Erratum to: The Kinetics of CO Oxidation by Adsorbed Oxygen on Well-Defined Gold Particles on TiO₂(110)

V. Bondzie · S. C. Parker · Charles T. Campbell

Published online: 26 August 2011
© Springer Science+Business Media, LLC 2011

Erratum to: Catal Lett 63:143–151 (1999) DOI 10.1023/A:1019012903936

On page 149, the text of this paper reads:

“Using simple Redhead analysis [28] and assuming first order desorption kinetics and a pre-exponential factor for desorption of $5.5 \times 10^{12} \text{ s}^{-1}$ from a closely related O/Au system [22], we estimate desorption activation energies ranging from 124.7 kJ/mol (for the ~ 1 -atom thick islands) to 90.4 kJ/mol (for the 6-atom thick islands). Since the activation energy for desorption generally follows the same trend as the adsorption energy (and they are equal for non-activated adsorption), we conclude that the ~ 34.3 kJ/mol higher activation energy on the thinnest particles corresponds to a larger adsorption energy (i.e., considerably more stable O_a) on the thinnest particles of Au.”

There was a calculation error here, and these three energies must be changed so that this text instead reads:

“Using simple Redhead analysis [28] and assuming first order desorption kinetics and a pre-exponential factor for

desorption of $5.5 \times 10^{12} \text{ s}^{-1}$ from a closely related O/Au system [22], we estimate desorption activation energies ranging from 190 kJ/mol (for the ~ 1 -atom thick islands) to 139 kJ/mol (for the 6-atom thick islands). Since the activation energy for desorption generally follows the same trend as the adsorption energy (and they are equal for non-activated adsorption), we conclude that the ~ 51 kJ/mol higher activation energy on the thinnest particles corresponds to a larger adsorption energy (i.e., considerably more stable O_a) on the thinnest particles of Au.”

Correspondingly, the value of “34.3 kJ/mol” appearing in three other places (on Figure 9, in the right-hand column of page 149 and the left-hand column of page 150) all must be corrected also to be “51 kJ/mol”. Similarly, the value “>17.2 kJ/mol” appearing in two places (on Figure 10 and in the left-hand column of page 150) must be corrected in both places to be “>25 kJ/mol”.

The authors thank Dr. Beatriz Roldan Cuenya for pointing out this error.

The online version of the original article can be found under doi:[10.1023/A:1019012903936](https://doi.org/10.1023/A:1019012903936).

V. Bondzie · S. C. Parker · C. T. Campbell (✉)
Department of Chemistry, University of Washington, Seattle,
WA 98195-1700, USA
e-mail: campbell@chem.washington.edu