Electronic Supplementary Material (ESI) for Physical Chemistry Chemical Physics.

Supporting information for

Electron Induced Surface Reactions of (η^{5}-C_5H_5)$Fe(CO)_2Mn(CO)_5$, a Potential Heterobimetallic Precursor for Focused Electron Beam Induced Deposition

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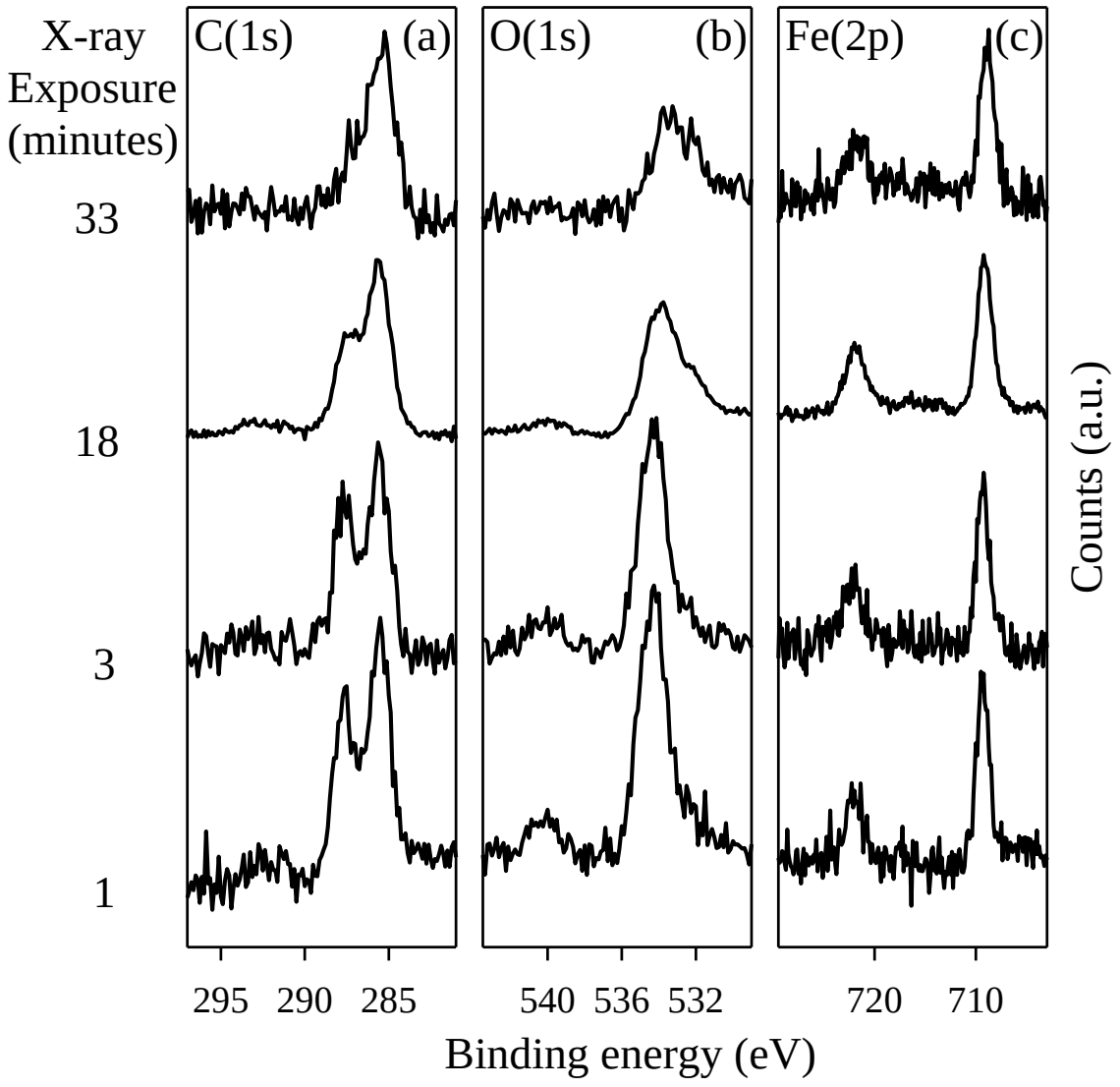

Figure S1 Evolution of the a) C(1s), b) O(1s), and (c) Fe(2p) XP regions for a ~3 nm thick film of η^5-$C_5H_5Fe(CO)_2Mn(CO)_5$ adsorbed onto Au, irradiated only with X-rays (Mg Kα 1253.6 eV) from the X-ray gun; the X-ray exposure time is shown on the left hand side of each spectrum.

