

Supplementary data

Optimizing low-voltage boosting for an air-cathode microbial fuel cell with an anion exchange membrane in a 246 L wastewater treatment reactor

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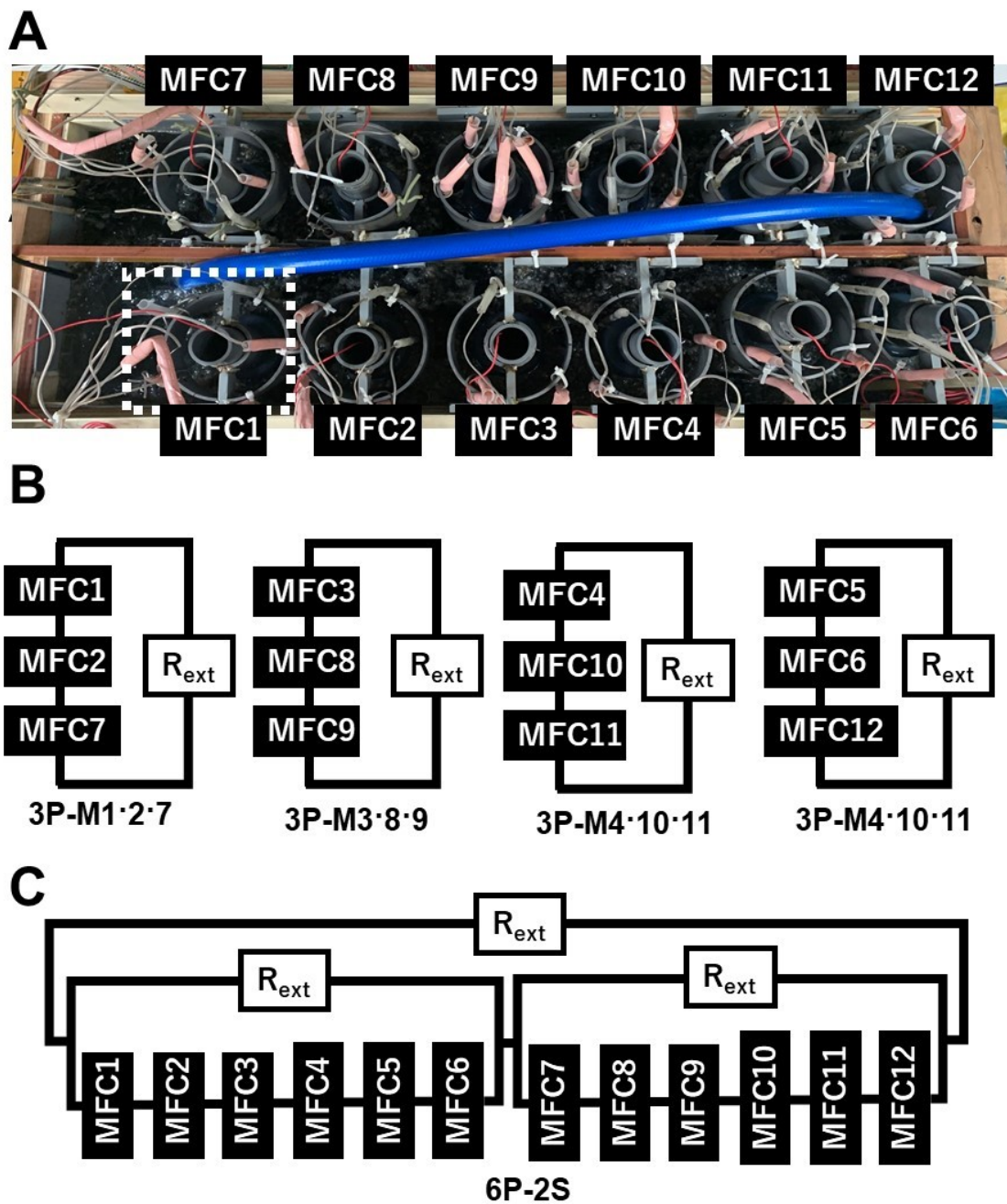
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Supplemental Fig.1 MFC connection schematics.

