

Supporting Information

Modulating the plasmon-mediated silver oxidation with thiophenol molecules as monitored with in situ SERS spectroscopy

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Supplementary Figures

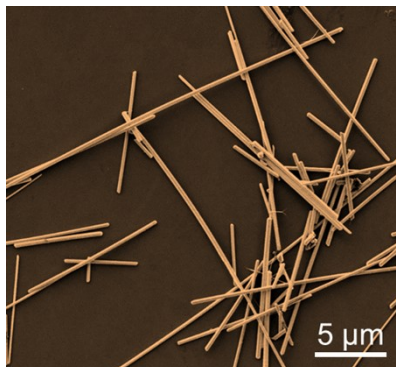


Figure S1. SEM image of the AgNWs used in this work.

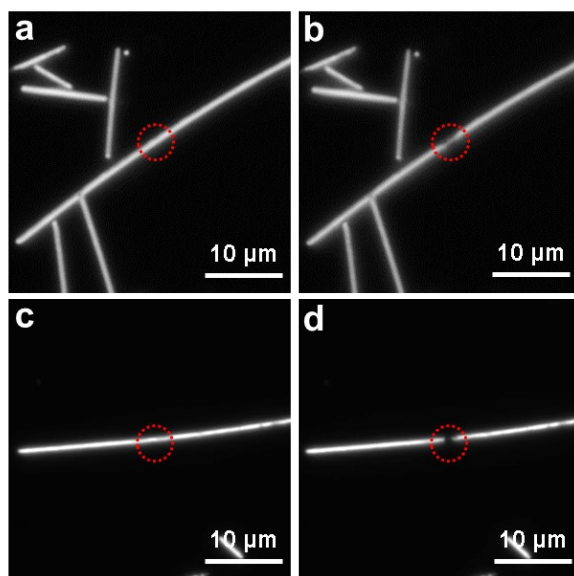


Figure S2. Morphological change of the AgNW before (a,c) and after (b,d) laser irradiation. The red dotted circles indicate the spot that was irradiated.

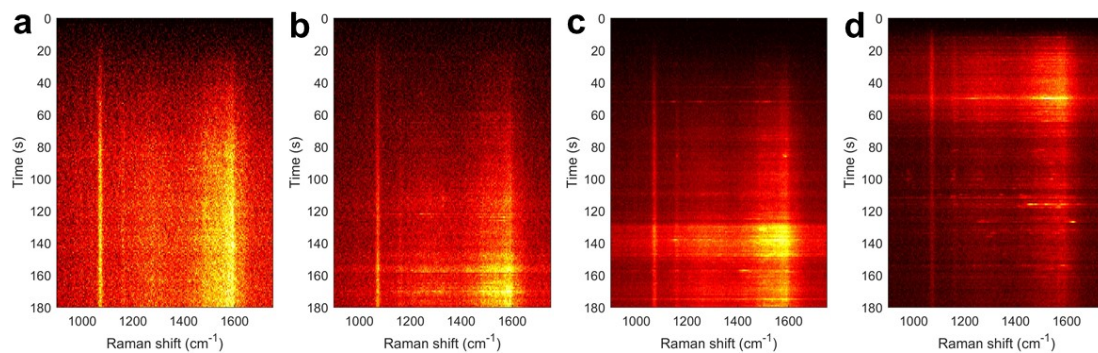


Figure S3. Temporal evolution of SERS spectra of the PHTP molecules at the centre of an AgNW in conditions of open circuit (a) and bias of 0.1 (b), 0.3 (c) and 0.5 (d) V.

