

CORRIGENDUM

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Simultaneous Generation of Mesoxalic Acid and Electricity from Glycerol on a Gold Anode Catalyst in Anion-Exchange Membrane Fuel Cells

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The authors of this Full Paper sincerely apologize for the misuse of “standard hydrogen electrode” (SHE) instead of “reversible hydrogen electrode” (RHE) and wish to clarify that all the potentials reported in this paper and the Supporting Information should be against RHE. We also would like to clarify that the electrochemical data was collected versus a Hg/HgO/1.0 m KOH reference electrode during the experiments and had been converted to values vs. RHE, as should be reported. The standard electrode potential of Hg/HgO/1.0 m KOH was 0.098 V vs. SHE based on the manufacturer’s specification. Therefore, in our system, potentials versus RHE were calculated as:

$$\begin{aligned} V(\text{vs. RHE}) &= V(\text{vs. Hg/HgO/1.0 m KOH}) + 0.098 + 0.059 \times \text{pH}_{\text{supporting electrolyte}} \\ &= V(\text{vs. Hg/HgO/1.0 m KOH}) + 0.924 \text{ [at pH 14, } T = 25^\circ\text{C]}. \end{aligned}$$

To be more accurate, the potential difference between the employed Hg/HgO/1.0 m KOH reference electrode and RHE was confirmed to be 0.925 V by a high impedance multimeter (Fluke 8808A) in a freshly prepared 1.0 m KOH electrolyte. In addition, during our conversion of potentials vs. Hg/HgO/1.0 m KOH to those vs. RHE, the potential difference at the bulk electrolyte–reference electrode junction interface was neglected. The authors apologize for this oversight and any inconvenience caused to the readers in interpreting our results.