Supporting Information to

Electrochemical water splitting by gold: evidence for an oxide decomposition mechanism

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Figure S1. Schematic view of the Raman setup
Figure S2. Electrochemical cell used for in situ Surface Enhanced Raman measurements.
Figure S3. Raman spectrum acquired at 1.7 V vs. RHE in a pH=0 solution prepared with H$_2^{16}$O, H$_2^{18}$O and D$_2$O, showing the polynomial fittings (second grade polynomial) used to determine the peak position.
Figure S3. SERS spectra for oxygen evolution acquired at constant potential in pH=0 solution prepared in D$_2$O.