

Supplementary Information

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Sequences of OTUs present at >1% relative abundance

The following 16S rRNA amplicon sequences correspond to the OTUs shown in Figs. 5&6. They have been processed as described in the materials and methods. The header line for each sequence contains the greengenes taxonomy followed by white space and then a short name used in the manuscript. The raw sequence data can be downloaded from the Short Read Archive SRP021172.

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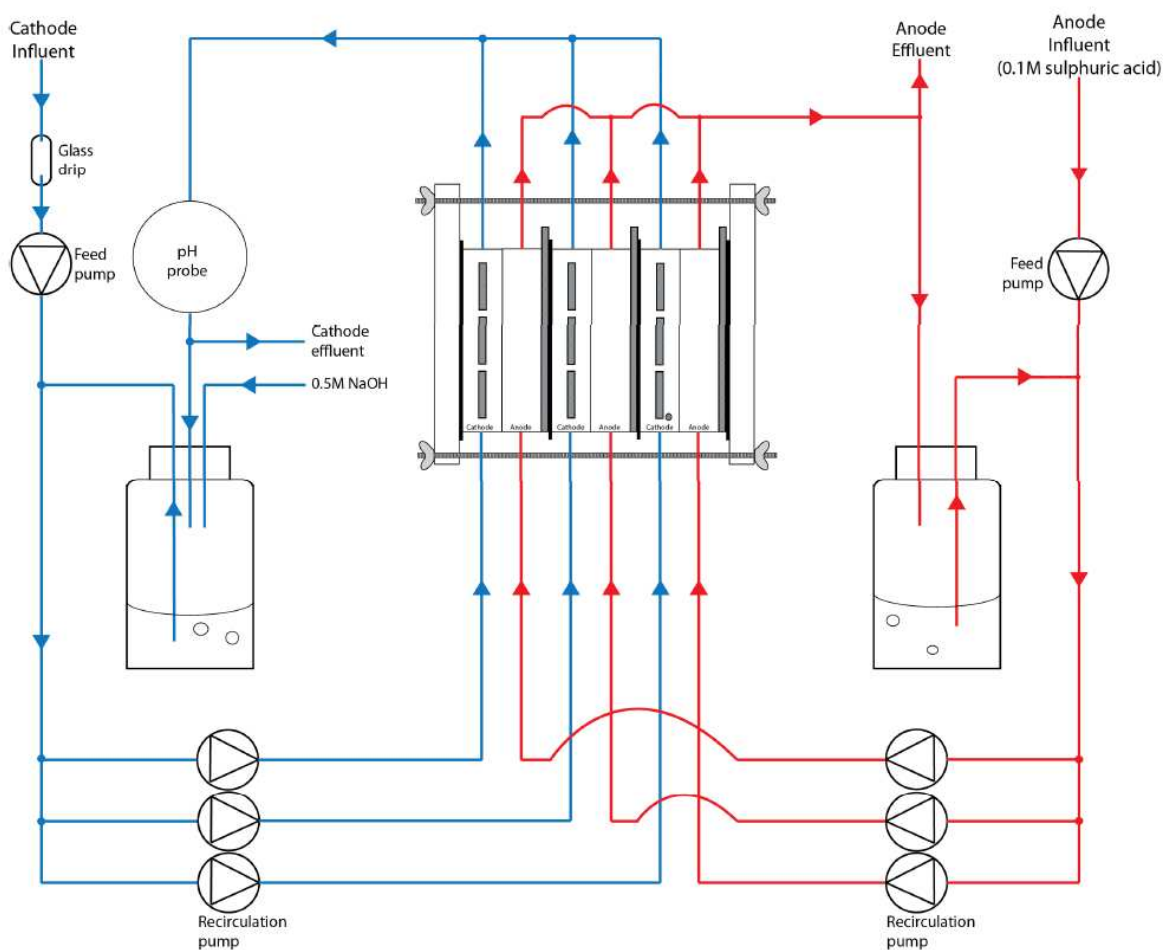


Fig. S1 Schematic diagram of the recirculation and feed circuits. Cathode flow is indicated in blue, anode flow in red. Cathode influent was pumped into the cathodic electrolyte recirculation stream at 3 L day^{-1} through a glass drip to avoid contamination of the stock solution. The influent was split into three pump channels before entering each cathode at a flow rate of 80 mL min^{-1} . The cathode was maintained at pH 5.5 by automated NaOH dosing. The anode influent (0.1 M sulphuric acid) was pumped into the anode electrolyte recirculation stream at 3 L day^{-1} . The anode electrolyte was also split into three pump channels before entering each anode at a flow rate of 80 mL min^{-1} . Excess electrolytes were drained from both cathodes and anodes from overflow tubes.