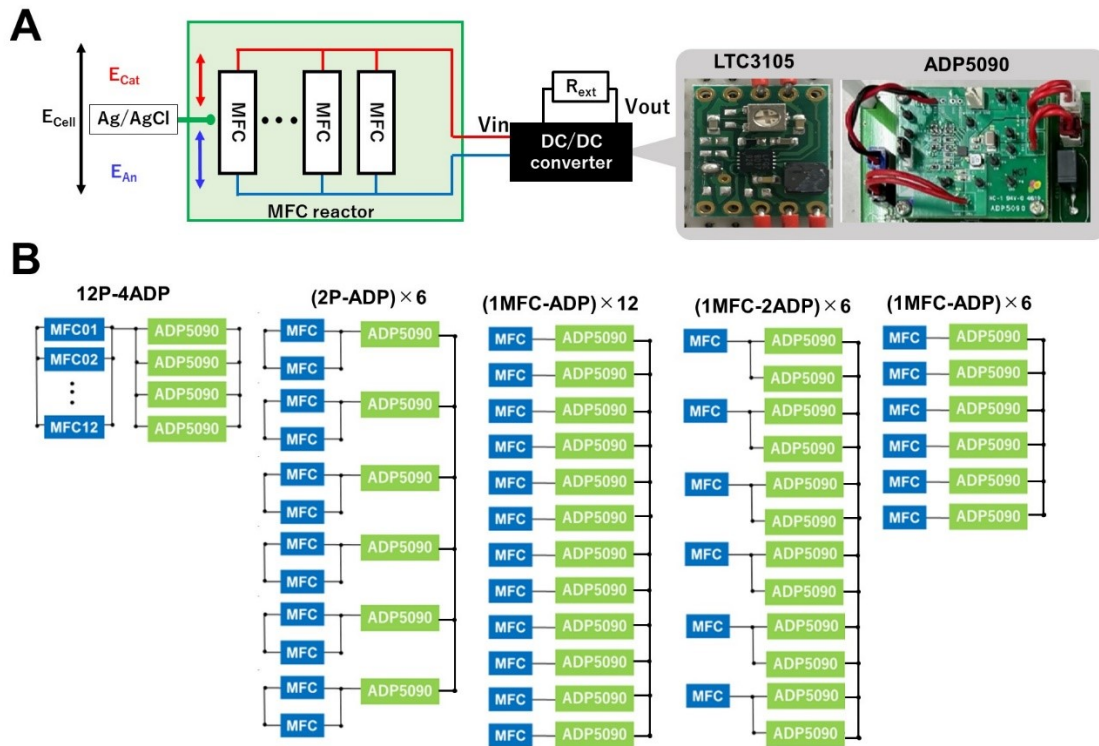
Supplemental Fig.2 Schematic diagram for the boost converter system using two DC/DC converters.

Supplemental Fig. 3 The time-course monitoring of power productions by the MFCs.

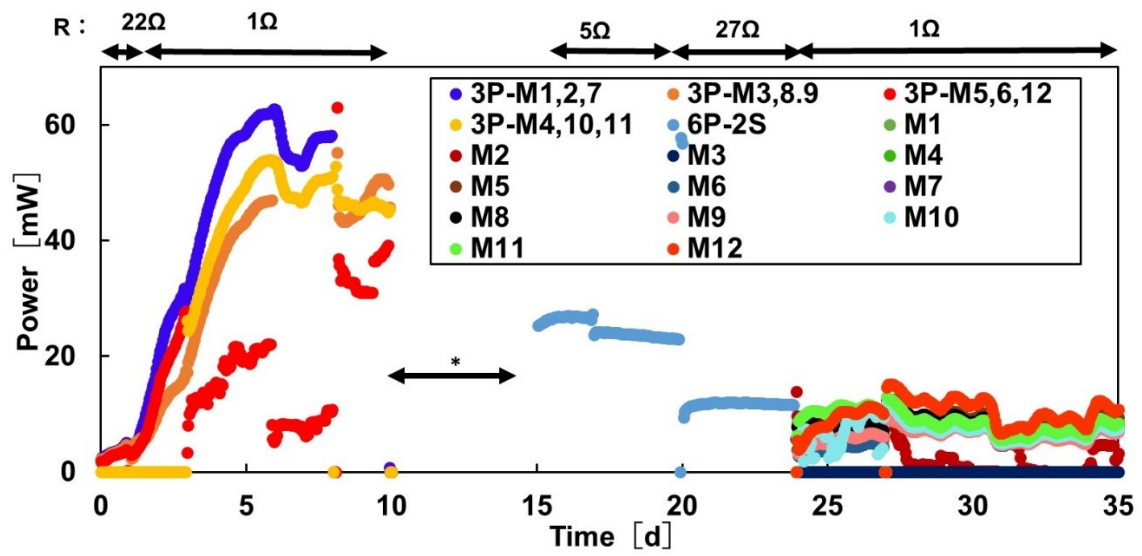
Supplemental Fig. 4 The removal of COD and BOD by the MFCs.



