Supplemental Materials

In situ EPR characterization of a cobalt oxide water oxidation catalyst at neutral pH

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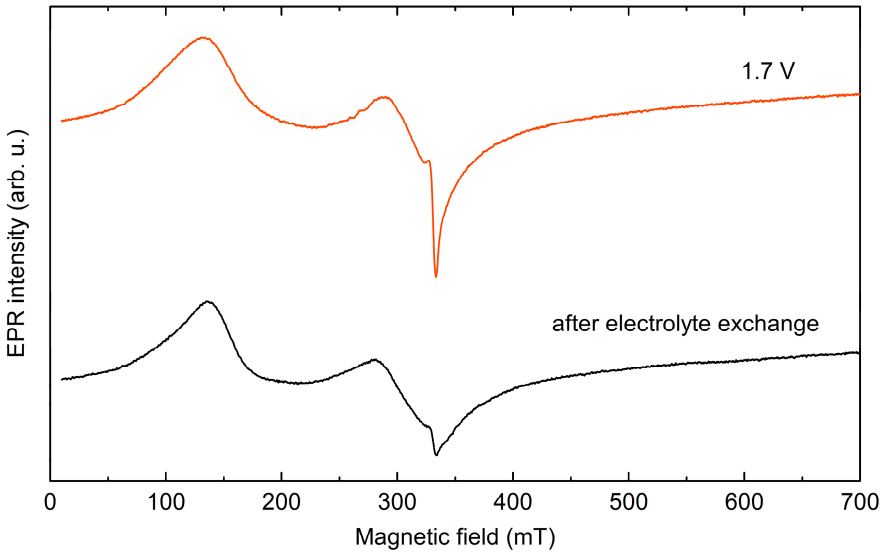

Figure S1. Bottom two traces of Figure 3 A: EPR spectra of a Co-Pi modified Au electrode electrolyzed at the highest applied potential of 1.7 V, recorded before (top) and after (bottom) the electrolyte solution exchange. P_{MW} = 63 mW, T = 5 K.

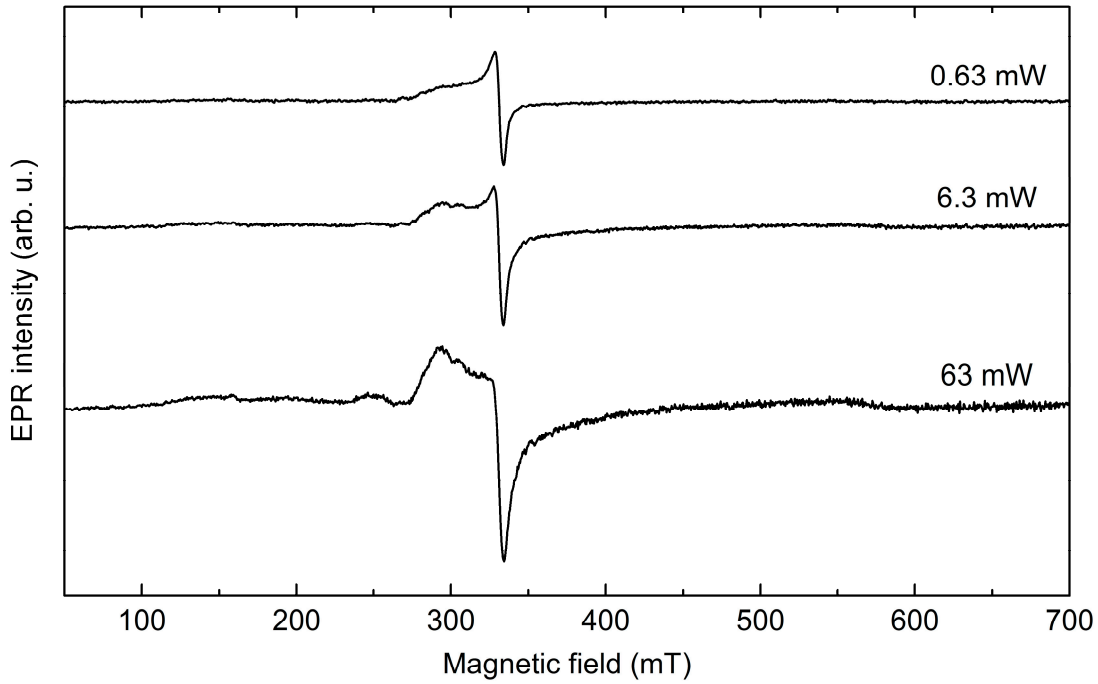

Figure S2. EPR spectra of the electrolyte solution used in the titration series measured at several MW power levels. The narrow $g \approx 2.1$ line is found in the solution measured separately from the cell.

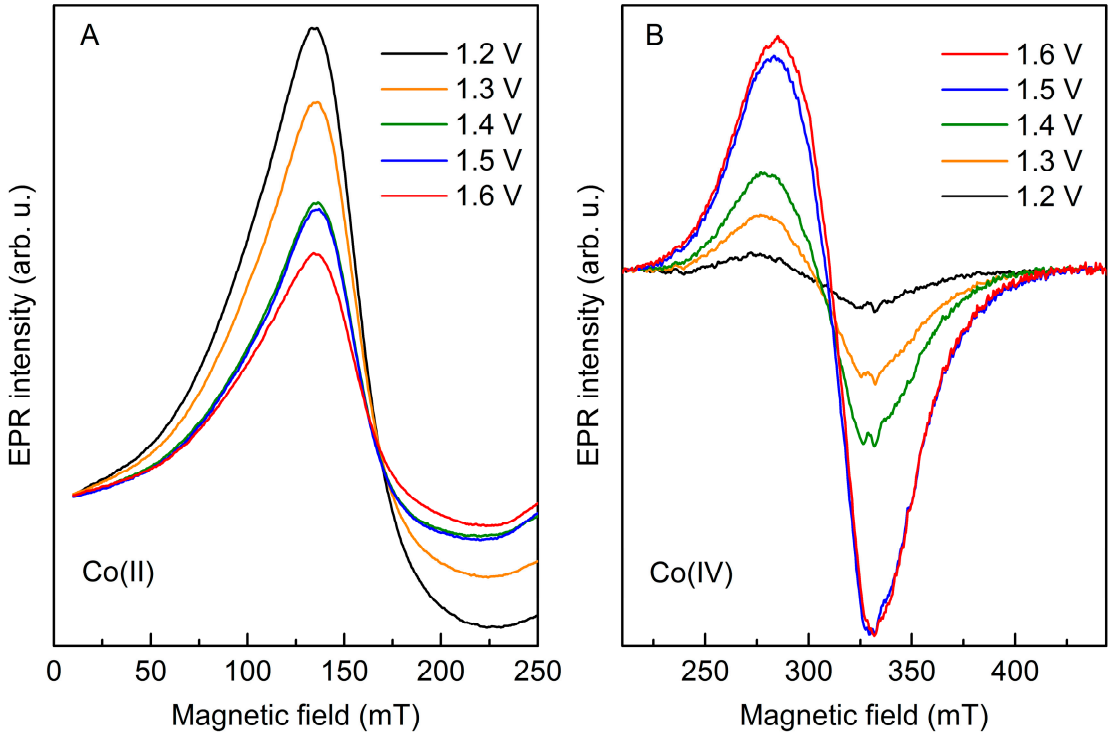

Figure S3. (**A**) The loss of the Co(II) species and (**B**) the increase in the Co(IV) EPR intensity as a function of applied potential above the water oxidation threshold.