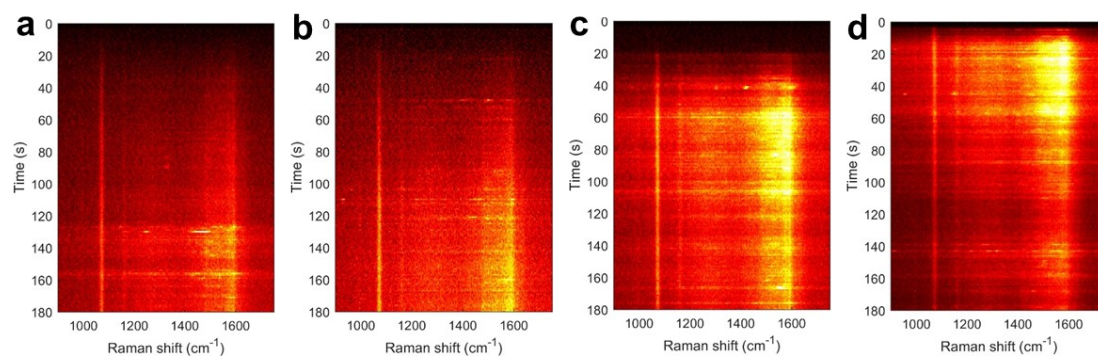


Figure S4. Temporal evolution of SERS spectra of the PHTP molecules at the junction of two AgNWs in conditions of open circuit (a) and bias of 0.1 (b), 0.3 (c) and 0.5 (d) V.

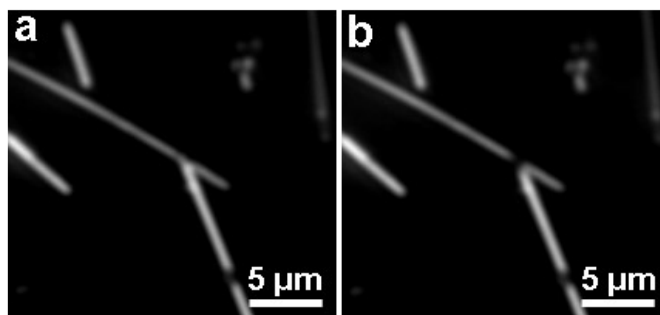


Figure S5. Dark field optical image of the AgNWs with junction etched away.

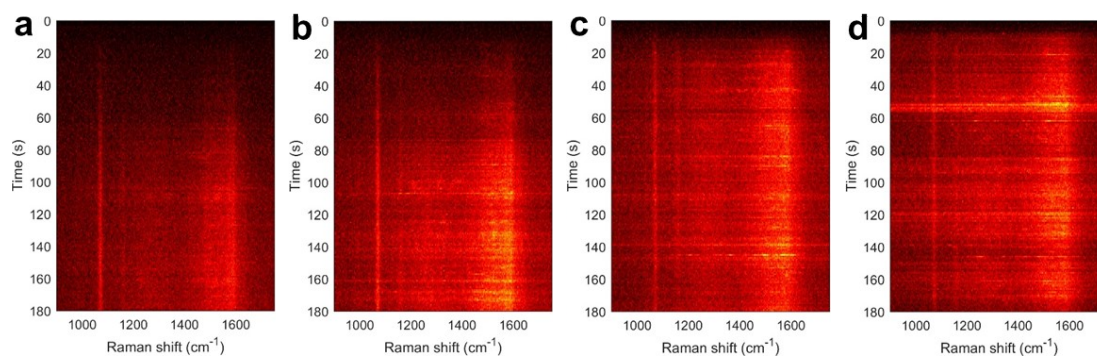


Figure S6. SERS spectral change at the centre of an AgNWs with presence of H_2O_2 molecules in conditions of open circuit (a) and bias of 0.1 (b), 0.3 (c) and 0.5 (d) V.

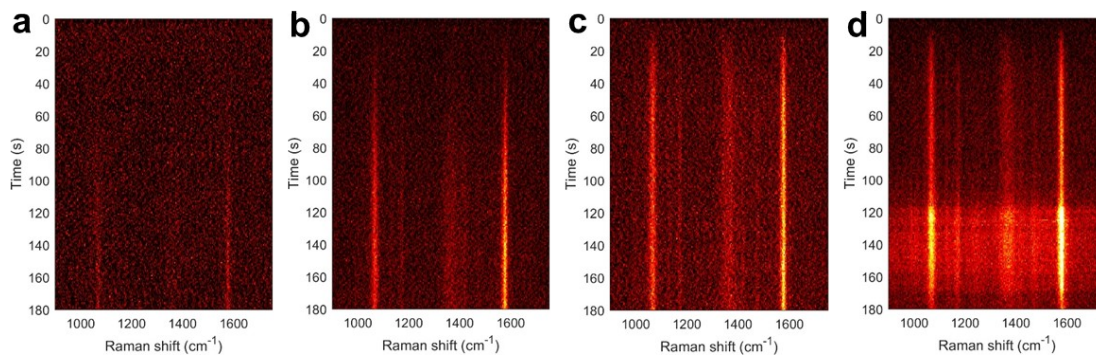


Figure S7. Temporal evolution of SERS spectra of the PMBA molecules at the centre of an AgNW in conditions of open circuit (a) and bias of 0.1 (b), 0.3 (c) and 0.5 (d) V.

