Supporting Information

Table S1. Experimental measurement data of D_i and corresponding U from different references.

No.	Electrolyte	U (V)	D_i (nm)	Reference
1	Oxalic Acid	10	46.2	[62]
2	Oxalic Acid	20	68.7	[62]
3	Oxalic Acid	30	73	[27]
4	Oxalic Acid	30	88.2	[63]
5	Oxalic Acid	30	91.7	[62]
6	Oxalic Acid	40	91	[64]
7	Oxalic Acid	40	90.4±0.4	[56]
8	Oxalic Acid	40	90.4±1.6	[56]
9	Oxalic Acid	40	91.5±1.4	[56]
10	Oxalic Acid	40	91.9±1.2	[56]
11	Oxalic Acid	40	95.9±1.2	[56]
12	Oxalic Acid	40	96.9±3.0	[56]
13	Oxalic Acid	40	97.5±2.5	[56]
14	Oxalic Acid	40	97.6±2.0	[56]
15	Oxalic Acid	40	101±10	[65]
16	Oxalic Acid	40	101±10	[66]
17	Oxalic Acid	40	102±10	[66]
18	Oxalic Acid	40	103	[27]
19	Oxalic Acid	40	110.2	[63]
20	Oxalic Acid	40	128.3	[62]
21	Oxalic Acid	45	94	[64]
22	Oxalic Acid	45	107	[64]
23	Oxalic Acid	50	124	[27]
24	Oxalic Acid	50	136.3	[63]
25	Oxalic Acid	50	146.4	[62]

26	Oxalic Acid	60	120	[27]
27	Oxalic Acid	60	166.9	[63]
28	Oxalic Acid	60	168	[64]
29	Sulfuric Acid	19	48±5	[65]
30	Sulfuric Acid	19	50	[67]
31	Sulfuric Acid	19	50	[68]
32	Sulfuric Acid	19	48±5	[66]
33	Sulfuric Acid	19	51±5	[66]
34	Sulfuric Acid	19	52±5	[66]
35	Sulfuric Acid	19	54±5	[66]
36	Sulfuric Acid	25	59	[64]
37	Sulfuric Acid	25	58.3±1.1	[56]
38	Sulfuric Acid	25	58.8±1.3	[56]
39	Sulfuric Acid	25	58.9±1.0	[56]
40	Sulfuric Acid	25	59.4±1.5	[56]
41	Sulfuric Acid	25	58.3±2.1	[56]
42	Sulfuric Acid	25	59.1±2.3	[56]
43	Sulfuric Acid	25	61.0±2.8	[56]
44	Sulfuric Acid	25	61.0±3.0	[56]
45	Sulfuric Acid	25	60±6	[65]
46	Sulfuric Acid	25	60±6	[66]
47	Sulfuric Acid	25	61±6	[66]
48	Sulfuric Acid	25	65±6	[66]
49	Phosphoric Acid	175	414	[64]
50	Phosphoric Acid	195	447±23	[69]
51	Arsenic Acid	320	800	[70]
52	Malonic Acid	120	300	[71]
53	Tartaric Acid	195	500	[71]
54	Citric Acid	240	600	[72]

Table S2. Experimental measurement data of D_p and corresponding U from different references.

No.	Electrolyte	U (V)	D_p (nm)	Reference
1	Oxalic Acid	5	11	[82]
2	Oxalic Acid	10	11	[82]
3	Oxalic Acid	10	14	[82]
4	Oxalic Acid	10	18	[82]
5	Oxalic Acid	10	20	[82]
6	Oxalic Acid	10	15	[62]
7	Oxalic Acid	15	14	[82]
8	Oxalic Acid	15	15	[82]
9	Oxalic Acid	15	17	[82]
10	Oxalic Acid	15	18	[82]
11	Oxalic Acid	15	19	[82]
12	Oxalic Acid	15	20	[82]
13	Oxalic Acid	15	23	[82]
14	Oxalic Acid	15	40	[82]
15	Oxalic Acid	20	22	[82]
16	Oxalic Acid	20	26	[82]
17	Oxalic Acid	20	30	[82]
18	Oxalic Acid	20	36	[82]
19	Oxalic Acid	20	30	[62]
20	Oxalic Acid	25	30	[82]
21	Oxalic Acid	30	18.6±2.9	[78]
22	Oxalic Acid	30	20.8±5.6	[83]
23	Oxalic Acid	30	23.4±6.3	[83]
24	Oxalic Acid	30	24.1±5.7	[83]
25	Oxalic Acid	30	28.5±7.3	[83]
26	Oxalic Acid	30	35.9±7.9	[83]
27	Oxalic Acid	30	44.6±6.4	[83]

