

Electronic Supplementary Information (ESI) for:
**Low-Capacitance Pulsed Discharge Enables Heat- and Solvent-Free
Delamination of Lithium-Ion Battery Cathodes**

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Table S1 Calibration data for Al obtained by ICP-OES at three analytical wavelengths (309.271, 308.215, and 396.152 nm).

Analytical Al STD concentration (mg/L)	Counts (cps)			Calculated Al concentration using the calibration curve (mg/L)		
	Al 309.271 nm	Al 308.215 nm	Al 396.152 nm	Al 309.271 nm	Al 308.215 nm	Al 396.152 nm
0	2127.913672	334.8031923	1252.165875	-0.04	0.01	-0.01
0.72	8504.767357	3716.698199	19041.65321	0.61	0.62	0.61
1.16	13540.42231	6529.641713	33814.17678	1.13	1.13	1.13
2.18	23932.55252	12330.06314	64493.40746	2.20	2.19	2.20
5.33	55139.65574	29651.80439	155398.9471	5.41	5.35	5.38
10.5	106797.7317	59101.60918	308096.0167	10.72	10.71	10.73
20.9	204964.6587	114672.881	596042.7406	20.81	20.83	20.81

Table S2 ICP-OES analytical data of Al concentrations (wt.%) under different discharge conditions shown in Fig. 6(b) and comparison to XRF analytical data.

Conditions	ICP Trial 1	ICP Trial 2	ICP Average	XRF Average
425 J, 6.4 uF	0.367	0.269	0.32	0.22
425 J, 400 uF	0.582	0.580	0.58	0.15
475 J, 6.4 uF	0.269	0.230	0.25	0.15
475 J, 400 uF	3.080	2.658	2.87	1.22

Fig. S1 Calibration curves of Al obtained by ICP-OES at three analytical wavelengths (309.271, 308.215, and 396.152 nm).

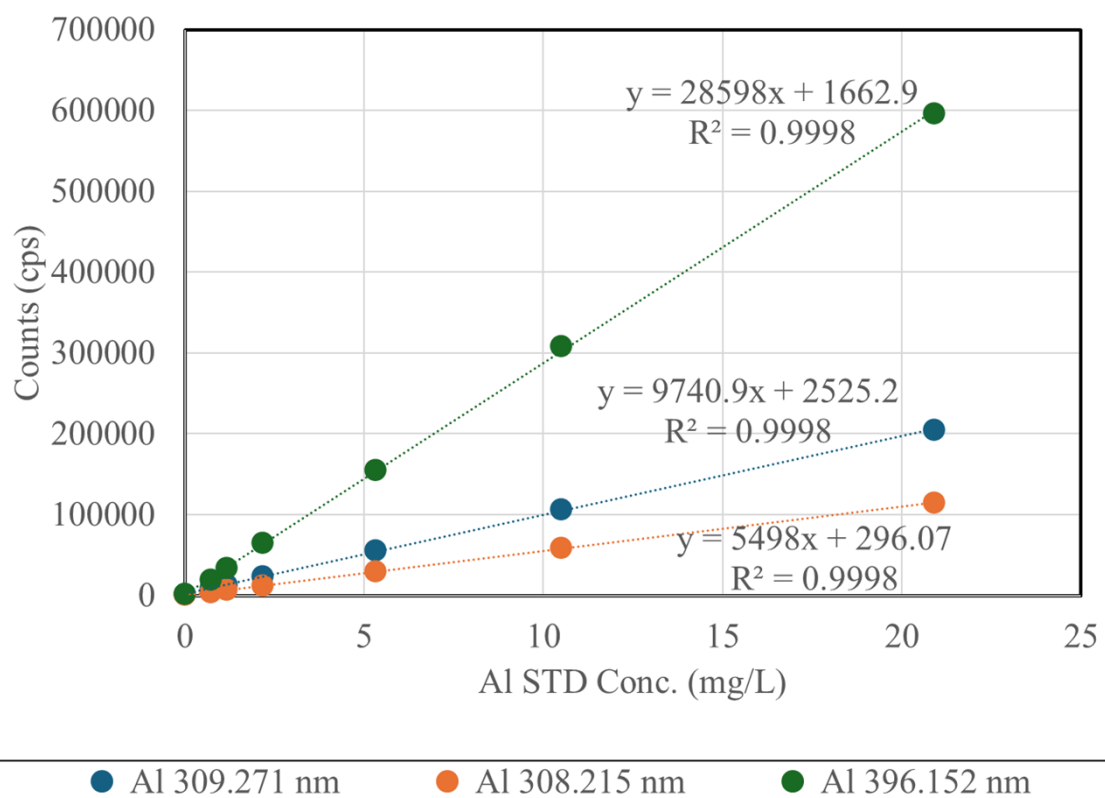


Fig. S2 Representative ICP-OES spectra of Al at 308.215 nm for delaminated CAMs digested under different discharge conditions (425 J and 475 J, using capacitances of 6.4 μ F and 400 μ F).