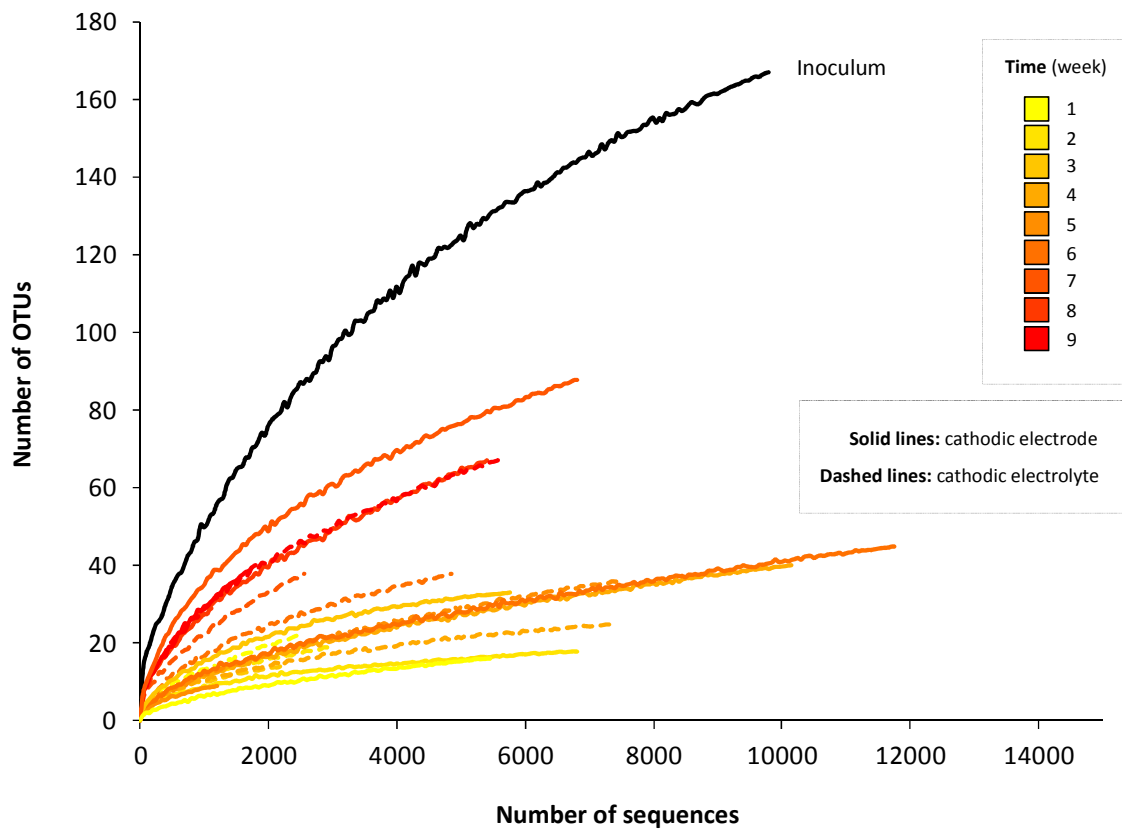


Fig. S2 Individual-based rarefaction curves for each sample.

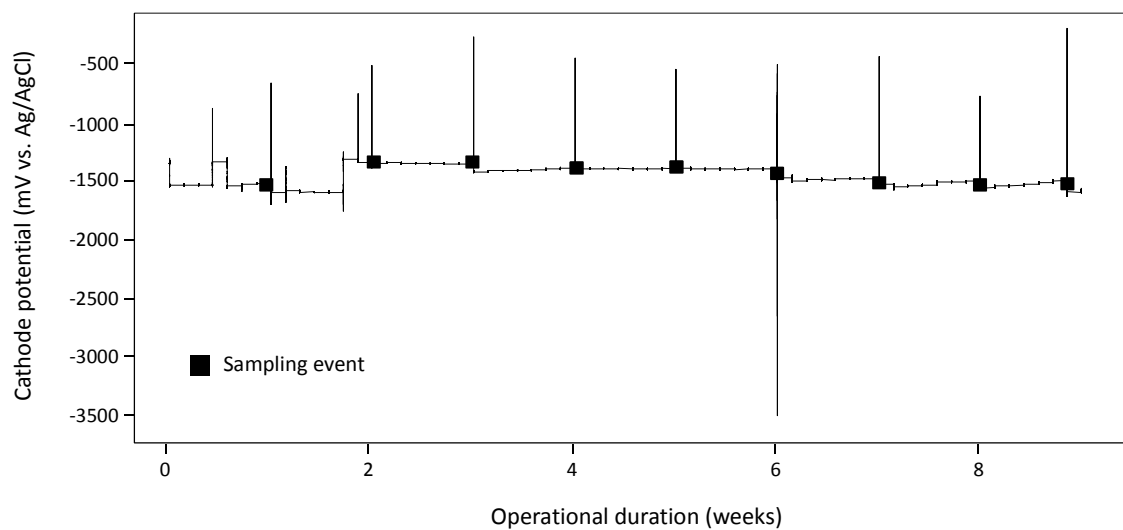


Fig. S3 Cathode potential over time during galvanostatic operation at -0.32 mA cm^{-2} . The spikes occur when the potentiostat/galvanostat is paused for sampling.