

**Table S3: Ti concentration in different morphological type of zircon crystal, eq. based on Watson et al. 2006:
5080/(6.01–LOG(Ti in ppm))–273**

Ti (ppm)	T (°C)	sample	rock-type	morphology	texture	FWHM
12	757	165-Z.FIN2	hybrid	short	antecrystic/xenocrystic core	7
11	746	162-Z.FIN2	hybrid	short	core	6
27	836	081-Z.FIN2	granitoid	normal	growth zoning	11
26	832	075-Z.FIN2	granitoid	normal	antecrystic/xenocrystic core	6
25	827	033-Z.FIN2	granitoid	normal	growth zoning	13
24	823	127-Z.FIN2	mafic	normal	growth zoning	12
21	812	126-Z.FIN2	mafic	normal	core	6
20	807	045-Z.FIN2	granitoid	normal	core	8
20	806	030-Z.FIN2	granitoid	normal	antecrystic/xenocrystic core	10
19	802	105-Z.FIN2	mafic	normal	core	8
19	801	044-Z.FIN2	granitoid	normal	antecrystic/xenocrystic core	7
18	794	110-Z.FIN2	mafic	normal	antecrystic/xenocrystic core	9
16	786	133-Z.FIN2	hybrid	normal	core	7
16	785	094-Z.FIN2	mafic	normal	antecrystic/xenocrystic core	8
16	784	083-Z.FIN2	granitoid	normal	antecrystic/xenocrystic core	8
16	783	063-Z.FIN3	granitoid	normal	growth zoning	6
16	782	054-Z.FIN2	granitoid	normal	growth zoning	7
15	781	048-Z.FIN2	granitoid	normal	growth zoning	14
15	780	086-Z.FIN2	granitoid	normal	antecrystic/xenocrystic core	11
15	780	042-Z.FIN2	granitoid	normal	antecrystic/xenocrystic core	5
15	779	085-Z.FIN2	granitoid	normal	antecrystic/xenocrystic core	10
15	779	145-Z.FIN2	hybrid	normal	growth zoning	8
15	778	146-Z.FIN2	hybrid	normal	antecrystic/xenocrystic core	9
15	777	062-Z.FIN2	granitoid	normal	antecrystic/xenocrystic core	6
15	777	027-Z.FIN3	granitoid	normal	growth zoning	8
15	776	035-Z.FIN2	granitoid	normal	antecrystic/xenocrystic core	12
15	776	026-Z.FIN2	granitoid	normal	growth zoning	5

15	775	087-Z.FIN2	granitoid	normal	antexcristic/xenocrystic core	9
14	771	027-Z.FIN2	granitoid	normal	growth zoning	6
13	767	013-Z.FIN2	granitoid	normal	antexcristic/xenocrystic core	11
13	765	161-Z.FIN2	hybrid	normal	growth zoning	
13	762	122-Z.FIN2	mafic	normal	core	10
12	760	128-Z.FIN2	mafic	normal	growth zoning	12
12	757	132-Z.FIN2	hybrid	normal	growth zoning	5
11	753	093-Z.FIN2	mafic	normal	growth zoning	8
11	753	108-Z.FIN2	mafic	normal	growth zoning	8
11	753	121-Z.FIN2	mafic	normal	growth zoning	11
11	746	031-Z.FIN2	granitoid	normal	growth zoning	6
11	746	041-Z.FIN2	granitoid	normal	growth zoning	5
10	744	142-Z.FIN2	hybrid	normal	antexcristic/xenocrystic core	7
10	744	168-Z.FIN2	hybrid	normal	core	9
10	743	032-Z.FIN2	granitoid	normal	antexcristic/xenocrystic core	12
10	741	143-Z.FIN2	hybrid	normal	core	9
10	737	014-Z.FIN2	granitoid	normal	growth zoning	8
9	736	084-Z.FIN2	granitoid	normal	growth zoning	12
9	732	052-Z.FIN2	granitoid	normal	antexcristic/xenocrystic core	9
9	732	069-Z.FIN2	granitoid	normal	core	10
9	730	053-Z.FIN2	granitoid	normal	growth zoning	12
9	728	144-Z.FIN2	hybrid	normal	growth zoning	11
9	728	154-Z.FIN2	hybrid	normal	growth zoning	
9	728	135-Z.FIN2	hybrid	normal	growth zoning	8
9	727	095-Z.FIN2	mafic	normal	growth zoning	10
8	727	167-Z.FIN2	hybrid	normal	growth zoning	7
8	724	115-Z.FIN2	mafic	normal	antexcristic/xenocrystic core	10
8	724	152-Z.FIN2	hybrid	normal	core	12
8	724	049-Z.FIN2	granitoid	normal	growth zoning	9
8	724	050-Z.FIN2	granitoid	normal	growth zoning	12
8	721	112-Z.FIN2	mafic	normal	growth zoning	9

