

Article

Supplementary Materials: 3D Porous Sponge/Carbon Nanotube/Polyaniline/Chitosan Capacitive Bioanode Material for Improving the Power Generation and Energy Storage Performance of Microbial Fuel Cells

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Figure S1. A physical illustration of a double-chamber microbial fuel cell.

Table S1. Formula of anode nutrient solution.

Chemicals	Mass concentration/L
NaH ₂ PO ₄	4.97
Na ₂ HPO ₄	2.75
NH ₄ Cl	0.31
CaCl ₂	0.015
MgSO ₄	0.2
(NH ₄) ₂ SO ₄	0.56
KCl	0.13
MnSO ₄	0.02
FeCl ₃	0.01
CH ₃ COONa	2.5

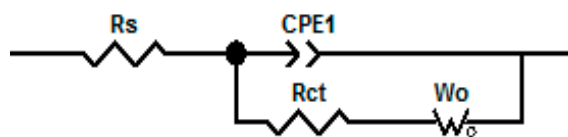


Figure S2. Fitting circuit diagram of EIS curves.

Table S2. Comparison of the operated potential, peak and stable current density of different anode materials in the MFCs.

Anodes	Charge time	Operated Potential	Peak current density	Stable current density	References
PANI/CF	5 min	−0.1 V	7 mA/cm ²	0.83mA/cm ²	[9]
Graphite plate	10 min	−0.3 V	0.9 A/m ²	0.7 A/m ²	[30]
AcM	10 min	−0.4 V	3.89 A/m ²	1.86 A/m ²	[11]
AcFeM	10 min	−0.4 V	5.51 A/m ²	2.65 A/m ²	[11]
GP/AOC	10 min	No data given	9.77 A/m ²	No data given	[37]
GP	10 min	No data given	3.95 A/m ²	No data given	[37]
S/CNT/PANI/CS	15 min	−0.1 V	6.95 A/m ²	2.79 A/m ²	This work
S/CNT	15 min	−0.1V	1.23 A/m ²	1.09 A/m ²	This work