

Supplementary information

This section describes additional experiments performed with a Teflon-embedded gold polycrystalline rotating disc electrode. Figure S1 shows the rotating disc voltammograms in 0.1M NaOH with different CO concentrations. Note that the results are essentially the same as those for Au(110) in figure 4. Figure S2 shows the plot of the evaluation of the reaction order in CO concentration. This figure also includes the results of the values of the reaction order, which are close to unity at potentials close to the onset of CO oxidation, and at higher potentials, they become clearly higher than unity.

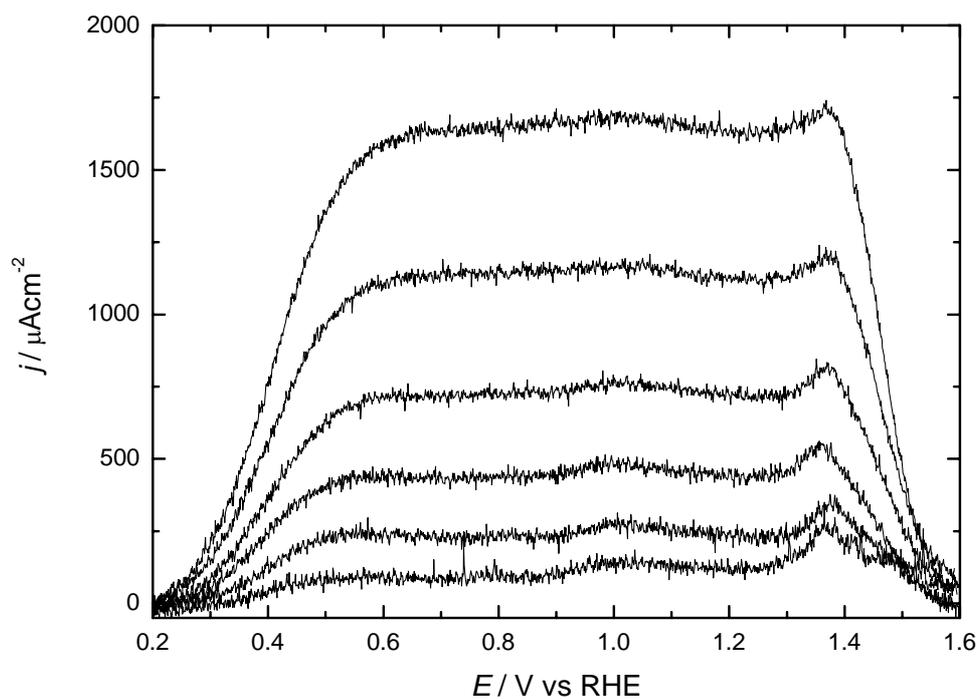


Figure S1. Rotating disc voltammogram of a gold polycrystalline electrode in 0.1 M NaOH with different CO concentrations. Scan rate: 50mV/s. Rotation rate: 1000 rpm.

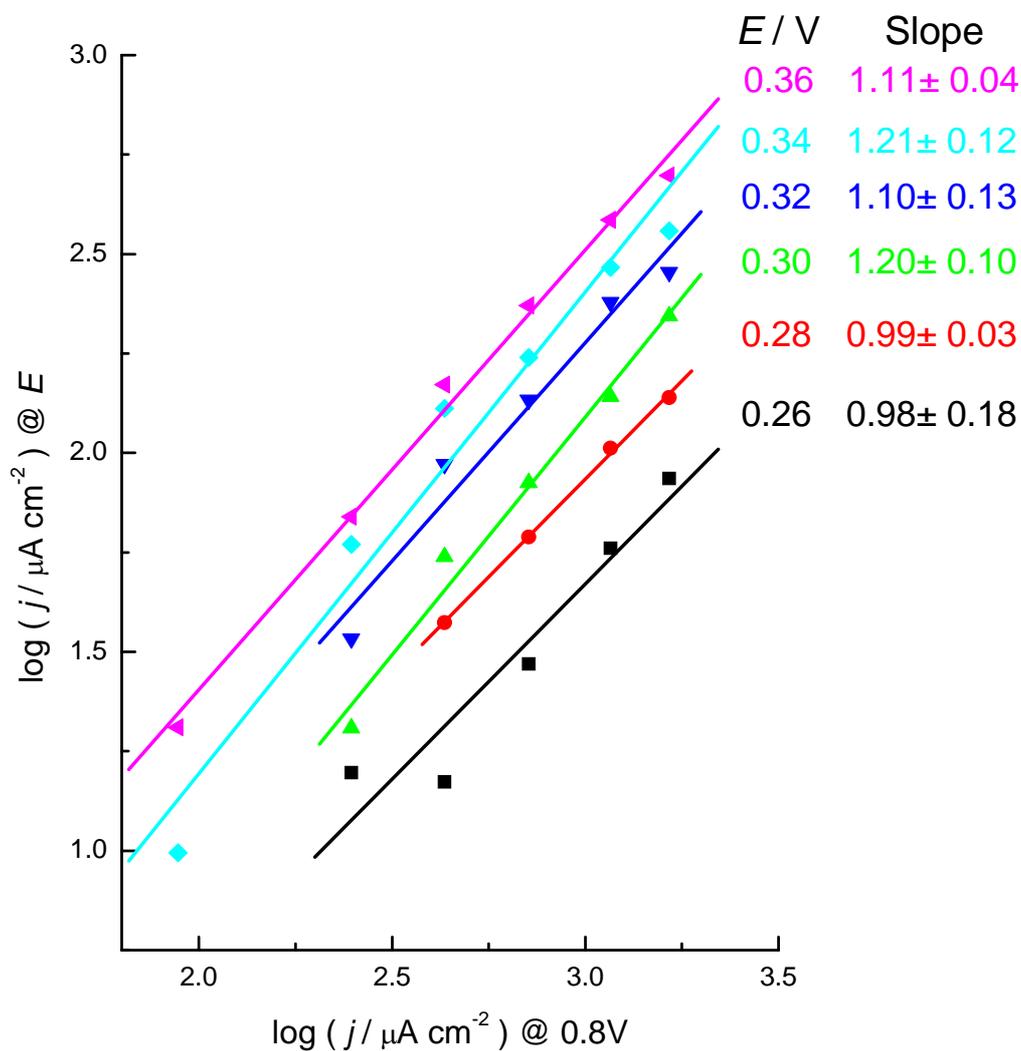


Figure S2. Plot of the logarithm of the kinetically limited current at selected potentials, as indicated, vs. the logarithm of the mass-transport limited current at $E=0.8V$, as obtained from the experimental data in figure S1.