28	Oxalic Acid	30	36.24±3.69	[84]
29	Oxalic Acid	30	37.27±3.31	[84]
30	Oxalic Acid	30	38.52±4.10	[84]
31	Oxalic Acid	30	39.04±4.94	[84]
32	Oxalic Acid	30	40	[27]
33	Oxalic Acid	30	42	[62]
34	Oxalic Acid	40	19.4±6.1	[56]
35	Oxalic Acid	40	20.1±6.6	[56]
36	Oxalic Acid	40	21.4±6.6	[56]
37	Oxalic Acid	40	21.8±6.4	[56]
38	Oxalic Acid	40	21.5±3.1	[56]
39	Oxalic Acid	40	22.1±2.9	[56]
40	Oxalic Acid	40	22.1±3.2	[56]
41	Oxalic Acid	40	22.6±3.7	[56]
42	Oxalic Acid	40	21.1±6.1	[83]
43	Oxalic Acid	40	26.9±5.0	[83]
44	Oxalic Acid	40	34.1±6.4	[83]
45	Oxalic Acid	40	35.2±8.2	[83]
46	Oxalic Acid	40	63.8±7.8	[83]
47	Oxalic Acid	40	64.0±4.2	[83]
48	Oxalic Acid	40	25	[85]
49	Oxalic Acid	40	34	[85]
50	Oxalic Acid	40	62	[85]
51	Oxalic Acid	40	31±3	[66]
52	Oxalic Acid	40	32±3	[66]
53	Oxalic Acid	40	48±5	[66]
54	Oxalic Acid	40	49±5	[66]
55	Oxalic Acid	40	50±5	[66]
56	Oxalic Acid	40	32±3	[65]

57	Oxalic Acid	40	33.6±7.6	[78]
58	Oxalic Acid	40	39	[86]
59	Oxalic Acid	40	39.81±2.65	[84]
60	Oxalic Acid	40	40.52±2.54	[84]
61	Oxalic Acid	40	40.66±2.42	[84]
62	Oxalic Acid	40	41.35±3.31	[84]
63	Oxalic Acid	40	31.1±4.0	[87]
64	Oxalic Acid	40	41	[27]
65	Oxalic Acid	40	46.5	[88]
66	Oxalic Acid	40	47.9	[88]
67	Oxalic Acid	40	53±5	[89]
68	Oxalic Acid	40	55±5	[89]
69	Oxalic Acid	40	61±8	[89]
70	Oxalic Acid	40	61	[62]
71	Oxalic Acid	40	75.5±9.2	[62]
72	Oxalic Acid	50	44	[27]
73	Oxalic Acid	50	54.66±5.49	[84]
74	Oxalic Acid	50	56.04±3.21	[84]
75	Oxalic Acid	50	59.70±11.46	[84]
76	Oxalic Acid	50	60.47±5.87	[84]
77	Oxalic Acid	50	69	[62]
78	Oxalic Acid	60	33.1±3.7	[87]
79	Oxalic Acid	60	37.5±3.1	[83]
80	Oxalic Acid	60	80.5±7.3	[83]
81	Oxalic Acid	60	97.4±27.6	[83]
82	Oxalic Acid	60	75	[27]
83	Oxalic Acid	60	77.79±22.08	[84]
84	Oxalic Acid	60	78.46±15.46	[84]
85	Oxalic Acid	60	80.03±14.88	[84]

86	Oxalic Acid	60	81.30±17.77	[84]
87	Oxalic Acid	80	41.2±3.7	[87]
88	Oxalic Acid	100	43.3±3.8	[87]
89	Sulfuric Acid	5	10	[82]
90	Sulfuric Acid	10	12	[82]
91	Sulfuric Acid	10	14	[82]
92	Sulfuric Acid	10	16	[82]
93	Sulfuric Acid	10	22	[82]
94	Sulfuric Acid	12.5	13.7±7.8	[78]
95	Sulfuric Acid	12.5	18.4±5.6	[78]
96	Sulfuric Acid	12.5	19.0±0.5	[78]
97	Sulfuric Acid	12.5	19.1±1.9	[78]
98	Sulfuric Acid	12.5	19.9±1.9	[78]
99	Sulfuric Acid	15	14	[82]
100	Sulfuric Acid	15	15	[82]
101	Sulfuric Acid	15	19	[82]
102	Sulfuric Acid	15	20	[82]
103	Sulfuric Acid	15	21	[82]
104	Sulfuric Acid	15	22	[82]
105	Sulfuric Acid	15	24	[82]
106	Sulfuric Acid	15	38	[82]
107	Sulfuric Acid	15	21.4±0.8	[78]
108	Sulfuric Acid	15	21.6±1.8	[78]
109	Sulfuric Acid	19	12	[68]
110	Sulfuric Acid	19	14	[68]
111	Sulfuric Acid	19	21	[68]
112	Sulfuric Acid	19	14	[67]
113	Sulfuric Acid	19	15	[67]
114	Sulfuric Acid	19	16	[67]

