

Supporting Information

Optical fiber SERS sensor based on GO/AgNPs/rGO sandwich structure hybrid films

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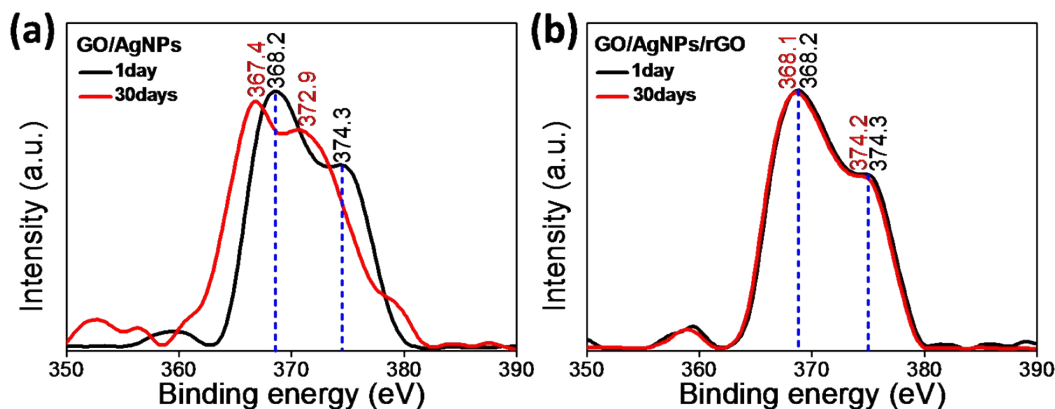


Figure S1. Ag 3d XPS data collected from (a) GO/AgNPs and (b) GO/AgNPs/rGO film at the designated 1 and 30 days. The vertical dotted lines at about 368.2 and 374.2 eV are added to emphasise the shift of the Ag 3d peaks.

As can be seen in the Figure S1, the Ag 3d peaks on GO/AgNPs film shifted to lower binding energy evidently compared to that on GO/AgNPs/rGO film, the dotted vertical lines at about 368.2 and 374.2 eV are added to emphasise the shift of the Ag 3d peaks. Ag is unusual in that its core-levels exhibit a chemical shift to lower binding energy as the oxidation state of Ag increases.¹⁻² Thus, the shift to lower binding energy of the Ag 3d peaks indicated the oxidation of Ag and the AgNPs on GO/AgNPs film oxidated more serious than that on GO/AgNPs/rGO film since the Ag 3d peaks on GO/AgNPs film shifted to lower binding energy evidently compared to that on GO/AgNPs/rGO film.³

References:

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