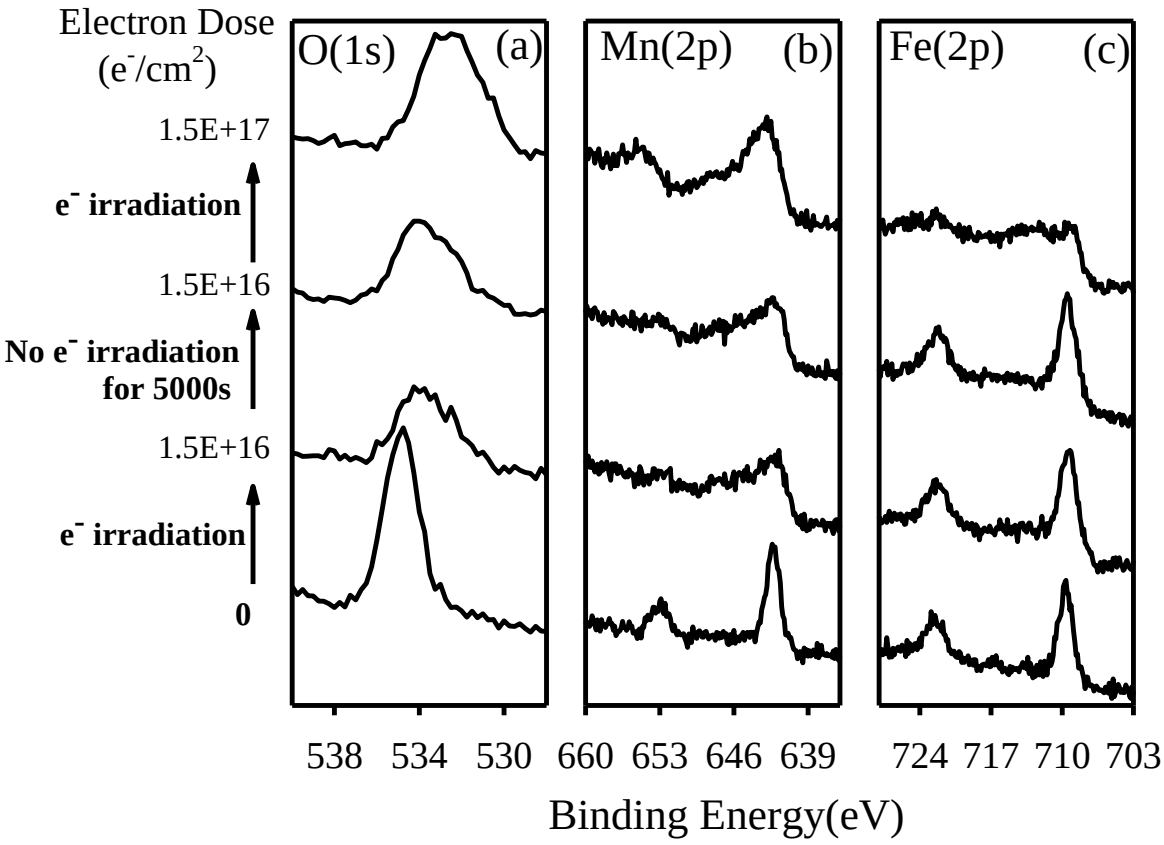

Figure S2 Evolution of (a) Fe(2p), (b) Mn(2p) and (c) O(1s) XPS regions for ~1.1 nm thick film of (η^5-C_5H_5)$Fe(CO)_2Mn(CO)_5$ adsorbed onto an amorphous carbon (a:C) substrate at 190 K and exposed to electrons in the presence of a measurable partial pressure of H_2O molecules in the UHV chamber. After an initial electron irradiation of 500s (electron dose of 1.5 x 10^{16} e^-/cm^2), the electron gun was switched off for 5000s and then on for 5000s to control for the effect of electrons on the oxidation of Fe atoms by H_2O