

Supplementary material

Current density reversibly alters metabolic spatial structure of exoelectrogenic anode biofilms

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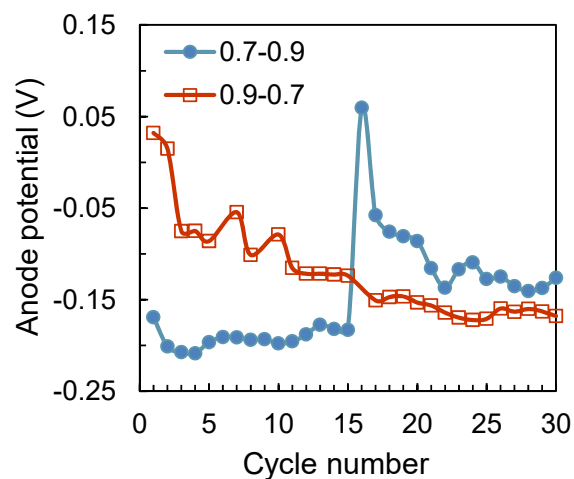


Figure S1. Anode potentials of current curves from Figure 1a.

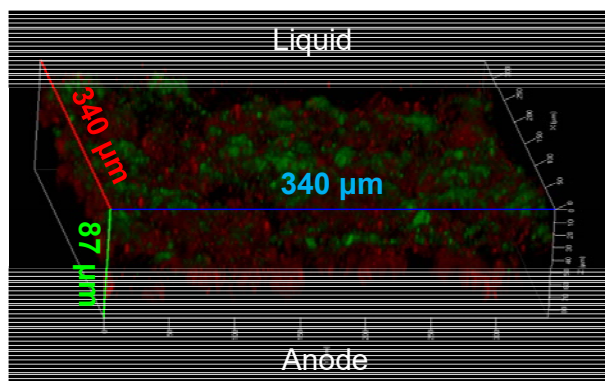


Figure S2. The 3D metabolic-structure image of anode biofilm operating with an applied voltage of 0.5 V. Biofilms were viability staining by using a LIVE/DEAD BacLight Bacterial Viability Kit. Live cells were imaged as green, while dead cells were imaged here as red.

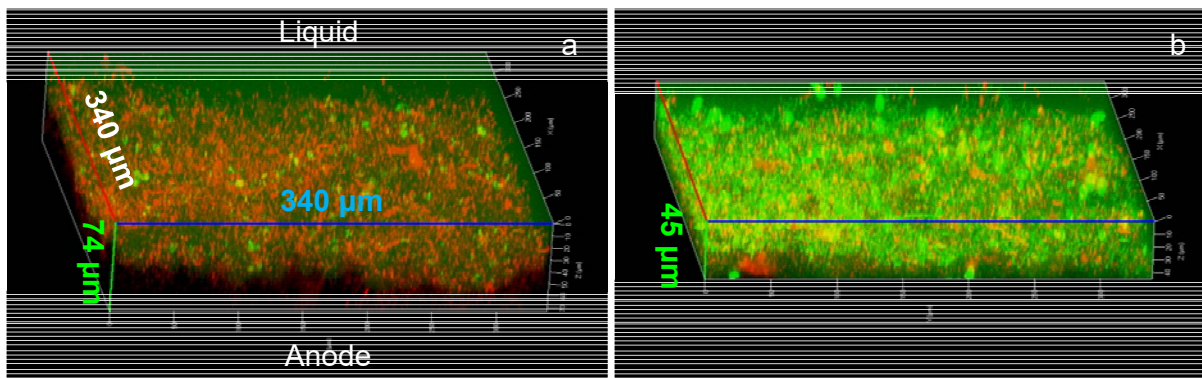


Figure S3. The 3D metabolic-structure images of anode biofilms operating with an applied voltage of 0.7 V (a) and 0.9 V (b). Biofilms were LIVE/DEAD viability staining by using two fluorescent dyes of FDA and PI with an incubation time of >8 minutes. Live cells were imaged as green, while dead cells were imaged here as red.

Table S1

Operation mode of each testing system.

Testing systems	Operation mode
S _{0.7V}	15 cycles under 0.7 V
S _{0.9V}	15 cycles under 0.9 V
S _{0.7V→0.9V}	15 cycles under 0.7 V, and then 15 cycles under 0.9 V
S _{0.9V→0.7V}	15 cycles under 0.9 V, and then 15 cycles under 0.7 V