Synthesis of Thin Film AuPd Alloys and their Investigation for Electrocatalytic CO₂ Reduction

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**Figure S11.** AFM images of AuPd thin films, revealing their RMS roughness values. The graphs below each AFM image correspond to a horizontal line scan across the sample.

**Figure S12.** EDS spectrum of AuPd thin film sample F. No Ti signal was detected within the AuPd layer.
Figure S13. AFM images of a AuPd thin film before and after electrochemical testing. Quantitative analysis confirms that the “Untested” and “Tested” regions have a similar RMS roughness values after testing, indicating that the sample retains a similar surface area.