

Correction to “Ag Adsorption on Reduced CeO₂(111) Thin Films”

Jason A. Farmer, Jack H. Baricuatro, and Charles T. Campbell*

J. Phys. Chem. C **2010**, *114* (40), 17166–17172. DOI: 10.1021/jp104593y

In the Experimental Section, on page 17167 in the right column near the end of the first full paragraph, it reads:

“Setting the final reflectivity for multilayer Ag at the literature value for Ag of 94%^{53,54} allowed us to calculate the reflectivity at lower coverages. This gave a reflectivity of $76 \pm 5\%$ for the starting CeO_{2-x}(111) film, which equals the reported reflectivity of Pt (at 300 K using 632 nm) of $\sim 76\%$ [Pt(111)],⁵⁵ $\sim 74\%$ [Pt(110)],⁵⁶ and $73.07 \pm 0.08\%$ [Pt(111)].⁵⁷ This implies that this 4 nm CeO_{2-x}(111) film does not significantly change the reflectivity of Pt(111).”

That part should be changed to instead read:

“We assumed that the initial reflectivity of each CeO_{2-x}(111)/Pt(111) surface at 300 K and 632 nm was equal to our measured value for clean Pt(111) of $\sim 76\%$,⁵⁵ which is very close to other reported values of $\sim 74\%$ for Pt(110)⁵⁶ and 73% for Pt(111).⁵⁷ We adjusted this reflectivity for this change in absorbance with Ag coverage in both the heat signal calibration and correcting for the optical radiation from the hot metal source versus Ag coverage. This led to a final heat of adsorption on multilayer Ag at ~ 3 ML that agrees to within 2% of the heat of sublimation of bulk Ag (285 kJ/mol⁷⁰), confirming the accuracy of this approach.”