115	Sulfuric Acid	19	18	[67]
116	Sulfuric Acid	19	19	[67]
117	Sulfuric Acid	19	17±2	[65]
118	Sulfuric Acid	19	17	[86]
119	Sulfuric Acid	19	16±2	[66]
120	Sulfuric Acid	19	17±2	[66]
121	Sulfuric Acid	19	27±3	[66]
122	Sulfuric Acid	20	24±2.5	[78]
123	Sulfuric Acid	20	24	[82]
124	Sulfuric Acid	20	25	[82]
125	Sulfuric Acid	20	32	[82]
126	Sulfuric Acid	20	33	[82]
127	Sulfuric Acid	25	14.5±5.3	[56]
128	Sulfuric Acid	25	17.1±6.2	[56]
129	Sulfuric Acid	25	17.2±5.7	[56]
130	Sulfuric Acid	25	17.8±5.8	[56]
131	Sulfuric Acid	25	17.9±2.6	[56]
132	Sulfuric Acid	25	18.3±4.0	[56]
133	Sulfuric Acid	25	19.3±3.6	[56]
134	Sulfuric Acid	25	19.6±4.3	[56]
135	Sulfuric Acid	25	20±2	[66]
136	Sulfuric Acid	25	22±2	[66]
137	Sulfuric Acid	25	23±2	[66]
138	Sulfuric Acid	25	25±3	[66]
139	Sulfuric Acid	25	32±3	[66]
140	Sulfuric Acid	25	34±3	[66]
141	Sulfuric Acid	25	23±2	[65]
142	Sulfuric Acid	25	28	[86]
143	Sulfuric Acid	25	30	[82]

144	Sulfuric Acid	25	47±3	[89]
145	Phosphoric Acid	195	137±10	[56]
146	Phosphoric Acid	205	149	[86]
147	Arsenic Acid	320	220	[70]

Table S3. Experimental measurement data of T_b and corresponding U from different references.

No.	Electrolyte	U (V)	T_b (nm)	Reference
1	Oxalic Acid	20	18±2	[99]
2	Oxalic Acid	20	20.3	[100]
3	Oxalic Acid	30	32.6	[62]
4	Oxalic Acid	30	38.6	[62]
5	Oxalic Acid	30	39.3	[62]
6	Oxalic Acid	30	41.1	[62]
7	Oxalic Acid	40	31±4	[99]
8	Oxalic Acid	40	38	[56]
9	Oxalic Acid	40	38.2	[56]
10	Oxalic Acid	40	38.9	[56]
11	Oxalic Acid	40	39.4	[56]
12	Oxalic Acid	40	39.4	[100]
13	Oxalic Acid	40	40	[101]
14	Oxalic Acid	40	40	[102]
15	Oxalic Acid	40	40	[93]
16	Oxalic Acid	40	41.2	[62]
17	Oxalic Acid	40	42.3	[56]
18	Oxalic Acid	40	42.4	[56]
19	Oxalic Acid	40	43.2	[56]
20	Oxalic Acid	40	43.3	[56]
21	Oxalic Acid	40	43.8±2.3	[103]
22	Oxalic Acid	40	44.4±2.8	[103]

23	Oxalic Acid	40	44.5±2.8	[103]
24	Oxalic Acid	40	45.9	[62]
25	Oxalic Acid	40	47.5	[62]
26	Oxalic Acid	40	49.5	[62]
27	Oxalic Acid	40	53±5	[104]
28	Oxalic Acid	50	52.4	[62]
29	Oxalic Acid	50	55.7	[62]
30	Oxalic Acid	50	58.9	[62]
31	Oxalic Acid	50	60.7	[62]
32	Oxalic Acid	60	54±5	[99]
33	Oxalic Acid	60	61.2	[62]
34	Oxalic Acid	60	67.2	[62]
35	Oxalic Acid	60	70.4	[62]
36	Oxalic Acid	60	71.2	[62]
37	Oxalic Acid	80	80	[93]
38	Sulfuric Acid	5	5.2	[100]
39	Sulfuric Acid	10	9.4	[100]
40	Sulfuric Acid	15	14	[100]
41	Sulfuric Acid	20	17.6	[100]
42	Sulfuric Acid	25	25	[93]
43	Sulfuric Acid	25	26.3	[56]
44	Sulfuric Acid	25	26.5	[56]
45	Sulfuric Acid	25	26.6	[56]
46	Sulfuric Acid	25	27.3	[56]
47	Sulfuric Acid	25	27.4	[56]
48	Sulfuric Acid	25	29.1	[56]
49	Sulfuric Acid	25	29.1	[56]
50	Sulfuric Acid	25	29.1	[56]
51	Sulfuric Acid	25	26.3±1.3	[103]

52	Sulfuric Acid	25	27.4±1.5	[103]
53	Sulfuric Acid	25	28.0±1.6	[103]
54	Sulfuric Acid	25	33±54	[104]
55	Phosphoric Acid	130	130	[93]
56	Phosphoric Acid	195	232±6	[104]

References listed in Table S1, S2, S3 and their in-text citation numbers in main text of review

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