Supplementary Materials: Contrasting Effects of Sediment Microbial Fuel Cells (SMFCs) on the Degradation of Macrophyte Litter in Sediments from Different Areas of a Shallow Eutrophic Lake

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Table S1. Characteristic of the experimental set-up.

Reaction columns (RC)	Treatments	Sampling sites	Temperature (℃)	Contents of wet sediments (g)	Contents of plant litter (g)
RC1	Control: no SMFC	TH1	25	3000	48
RC2	Control: no SMFC	TH1	25	3000	48
RC3	SMFC	TH1	25	3000	48
RC4	SMFC	TH1	25	3000	48
RC5	Control: no SMFC	TH2	25	3000	48
RC6	Control: no SMFC	TH2	25	3000	48
RC7	SMFC	TH2	25	3000	48
RC8	SMFC	TH2	25	3000	48

Table S2. Characteristics of the basic physicochemical properties of sediments and water in the experimental sites.

Sampling sites	**Sediments**			**Lake water**		
	TOC ($mg\ kg^{-1}$)	TP ($mg\ kg^{-1}$)	TN ($mg\ kg^{-1}$)	pH	Conductivity ($mS\ cm^{-1}$)	DO ($mg\ L^{-1}$)
TH1	15.7±1.6	763.61±1.3	1250.28±4.2	8.0±0.02	0.50±0.03	11.79±0.02
TH2	9.7±0.2	625.50±2.2	1191.50±5.3	7.8±0.01	0.60±0.02	12.47±0.01

Table S3 Performance of solid organic matter-fed SMFCs to date.

Type of substrate	Type of MFC	Maximum cell voltage (mV)	Power density (mW/m^2)	External resistor (Ω)	Reference
sediment	two-chamber	20	25	100	[31]
sediment +Chitin/cellulose	two-chamber	600	76-84	1000	[32]

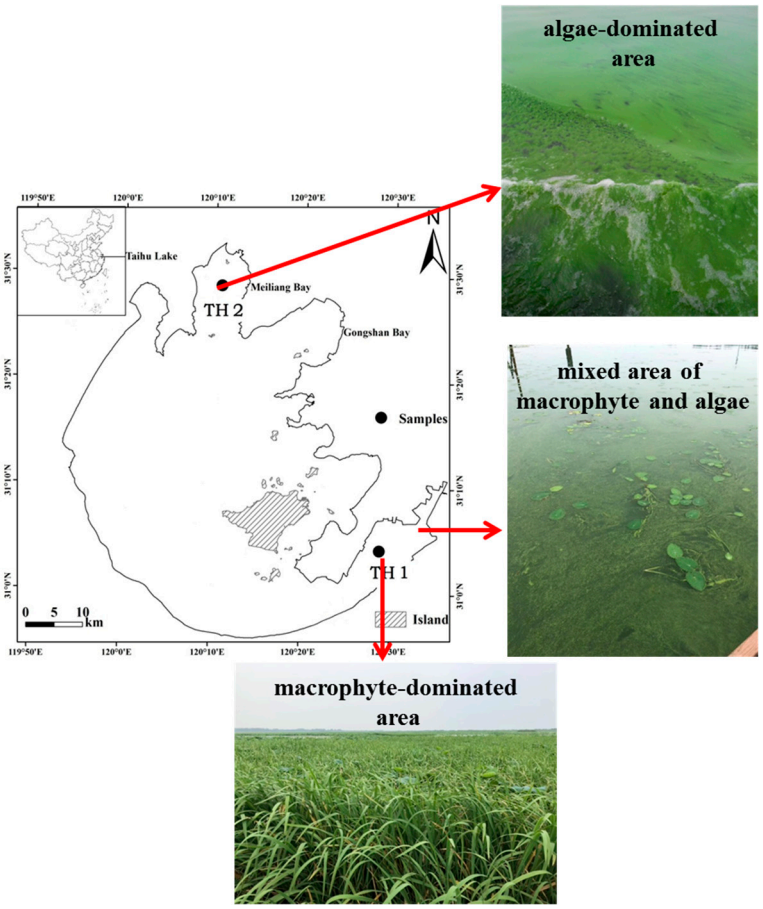

Figure.S1. Location and photos of sampling sites in Lake Taihu, China.

