

## Supporting Information

Table S1. Dimensions and resistance of bamboo charcoal anodes

MFC	BC #	Dimensions				Resistance		
		Length (cm)	Width (cm)	Thickness (cm)	Anode area <sup>(a)</sup> (cm <sup>2</sup> )	Lengthwise (Ohm)	Widthwise (Ohm)	Average <sup>(b)</sup> (Ohm)
MFC 1 (530 mL)	BC-1	7.1	3.5	0.8	63.9	35	28	32
	BC-2	7.2	4.5	0.7	78.0	22	16	19
	BC-3	7.7	4.6	0.4	78.8	28	24	26
	BC-4	7.4	4.5	0.4	74.3	31	25	28
MFC 2 (530 mL)	BC-1	7.4	4.3	0.9	80.8	27	25	26
	BC-2	7	4.5	0.6	74.1	26	25	26
	BC-3	7.4	4	0.8	74.2	19	17	18
	BC-4	7.2	4.4	0.8	78.4	28	26	27
MFC 3 (500 mL)	BC-1	7.3	4.2	0.7	74.5	53	54	54
	BC-2	7.9	4	0.7	77.1	32	37	35
	BC-3	7.5	3.9	0.9	75.5	55	31	43
	BC-4	7.5	3.9	0.8	73.6	25	33	29

BC, Bamboo charcoal

<sup>(a)</sup> Apparent anode area exposed to anolyte

<sup>(b)</sup> [(Lengthwise resistance) + (Widthwise resistance)] / 2

Table S2. Concentrations of inorganic constituents in potato extract (ICP analysis results)

Constituents	B	Na	Mg	Al	P	K	Ca	V	Cr
Conc. (ppm)	14.8	3082	5220	93.11	8534	92790	1375	0.29	1.21
Constituents	Mn	Fe	Co	Ni	Cu	Ga	As	Se	Rb
Conc. (ppm)	18.73	30.74	0.17	1.08	1.69	0.12	0.12	0.21	30.5
Constituents	Sr	Cd	Cs	Ba	Ce	Nd	W	Pb	U
Conc. (ppm)	10.49	0.12	0.04	3.53	0.01	0.01	4.37	0.01	0.02

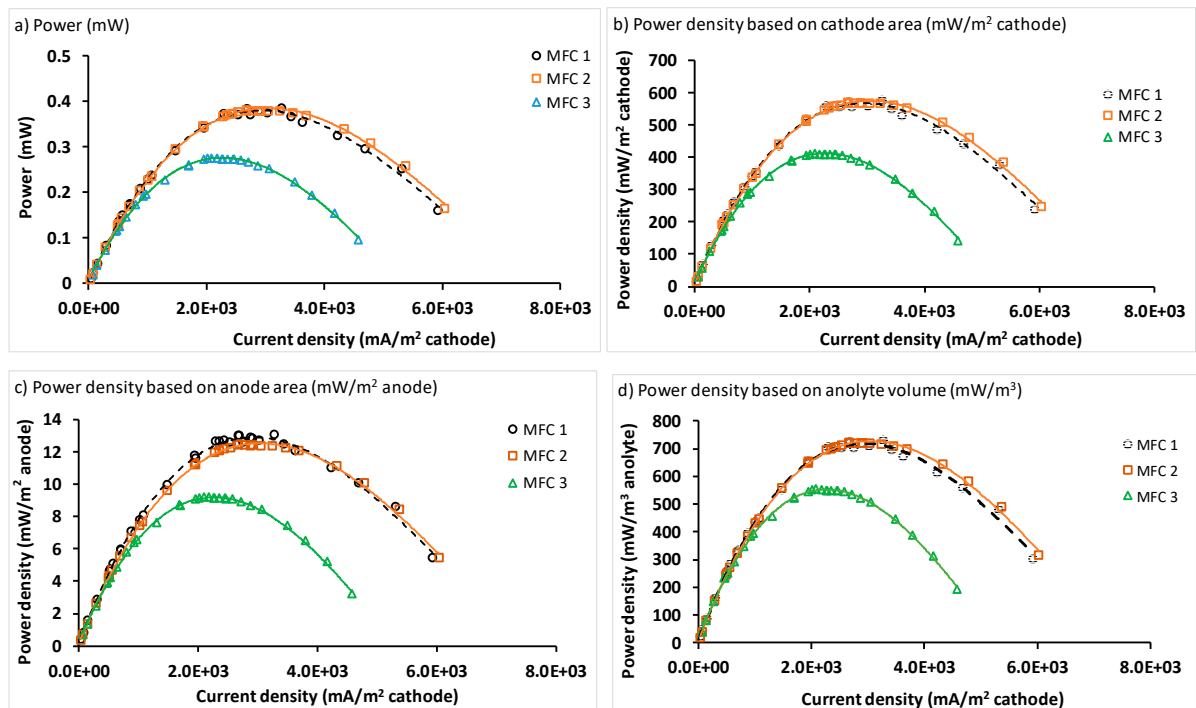


Figure S1. Power and power density curves for MFC 1: (a) power; (b) power density normalized to the cathode area, (c) anode area, and (d) anolyte volume.