8	719	123-Z.FIN2	mafic	normal	growth zoning	8
8	718	114-Z.FIN2	mafic	normal	growth zoning	13
8	717	063-Z.FIN2	granitoid	normal	growth zoning	11
8	716	065-Z.FIN2	granitoid	normal	core	12
7	714	166-Z.FIN2	hybrid	normal	growth zoning	10
7	712	022-Z.FIN2	granitoid	normal	growth zoning	6
7	711	051-Z.FIN2	granitoid	normal	core	9
7	710	025-Z.FIN2	granitoid	normal	growth zoning	10
7	705	088-Z.FIN2	granitoid	normal	growth zoning	14
6	704	109-Z.FIN2	mafic	normal	growth zoning	6
6	702	104-Z.FIN2	mafic	normal	growth zoning	13
6	698	034-Z.FIN2	granitoid	normal	growth zoning	11
6	696	134-Z.FIN2	hybrid	normal	growth zoning	13
6	691	071-Z.FIN2	granitoid	normal	growth zoning	8
5	688	068-Z.FIN2	granitoid	normal	growth zoning	12
5	687	067-Z.FIN2	granitoid	normal	growth zoning	13
5	687	153-Z.FIN2	hybrid	normal	growth zoning	9
5	683	101-Z.FIN2	mafic	normal	growth zoning	21
4	675	103-Z.FIN2	mafic	normal	growth zoning	8
4	675	082-Z.FIN2	granitoid	normal	growth zoning	7
4	672	070-Z.FIN2	granitoid	normal	growth zoning	10
4	670	064-Z.FIN2	granitoid	normal	growth zoning	13
4	665	047-Z.FIN2	granitoid	normal	convolute zoning	9
4	663	043-Z.FIN2	granitoid	normal	growth zoning	13
4	658	015-Z.FIN2	granitoid	normal	growth zoning	5
4	657	074-Z.FIN2	granitoid	normal	growth zoning	8
3	650	023-Z.FIN2	granitoid	normal	growth zoning	6
3	636	066-Z.FIN2	granitoid	normal	growth zoning	10
3	634	113-Z.FIN2	mafic	normal	growth zoning	9
2	630	055-Z.FIN2	granitoid	normal	growth zoning	12
2	616	021-Z.FIN2	granitoid	normal	growth zoning	4

2	613	164-Z.FIN2	hybrid	normal	growth zoning	11
1	594	102-Z.FIN2	mafic	normal	growth zoning	6
1	587	072-Z.FIN2	granitoid	normal	growth zoning	7
1	552	073-Z.FIN2	granitoid	normal	growth zoning	5
32	854	010-Z.FIN2	granitoid	long	weak growth zoning	4
25	829	029-Z.FIN2	granitoid	long	weak growth zoning	5
18	797	011-Z.FIN2	granitoid	long	weak growth zoning	5
18	794	147-Z.FIN2	hybrid	long	weak growth zoning	5
16	787	028-Z.FIN2	granitoid	long	weak growth zoning	4
16	783	012-Z.FIN2	granitoid	long	weak growth zoning	6
15	776	092-Z.FIN2	mafic	long	weak growth zoning	4
15	776	148-Z.FIN2	hybrid	long	weak growth zoning	6
14	774	089-Z.FIN3	mafic	long	weak growth zoning	5
13	768	149-Z.FIN2	hybrid	long	weak growth zoning	5
12	759	090-Z.FIN2	mafic	long	weak growth zoning	6
10	745	009-Z.FIN2	granitoid	long	weak growth zoning	6
10	741	150-Z.FIN2	hybrid	long	weak growth zoning	5
9	728	111-Z.FIN2	mafic	long	weak growth zoning	5
8	719	008-Z.FIN2	granitoid	long	weak growth zoning	5
8	718	091-Z.FIN2	mafic	long	weak growth zoning	5