 solution. 0 time means polycrystalline gold electrode (diameter: 5 mm) without AuNP. (B) Change in ratio of effective surface area related to the cast number.

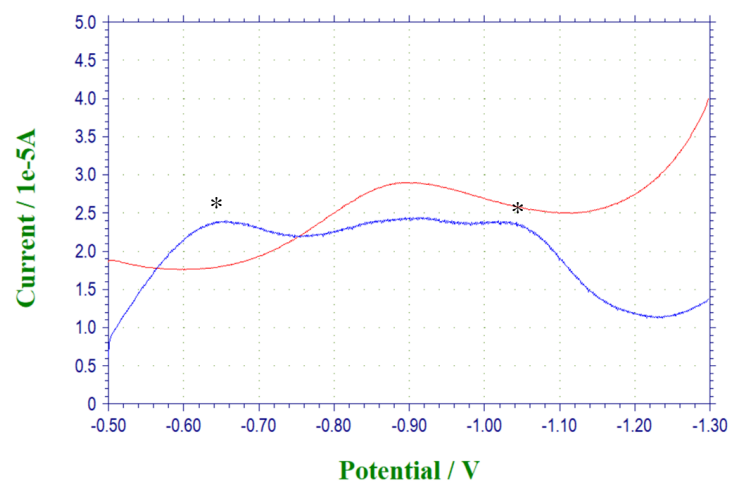


Figure S2 Cathodic stripping voltammetry in 0.5M KOH solution in the potential range -0.5 to -1.3 V.
(Red: AuNP electrode without SAM modification, Blue: SAM-modified AuNP electrode)

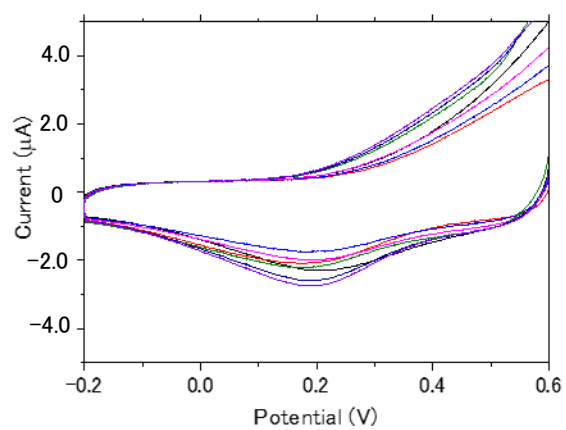


Figure S3 Cyclic voltammograms depending on IS addition (0-6 $\mu\text{g/mL}$) by 1 $\mu\text{g/mL}$ in phosphate buffer measured by non-pretreated 2-mercaptobenzimidazole modified AuNP electrode.

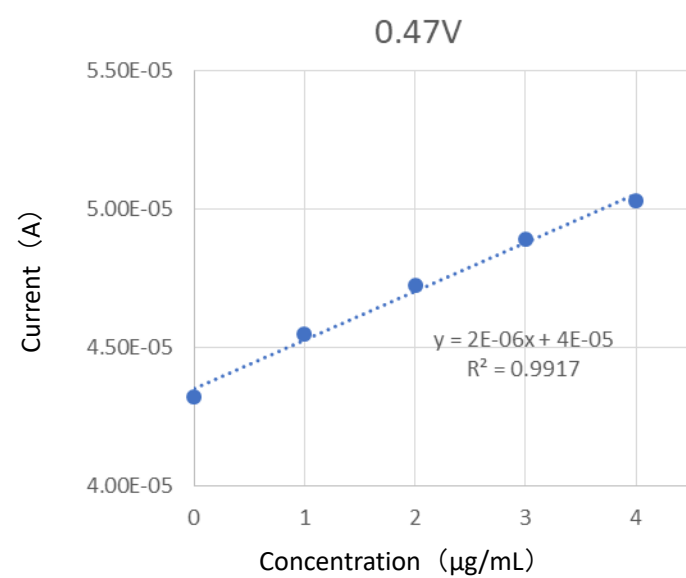


Figure S4 Standard curve of IS concentration vs oxidation current measured in serum-free culture medium.