Table S1. Average LA-ICP-MS data of glass standards in comparison with published values for Corning glass standards A, B, D, and NIST 612.

Major and minor elements [wt %]

	Na_2O	MgO	Al_2O_3	SiO_2	P_2O_5	Cl	K_2O	CaO	TiO_2	MnO	Fe_2O_3	CoO	CuO	Rb_2O	SrO	ZrO2	SnO_2	Sb_2O_3	BaO	PbO	Bi
Corning A (n = 44)	13.9	2.53	0.92	66.9	0.11	0.13	2.85	5.77	0.78	1.02	1.11	0.17	1.16	0.01	0.10	0.01	0.17	1.62	0.46	0.06	0.00
SD	0.2	0.06	0.04	0.4	0.01	0.01	0.04	0.15	0.03	0.02	0.02	0.00	0.02	0.00	0.00	0.00	0.00	0.05	0.01	0.00	0.00
Vicenzi et al. 2002	14.3	2.66	1.00	66.6	0.13	0.10	2.87	5.03	0.79	1.00	1.09	0.17	1.17	0.01	0.10	0.01	0.19	1.58	0.46	0.073	0.00
Wagner et al. 2012	0.4	0.13	0.08	-0.3	0.02	-0.03	0.02	-0.74	0.01	-0.02	-0.02	0.00	0.01	0.00	0.00	0.00	0.02	-0.05	0.00	0.01	0.00
accuracy	3.1	5.04	7.56	-0.5	12.95	-29.78	0.80	-14.68	1.88	-1.62	-1.98	-0.19	1.15	4.48	-4.18	-9.03	12.76	-2.91	0.64	14.47	13.60
Corning B (n = 19)	16.7	1.01	4.46	62.4	0.81	0.21	1.01	8.61	0.10	0.24	0.34	0.04	2.65	0.00	0.02	0.02	0.02	0.43	0.08	0.42	0.00
SD	0.2	0.02	0.10	0.3	0.03	0.01	0.01	0.13	0.00	0.00	0.01	0.00	0.03	0.00	0.00	0.00	0.00	0.01	0.00	0.01	0.00
Vicenzi et al. 2002	17.0	1.03	4.36	61.6	0.82	0.20	1.00	8.56	0.09	0.25	0.34	0.05	2.66	0.00	0.02	0.03	0.04	0.41	0.08	0.61	0.01
Wagner et al. 2012	0.3	0.02	-0.10	-0.9	0.01	-0.01	-0.01	-0.05	-0.01	0.01	0.00	0.00	0.01	0.00	0.00	0.00	0.02	-0.01	0.00	0.19	0.00
accuracy	1.9	2.09	-2.28	-1.4	1.47	-3.31	-0.80	-0.56	-13.30	2.08	-1.16	4.18	0.24	-24.79	5.87	5.80	40.89	-3.55	1.36	31.49	20.24
NIST 612 (n = 41)	13.5	0.01	2.02	72.8	0.02	0.05	0.01	11.4	0.01	0.01	0.01	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00
SD	0.2	0.00	0.12	0.4	0.01	0.05	0.01	0.3	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Jochum et al. 2011	13.7		2.03	72.1				11.9													
	0.2		0.01	-0.7				0.5													
accuracy	1.7		0.27	-1.0				4.3													

Trace elements [ppm]

	Li	B	V	Cr	Co	Ni	Cu	Zn	Ga	As	Rb	Sr	Y	Zr	Nb	Mo	Ag	Cd	In	Sn	Sb	Cs	Ba
NIST 612 (n = 42)	41.7	34.9	37.7	38.1	35.0	37.7	36.1	38.0	36.1	33.7	32.2	75.4	36.9	36.7	34.6	32.8	20.7	42.7	37.3	34.1	37.1	41.1	36.1
SD	1.9	2.6	1.1	6.7	0.9	1.8	1.0	3.8	0.7	2.7	0.5	2.9	1.6	1.7	1.2	1.3	1.5	2.3	0.6	0.8	7.2	1.0	1.0
Jochum et al. 2011	40.2	34.3	38.8	36.4	35.5	38.8	37.8	39.1	36.9	35.7	31.4	78.4	38.3	37.9	38.9	35.8	22.0	28.1	38.9	38.6	34.7	42.7	39.3
Table 7	-1.5	-0.6	1.1	-1.7	0.5	1.1	1.7	1.1	0.8	2.0	-0.8	3.0	1.4	1.2	4.3	3.0	1.3	-14.6	1.6	4.5	-2.4	1.6	3.2
accuracy	-3.7	-1.7	2.9	-4.7	1.4	2.8	4.5	2.9	2.1	5.6	-2.5	3.8	3.7	3.2	10.9	8.5	6.1	-52.1	4.1	11.7	-6.8	3.7	8.2

	La	Ce	Pr	Nd	Sm	Eu	Gd	Tb	Dy	Ho	Er	Tm	Yb	Lu	Hf	Ta	W	Pt	Au	Pb	Bi	Th	U
NIST 612 (n = 42)	38.0	38.7	36.8	34.9	36.7	36.0	33.7	36.8	33.6	37.6	34.5	35.2	37.6	36.3	34.6	30.9	30.3	2.39	4.40	33.1	30.8	37.2	38.3
SD	2.3	2.2	1.5	1.2	1.3	1.1	2.1	1.3	1.2	1.3	1.4	1.1	1.5	1.3	1.4	0.9	2.2	0.13	0.45	2.4	0.6	2.2	1.8
Jochum et al. 2011	36.0	38.4	37.9	35.5	37.7	35.6	37.3	37.6	35.5	38.3	38.0	36.8	39.2	37.0	36.7	37.6	38.0	2.51	4.77	38.6	30.2	37.8	37.4
	-2.0	-0.3	1.1	0.6	1.0	-0.4	3.6	0.8	1.9	0.7	3.5	1.6	1.6	0.7	2.1	6.7	7.7	0.12	0.37	5.5	-0.6	0.6	-0.9
accuracy	-5.7	-0.7	2.8	1.6	2.6	-1.3	9.6	2.0	5.5	1.9	9.1	4.2	4.0	2.0	5.7	17.7	20.4	4.69	7.67	14.3	-1.9	1.6	-2.4

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