Supporting Information

Biofabrication and Characterization of Multispecies Electroactive Biofilms in Stratified Paper-based Scaffolds

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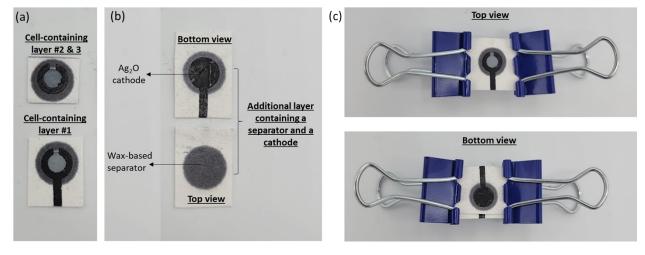


Figure S1. Pictures of individual paper layers and multi-laminate structures. (a) Individual paper layers including bacterial cells, (b) additional layer integrating a seperator and a cathode, and (c) multi-laminate paper structures with the additional layer to form a MFC configuration.

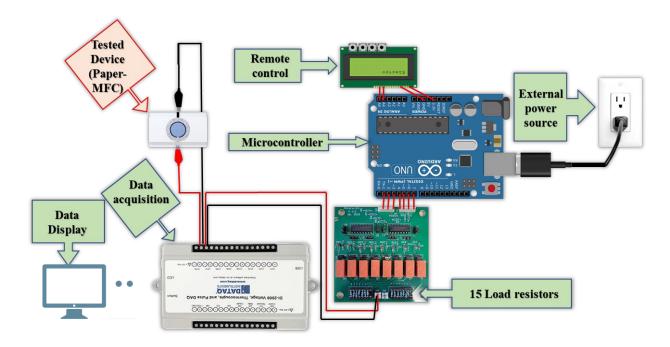


Figure S2. Test setup. The voltage differences between the bacteria-containing reserviors (as an anode) and the cathode are measured by a data acquisition system. The polarization test modules automatically connect 15 resistors to the 3-D stacked MFC.

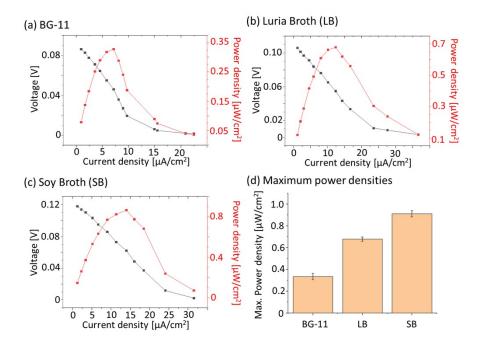


Figure S3. Control data only with media. Polarization and power curves of (a) BG-11, (b) LB, and (c) SB without bacterial cells. (d) Comparison data of the maimum power densities of BG-11, LB, and SB. The experiments are conducted in triplicates.

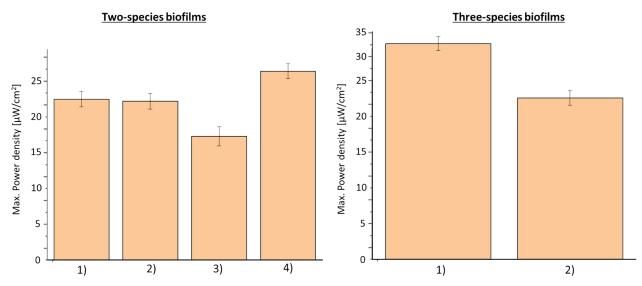


Figure S4. Comparison data of the maimum power densities of two-species biofilms and three-species biofilms. The experiments are conducted in triplicate.