Electronic Supplementary Material (ESI) for Journal of Analytical Atomic Spectrometry.

ESI Table S1. Analytical results of SRM 612 glass with different ablation parameters[a]

Ablation condition	Sample	^{6}Li / V	2SE	^{7}Li / V	2SE	$^{7}Li/^{6}Li$	2SE	$\delta^{7}Li$	2SE
30um/10Hz/193nm	SRM612_1	0.0107	0.0003	0.1654	0.0047	15.442	0.025	39.1	1.6
30um/20Hz/193nm	SRM612_2	0.0165	0.0009	0.2555	0.0140	15.468	0.021	40.2	1.4
50um/2Hz/193nm	SRM612_3	0.0069	0.0001	0.1069	0.0021	15.392	0.035	35.7	2.3
50um/5Hz/193nm	SRM612_4	0.0151	0.0001	0.2320	0.0021	15.401	0.019	36.6	1.2
50um/10Hz/193nm	SRM612_5	0.0269	0.0004	0.4151	0.0061	15.416	0.011	37.6	0.7
50um/20Hz/193nm	SRM612_6	0.0452	0.0014	0.6962	0.0208	15.395	0.008	36.2	0.5
100um/1Hz/193nm	SRM612_7	0.0130	0.0002	0.1991	0.0034	15.368	0.024	33.1	1.5
100um/2Hz/193nm	SRM612_8	0.0237	0.0005	0.3641	0.0072	15.358	0.013	32.6	0.9
100um/5Hz/193nm	SRM612_9	0.0589	0.0009	0.9037	0.0131	15.338	0.006	31.2	0.4
100um/10Hz/193nm	SRM612_10	0.0864	0.0006	1.3228	0.0098	15.313	0.005	29.8	0.3
100um/20Hz/193nm	SRM612_11	0.1591	0.0025	2.4284	0.0378	15.262	0.003	26.7	0.2
200um/1Hz/193nm	SRM612_12	0.0372	0.0005	0.5701	0.0082	15.317	0.010	29.9	0.6
200um/2Hz/193nm	SRM612_13	0.0683	0.0008	1.0437	0.0119	15.276	0.007	27.5	0.5
200um/5Hz/193nm	SRM612_14	0.1502	0.0018	2.2859	0.0270	15.219	0.004	23.6	0.3