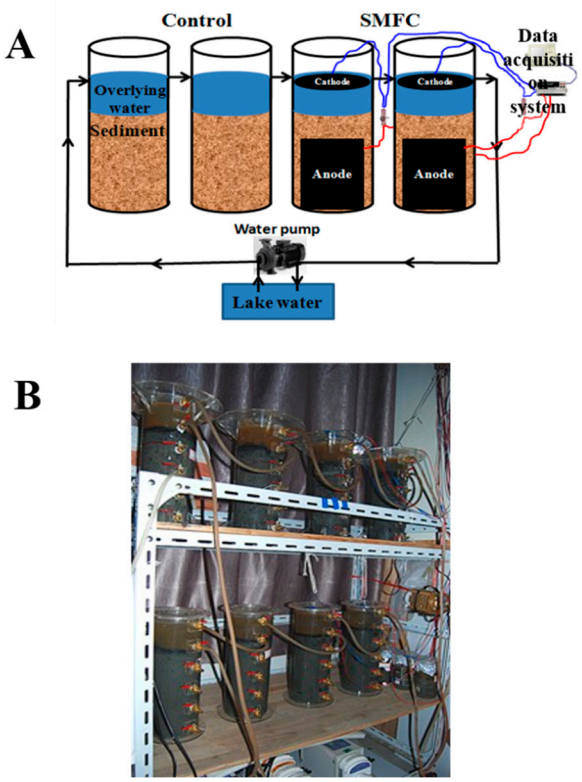

Figure.S2. Schematic diagram (A) and photo (B) of the experiments.

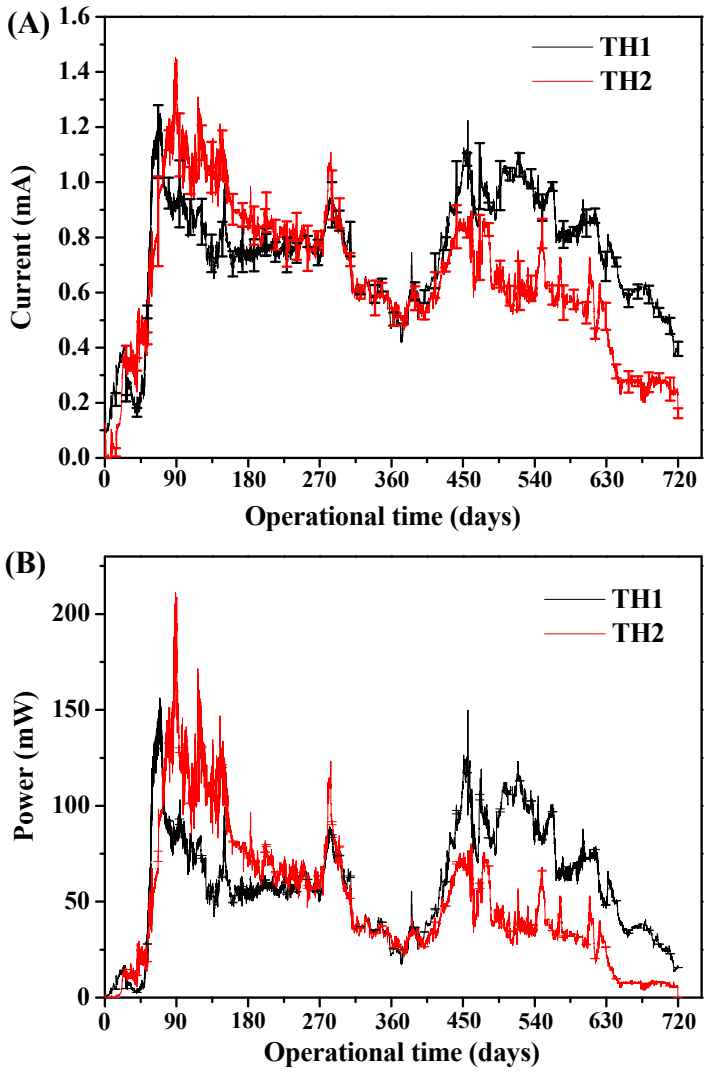

Figure.S3. Current (A) and power (B) generation along with time from SMFCs inoculated with TH1 and TH2 sedimentary samples. Current and power were represented as mean voltages and standard deviations (n = 2).