Electronic Supplementary Information

All potentials in the paper were measured vs. SCE and then converted to the reversible hydrogen electrode (RHE) scale. A standard three-electrode system was used for the calibration of the SCE reference, using two identical platinum electrodes. The 8 M KOH electrolyte was pre-saturated with hydrogen gas and then linear scan voltammetry was run at a scan rate of 10 mV s^{-1}. The thermodynamic potential (vs. SCE) for the hydrogen electrode reactions is considered to be that at which the current becomes zero. As shown in Figure S1, for the tested 8 M KOH electrolyte, that potential value was -1.115 V vs. SCE. Accordingly, to convert the potentials from the SCE scale to the RHE scale, the following expression was used: $E_{RHE} = E_{SCE} + 1.115$ V

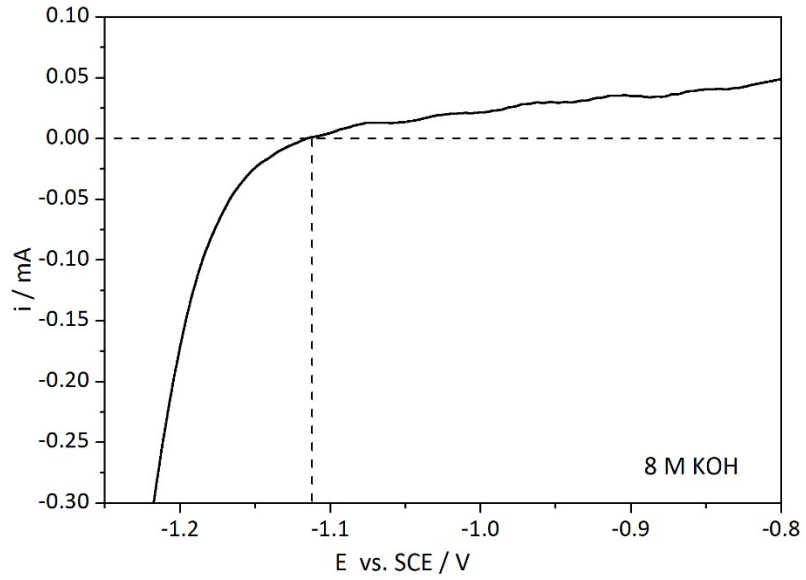

Fig. S1. Calibration of SCE to RHE scale.