## **Supplementary Information**

## Development of a compact label-free small molecule measurement system using a periodically nanostructured sensor substrate

K. Yokoyama, M. Oishi and M. Oshima



Fig. S1 Result of the XPS measurement on the sensor substrate before and after AUT treatment. a) Intensity of the element N. b) Intensity of the element S.



Fig. S2 Result of the ellipsometry measurement. The green and blue line represents the

measurement results of the amplitude component  $\Delta$  and the phase difference  $\phi$ , respectively. The purple and red line represents the analysis results of  $\Delta$  and  $\phi$ , respectively. a) Result of the Aucoated sensor substrate. b) Result of the AUT-coated sensor substrate.



Fig. S3 Result of the TOFMS measurement. The m/z 603 matches the molecular weight of the chemical compound (603) as a result of the reaction of Dodecylamine and CO-CMO.