Supplementary Information

Electro-oxidation of humic acids using platinum electrodes: experimental activity and kinetic modelling

Table S1. Initial oxidation rate (v_0) of humic acids (HA) under different operational conditions

v_0 (mg L^{-1} h^{-1})	HA (mg L^{-1})	I (A m^{-2})	NaCl (mM)	$NaClO_4$ (mM)	$NaNO_3$ (mM)	Ionic Strength (mM)
1.8	71.1	77	0	10	0	10
3.3	69.4	115	0	10	0	10
3.4	70.0	153	0	10	0	10
4.1	69.8	230	0	10	0	10
3.0	106.7	77	0	10	0	10
2.8	108.6	115	0	10	0	10
5.1	103.1	153	0	10	0	10
8.3	107.2	230	0	10	0	10
4.1	152.2	77	0	10	0	10
4.3	147.9	115	0	10	0	10
7.4	147.9	153	0	10	0	10
11.3	148.8	230	0	10	0	10
3.8	69.7	77	0	30	0	30
7.1	67.8	115	0	30	0	30
7.9	67.9	153	0	30	0	30
8.9	70.0	230	0	30	0	30
4.6	107.0	77	0	30	0	30
7.5	105.1	115	0	30	0	30
8.7	105.8	153	0	30	0	30
10.2	105.4	230	0	30	0	30
6.3	149.6	77	0	30	0	30
9.8	151.3	115	0	30	0	30
9.0	142.6	153	0	30	0	30
13.7	145.7	230	0	30	0	30
4.2	73.0	77	0	50	0	50
5.6	71.8	115	0	50	0	50
6.8	70.2	153	0	50	0	50
7.1	69.2	230	0	50	0	50
6.4	100.7	77	0	50	0	50
5.1	102.4	115	0	50	0	50
7.9	100.7	153	0	50	0	50
9.6	103.5	230	0	50	0	50
7.7	154.2	77	0	50	0	50
8.5	151.8	115	0	50	0	50
12.7	149.2	153	0	50	0	50
14.2	151.0	230	0	50	0	50

3.1	68.4	77	10	0	0	10
3.1	72.9	115	10	0	0	10
5.8	69.1	153	10	0	0	10
10.7	68.4	230	10	0	0	10
4.1	105.9	77	10	0	0	10
7.5	106.7	115	10	0	0	10
8.2	109.5	153	10	0	0	10
18.7	106.1	230	10	0	0	10
6.0	151.9	77	10	0	0	10
12.3	148.9	115	10	0	0	10
15.1	148.4	153	10	0	0	10
25.0	148.3	230	10	0	0	10
12.6	70.0	77	30	0	0	30
14.6	70.3	115	30	0	0	30
18.1	72.9	153	30	0	0	30
23.9	68.7	230	30	0	0	30
13.6	108.0	77	30	0	0	30
17.4	104.2	115	30	0	0	30
23.3	105.0	153	30	0	0	30
27.5	103.4	230	30	0	0	30
18.6	156.2	77	30	0	0	30
20.6	148.3	115	30	0	0	30
27.4	146.5	153	30	0	0	30
37.9	148.1	230	30	0	0	30
22.3	69.7	77	50	0	0	50
27.6	69.8	115	50	0	0	50
31.3	69.1	153	50	0	0	50
42.8	69.5	230	50	0	0	50
25.2	104.1	77	50	0	0	50
26.2	105.1	115	50	0	0	50
32.7	108.7	153	50	0	0	50
51.6	102.2	230	50	0	0	50
9.2	71.4	77	25	25	0	50
15.8	70.0	115	25	25	0	50
19.6	70.1	153	25	25	0	50
23.6	71.5	230	25	25	0	50
13.1	112.8	77	25	25	0	50
18.8	106.5	115	25	25	0	50
22.5	109.3	153	25	25	0	50
37.3	110.6	230	25	25	0	50
14.9	147.8	77	25	25	0	50
19.6	148.2	115	25	25	0	50
27.1	149.5	153	25	25	0	50
36.5	151.0	230	25	25	0	50
14.2	72.1	77	40	10	0	50
19.1	70.9	115	40	10	0	50
26.0	70.6	153	40	10	0	50
36.3	68.8	230	40	10	0	50
8.2	70.8	77	10	40	0	50

12.4	70.1	115	10	40	0	50
15.3	70.4	153	10	40	0	50
21.0	70.6	230	10	40	0	50
11.4	98.8	153	10	10	0	20
10.0	98.3	153	10	20	0	30
13.7	97.0	153	10	40	0	50
6.7	99.5	153	0	0	10	10
6.6	103.1	153	0	0	20	20
8.9	109.6	153	0	0	30	30
8.6	105.1	153	0	0	40	40
7.9	109.1	153	0	0	50	50