[a]: 2SE: 2-standard error

Ablation condition	Sample	^{6}Li / V	2SE	^{7}Li / V	2SE	$^{7}Li/^{6}Li$	2SE	$\delta^{7}Li$	2SE
30um/10Hz/266nm	SRM612_1	0.0019	0.0001	0.0292	0.0012	15.695	0.139	44.9	8.8
30um/20Hz/266nm	SRM612_2	0.0069	0.0002	0.1071	0.0035	15.510	0.059	32.9	3.8
30um/30Hz/266nm	SRM612_3	0.0110	0.0009	0.1712	0.0136	15.536	0.030	34.6	1.9
50um/20Hz/266nm	SRM612_4	0.0050	0.0002	0.0780	0.0024	15.604	0.045	39.0	2.9
50um/30Hz/266nm	SRM612_5	0.0253	0.0008	0.3922	0.0129	15.517	0.014	33.3	0.9
50um/60Hz/266nm	SRM612_6	0.0306	0.0029	0.4750	0.0455	15.537	0.016	34.6	1.0
100um/10Hz/266nm	SRM612_7	0.0115	0.0002	0.1783	0.0038	15.490	0.027	31.6	1.7
100um/10Hz/266nm	SRM612_8	0.0090	0.0002	0.1402	0.0032	15.548	0.026	35.4	1.7
100um/20Hz/266nm	SRM612_9	0.0223	0.0003	0.3466	0.0051	15.517	0.016	33.4	1.0
100um/30Hz/266nm	SRM612_10	0.0570	0.0016	0.8829	0.0244	15.484	0.007	31.2	0.5
100um/30Hz/266nm	SRM612_11	0.0493	0.0009	0.7635	0.0141	15.485	0.007	31.3	0.5
100um/30Hz/266nm	SRM612_12	0.0472	0.0012	0.7310	0.0187	15.484	0.007	31.2	0.5
100um/40Hz/266nm	SRM612_13	0.0686	0.0020	1.0610	0.0314	15.474	0.006	30.6	0.4
100um/50Hz/266nm	SRM612_14	0.0747	0.0028	1.1549	0.0426	15.460	0.008	29.7	0.5
100um/60Hz/266nm	SRM612_15	0.0578	0.0018	0.8949	0.0281	15.481	0.007	31.0	0.4
100um/60Hz/266nm	SRM612_16	0.0812	0.0044	1.2554	0.0675	15.462	0.007	29.8	0.5
100um/90Hz/266nm	SRM612_17	0.0545	0.0051	0.8440	0.0781	15.501	0.008	32.3	0.5
200um/10Hz/266nm	SRM612_18	0.0159	0.0003	0.2463	0.0054	15.489	0.022	31.5	1.4
200um/20Hz/266nm	SRM612_19	0.0420	0.0006	0.6514	0.0089	15.494	0.005	31.9	0.3
200um/30Hz/266nm	SRM612_20	0.0671	0.0013	1.0376	0.0200	15.472	0.006	30.4	0.4
200um/40Hz/266nm	SRM612_21	0.1066	0.0017	1.6472	0.0256	15.456	0.005	29.4	0.3
200um/40Hz/266nm	SRM612_22	0.1006	0.0023	1.5559	0.0355	15.463	0.006	29.9	0.4
200um/50Hz/266nm	SRM612_23	0.1500	0.0031	2.3132	0.0471	15.423	0.005	27.3	0.3
200um/60Hz/266nm	SRM612_24	0.1737	0.0030	2.6757	0.0459	15.405	0.006	26.1	0.4
200um/90Hz/266nm	SRM612_25	0.2406	0.0073	3.6984	0.1103	15.374	0.007	24.1	0.5

[a]: 2SE: 2-standard error

Ablation condition	Sample	^{10}B /V	2SE	^{11}B / V	2SE	$^{10}B/^{11}B$	2SE	$\delta^{11}B$	2SE
30um/10Hz/193nm	SRM612_1	0.0109	0.0003	0.0498	0.0014	4.561	0.007	0.8	1.5
30um/20Hz/193nm	SRM612_2	0.0179	0.0006	0.0817	0.0028	4.566	0.005	2.0	1.1
50um/10Hz/193nm	SRM612_3	0.0266	0.0002	0.1212	0.0009	4.560	0.004	0.4	0.8
50um/20Hz/193nm	SRM612_4	0.0483	0.0007	0.2202	0.0033	4.557	0.002	-0.4	0.4
50um/5Hz/193nm	SRM612_5	0.0153	0.0001	0.0700	0.0006	4.565	0.004	1.6	0.9
100um/5Hz/193nm	SRM612_6	0.0448	0.0010	0.2039	0.0047	4.556	0.002	-0.4	0.4
100um/10Hz/193nm	SRM612_7	0.0741	0.0013	0.3369	0.0058	4.549	0.001	-1.6	0.3
100um/1Hz/193nm	SRM612_8	0.0109	0.0001	0.0500	0.0006	4.569	0.006	2.3	1.3
100um/20Hz/193nm	SRM612_9	0.1458	0.0017	0.6620	0.0075	4.541	0.001	-3.8	0.2
100um/2Hz/193nm	SRM612_10	0.0210	0.0001	0.0959	0.0006	4.557	0.003	0.2	0.7
200um/1Hz/193nm	SRM612_11	0.0687	0.0037	0.3139	0.0168	4.571	0.002	2.4	0.5
200um/2Hz/193nm	SRM612_12	0.0835	0.0013	0.3806	0.0059	4.557	0.001	-0.3	0.3
200um/5Hz/193nm	SRM612_13	0.1661	0.0010	0.7543	0.0045	4.542	0.001	-3.5	0.2

