

Supplementary Table 1

Table S1. Major (wt.%) elements compositions of the representative high-pressure granulites analyzed in the present study.

Sample	Lg-0-01	Lg-0-2	Lg-1-1	Lg-1-2	Lg-1-3	Lg-1-5	Lg-1-6	Lg-2-1	Lg-6-1	Lg-6-2	Lg-6-04
Lithology	garnet pyroxenite				garnet two-pyroxene granulite				garnet-bearing-plagioclase amphibolite		
SiO ₂	48.58	49.06	50.06	51.26	51.16	48.68	52.30	50.00	52.42	51.42	51.31
TiO ₂	1.63	1.51	1.85	1.87	1.71	1.44	1.83	1.46	1.44	1.48	1.38
Al ₂ O ₃	11.06	14.32	13.67	13.21	13.10	14.00	12.59	13.77	13.13	13.03	12.80
Fe ₂ O ₃ ^T	19.31	16.25	17.72	17.16	11.54	11.54	11.72	11.12	15.05	15.30	15.58
FeO	11.44	11.54	13.01	12.38	16.59	16.45	16.47	15.64	9.55	10.18	10.68
MgO	6.25	4.91	5.24	4.98	0.23	0.23	0.29	0.25	5.38	5.55	5.66
MnO	0.22	0.27	0.24	0.24	5.70	6.72	5.22	6.91	0.21	0.21	0.25
CaO	9.07	11.45	9.23	9.97	8.55	8.96	8.22	9.09	9.02	9.36	9.12
Na ₂ O	2.21	2.12	1.32	1.60	1.27	1.86	1.26	1.59	2.32	1.96	1.96
K ₂ O	0.62	0.27	0.37	0.28	0.44	0.53	0.38	0.67	0.72	0.79	0.76
P ₂ O ₅	0.38	0.29	0.24	0.26	0.27	0.21	0.27	0.23	0.20	0.20	0.24
LOI	0.27	0.14	-0.03	-0.22	0.62	0.80	0.68	0.69	0.31	0.34	0.32
Totall	100.66	101.29	100.62	101.07	101.18	100.56	100.29	100.74	100.22	100.75	100.35
X _{Mg}	27.88	25.07	24.39	24.19	27.74	31.26	25.96	32.84	29.34	29.23	29.00
K ₂ O/Na ₂ O	0.28	0.13	0.28	0.18	0.35	0.28	0.30	0.42	0.31	0.40	0.39
ISiO ₂	44.01	43.92	44.41	45.38	46.27	44.01	47.31	45.15	57.97	57.29	57.40
IN+K	2.56	2.14	1.50	1.66	1.55	2.16	1.48	2.04	3.36	3.06	3.04