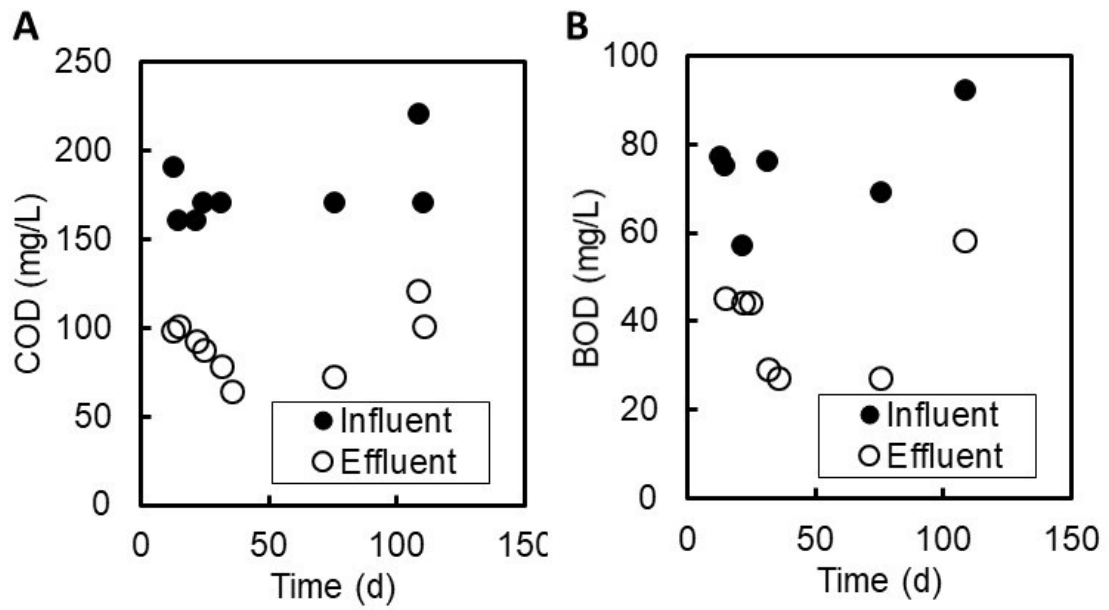
Supplemental Fig.1 MFC connection schematics. Panels A indicates the top-view of the MFC reactor with the number of MFC in the closed circles. Panels B and C indicates schematics for 3P and 6P-2S connections.



Supplemental Fig.2 Schematic diagram for the boost converter system using two DC/DC converters. Panels A indicates the image of two DC/DC converters, LTC3105 and ADP5090. Panel B shows connections of MFC and ADP5090 evaluated in this study.



Supplemental Fig. 3 The time-course monitoring of power productions by the MFCs. The R_{ext} indicates the external resistance connected to MFCs. In some case, multiple MFCs were connected as indicated in the supplemental Fig.1. The data was not recorded accidentally in the term marked as asterisk



Supplemental Fig. 4 The removal of COD and BOD by the MFCs. Panel A and B indicate the COD (A) and BOD (B) in the influent and effluent, respectively.