[a]: 2SE: 2-standard error

Ablation condition	Sample	^{10}B	2SE	^{11}B	2SE	$^{10}B/^{11}B$	2SE	$\delta^{11}B$	2SE
30um/10Hz/266nm	SRM612_1	0.0026	0.0001	0.0121	0.0004	4.608	0.026	6.8	5.7
30um/20Hz/266nm	SRM612_2	0.0072	0.0004	0.0328	0.0019	4.579	0.013	0.5	2.9
30um/30Hz/266nm	SRM612_3	0.0081	0.0009	0.0369	0.0043	4.580	0.014	0.7	3.0
50um/10Hz/266nm	SRM612_4	0.0056	0.0001	0.0255	0.0004	4.563	0.016	-3.1	3.5
50um/20Hz/266nm	SRM612_5	0.0142	0.0003	0.0647	0.0014	4.573	0.005	-0.9	1.2
50um/30Hz/266nm	SRM612_6	0.0212	0.0011	0.0969	0.0049	4.571	0.005	-1.3	1.1
50um/40Hz/266nm	SRM612_7	0.0244	0.0018	0.1113	0.0083	4.566	0.004	-2.3	0.8
50um/50Hz/266nm	SRM612_8	0.0264	0.0027	0.1204	0.0122	4.570	0.003	-1.5	0.7
100um/10Hz/266nm	SRM612_9	0.0135	0.0002	0.0621	0.0009	4.589	0.007	2.8	1.5
100um/20Hz/266nm	SRM612_10	0.0317	0.0006	0.1451	0.0029	4.579	0.003	0.4	0.7
100um/30Hz/266nm	SRM612_11	0.0527	0.0011	0.2408	0.0051	4.569	0.002	-1.6	0.4
100um/30Hz/266nm	SRM612_12	0.0522	0.0009	0.2384	0.0042	4.568	0.002	-1.2	0.5
100um/30Hz/266nm	SRM612_13	0.0526	0.0011	0.2400	0.0052	4.565	0.002	-0.8	0.4
100um/40Hz/266nm	SRM612_14	0.0675	0.0020	0.3081	0.0093	4.564	0.002	-2.8	0.3
100um/50Hz/266nm	SRM612_15	0.0791	0.0035	0.3605	0.0161	4.560	0.001	-3.6	0.3
100um/60Hz/266nm	SRM612_16	0.0849	0.0043	0.3868	0.0195	4.559	0.001	-3.8	0.3
100um/70Hz/266nm	SRM612_17	0.0947	0.0057	0.4317	0.0261	4.557	0.001	-4.3	0.3
200um/10Hz/266nm	SRM612_18	0.0191	0.0012	0.0877	0.0054	4.578	0.004	0.2	0.9
200um/20Hz/266nm	SRM612_19	0.0311	0.0009	0.1421	0.0040	4.571	0.003	-1.2	0.7
200um/30Hz/266nm	SRM612_20	0.0731	0.0015	0.3337	0.0070	4.565	0.002	-2.6	0.3
200um/40Hz/266nm	SRM612_21	0.1063	0.0018	0.4846	0.0084	4.558	0.002	-4.2	0.4
200um/50Hz/266nm	SRM612_22	0.1241	0.0021	0.5653	0.0095	4.555	0.001	-4.7	0.2
200um/60Hz/266nm	SRM612_23	0.1320	0.0028	0.6010	0.0129	4.555	0.001	-4.8	0.2
200um/90Hz/266nm	SRM612_24	0.1448	0.0063	0.6591	0.0284	4.551	0.001	-5.6	0.3

[a]: 2SE: 2-standard error