SUPPORTING INFORMATION

Evaluation of multi-brush anode systems in microbial fuel cells

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Figure S1 Cubic MFC, single-brush anode: (A) schematic design of C3, and (B) photography showing air-cathode.
Figure S2 Carbon fiber brushes used as cubic MFC anode electrodes in configurations C1-thick, C1, C3, and C6.
Figure S3 Nyquist plots of whole cell impedance spectra at OCP for the four configurations, measured between the anode (working electrode) and the cathode (counter and reference electrode) (NOTE: noise signal at lower frequencies was removed from the figure).
Figure S4 Typical (A) potential outputs (duplicate reactors) and (B) electrode potential vs. time for each set-up during brush disconnection/removal experiments at 100 Ω external resistance for C3. A = anode; C = cathode; 1D = first brush disconnected; 1R = first brush removed. Electrode potentials were measured against a reference electrode (Ag/AgCl).
Figure S5 Typical (A) potential outputs (duplicate reactors) and (B) electrode potential vs. time for each set-up during brush disconnection/removal experiments at 100 Ω external resistance for C3. A = anode; C = cathode; 1D = first brush disconnected; 1R = first brush removed. Electrode potentials were measured against a reference electrode (Ag/AgCl).
Figure S5 Average COD removal and coulombic efficiency (CE) of the successive brush disconnection and removal for (A) C3, and (B) C6.