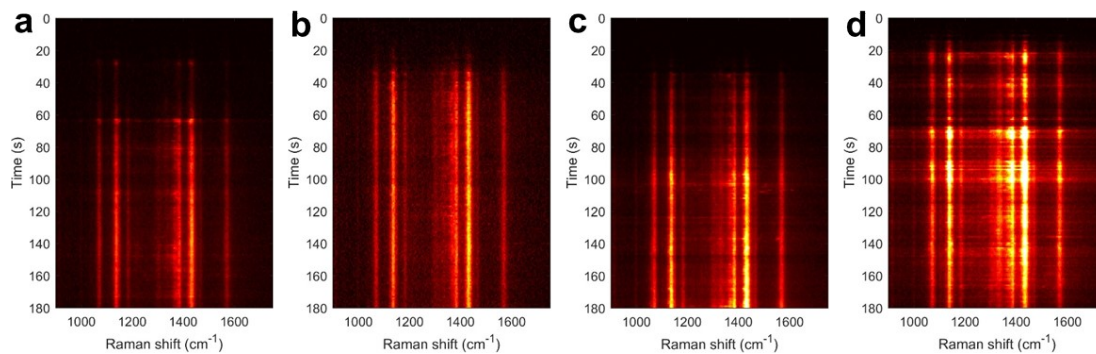


Figure S8. Temporal evolution of SERS spectra of the PNTTP molecules at the centre of an AgNW in conditions of open circuit (a) and bias of 0.1 (b), 0.3 (c) and 0.5 (d) V.

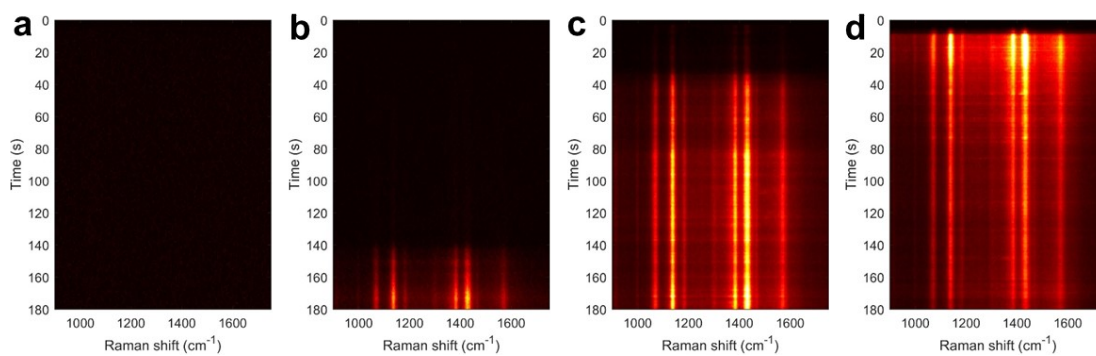


Figure S9. Temporal evolution of SERS spectra of the PATP molecules at the centre of an AgNW in conditions of open circuit (a) and bias of 0.1 (b), 0.3 (c) and 0.5 (d) V.

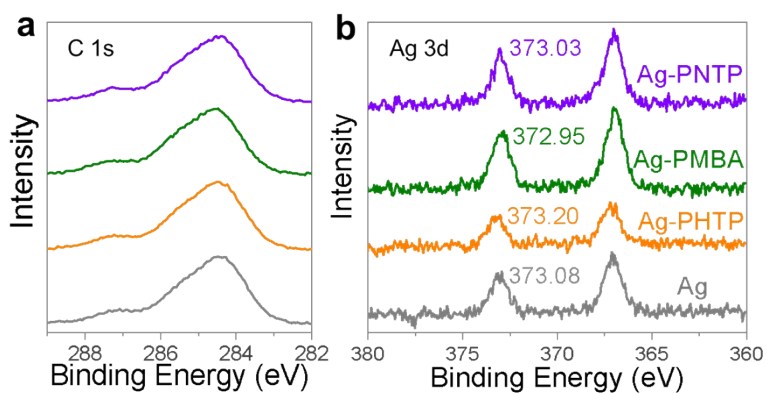


Figure S10. XPS (a) 1s and (b) Ag 3d spectra of the bare silver surface and the ones adsorbed with PNTP, PMBA, and PHTP molecules.