Supplementary materials

Table S1 Representative geochronological data of Eo-Mesoarchean rocks on the Liaodong Peninsula and its vicinity

No.	Samples	Location	Lithologies	Ages (Ma)	Methods*	Interpretations	References
Eoarchean							
1	A0011/AB87-7	Baijiafen	Mylonitized trondhjemitic gneiss	3804±5	SHRIMP	Crystallization age	Liu et al., 1991
2	A0518	Baijiafen	Mylonitized trondhjemitic gneiss	3800±5	SHRIMP	Crystallization age	Liu et al., 2008
3	A0405	Baijiafen	Mylonitized trondhjemitic gneiss	3573±21	SHRIMP	Crystallization age	Liu et al., 2008
4	A0403	Baijiafen	Biotite schist	>3.62 Ga	SHRIMP	Crystallization/Depositional age	Liu et al., 2008
5	A0404	Baijiafen	Trondhjemite	3620±23	SHRIMP	Crystallization age	Liu et al., 2008
6	Ch28	Dongshan	Banded trondhjemitic gneiss	3811± 4	SHRIMP	Crystallization age	Liu et al., 1992
				3322± 12		Anatexis age	
7	A9604	Dongshan	Quartz dioritic gneiss	3792± 12	SHRIMP	Crystallization age	Liu et al., 2008
8	A9604	Dongshan	Quartz dioritic gneiss	3792± 4	SHRIMP	Crystallization age	Wan et al., 2005c
				3812± 4 Ma	SHRIMP	Crystallization age	Song et al., 1996
9	A0423	Dongshan	Banded trondhjemitic gneiss	3680 ± 19	SHRIMP	Crystallization age	Liu et al., 2008
10	A0512	Shengoushi	Banded trondhjemitic gneiss	3777± 13	SHRIMP	Crystallization age	Liu et al., 2008
				3556± 6		Metamorphic age	
11	C209-8	Guodishan	Massive to weakly-banded trondhjemitic gneiss	3812±8	SIMS	Crystallization age	Wang et al., 2015
Paleoarchean							
12	A0514	Shengoushi	Banded trondhjemite	3454 ± 8	SHRIMP	Crystallization age	Wan et al., 2012
				3.78–3.73 Ga		Inherited zircon age	
				3.66–3.62 Ga		Inherited zircon age	
				3.29 Ga		Metamorphic age	
13	A0515	Shengoushi	Gneissic trondhjemite	3448 ± 8	SHRIMP	Crystallization age	Wan et al., 2012
14	A0711	Shengoushi	Trondhjemite patch	3311 ± 4		Crystallization age	
				3.65–3.60 Ga		Metamorphic age	
15	A0710	Shengoushi	Mafic dyke	3329 ± 8		Crystallization age	Wan et al., 2012
				3.66–3.62 Ga		Inherited age	
				3.35 Ga		Metamorphic age	
				3.13 Ga		Metamorphic age	
16	A0510	Shengoushi	Mafic dyke	3330 ± 6	SHRIMP	Crystallization age	Wan et al., 2012
17	A3212-3	Chentaigou	Felsic volcanic	3362 ± 5	SHRIMP	Crystallization age	Song et al., 1996
18	Ch10	Chentaigou	Granitic dyke	3342 ± 10	SHRIMP	Crystallization age	Song et al., 1996

19	05FW040	Dongshan	Trondhjemitic gneiss	3265±13	SHRIMP	Crystallization age	Wu et al., 2008
				3751±12		Inherited age	
20	05FW037	Dongshan	Dioritic gneiss	3303 ±5	SHRIMP	Crystallization age	Wu et al., 2008
21	05FW038	Dongshan	Trondhjemitic gneiss	3305 ± 7	SHRIMP	Crystallization age	Wu et al., 2008
22	05FW031	Baijiafen	Mica schist	<3306 ± 12	SHRIMP	Depositional age	Wu et al., 2008
				3627 ±33		Detrital age	
				3808 ± 24		Detrital age	
23	05FW030	Baijiafen	Trondhjemitic gneiss	3304 ± 10	SHRIMP	Crystallization age	Wu et al., 2008
				3798 ± 30		Inherited age	
24	05FW032	Baijiafen	Trondhjemitic gneiss	3320 ±9	SHRIMP	Crystallization age	Wu et al., 2008
				3802 ± 11		Inherited age	
25	05FW032	Baijiafen	Trondhjemitic gneiss	3315 ±4	SHRIMP	Crystallization age	Wu et al., 2008
				3799 ± 6		Inherited age	
				3865 ± 5		Inherited age	
26	C209-3	Guodishan	Migmatite complex	3356 ± 3	SIMS	Crystallization age	Wang et al., 2015
				3558–3865		Inherited age	
27	C209-2	Guodishan	Migmatite complex	3304 ±4	SIMS	Crystallization age	Wang et al., 2015
Mesoarchean							
28	C209-4	Guodishan	Fine-grained massive trondhjemitic gneiss	3131 ± 6	SIMS	Crystallization age	Wang et al., 2015
				>3.2 Ga		Inherited age	
29	C209-6	Guodishan	Fine-grained massive trondhjemitic gneiss	3133 ± 8	SIMS	Crystallization age	Wang et al., 2015
				3.2–3.3 Ga		Inherited age	
30	05FW033	Baijiafen	Trondhjemitic gneiss	3140±31	SHRIMP	Crystallization age	Wu et al., 2008
				3294±6		Inherited age	
				3624 ± 7		Inherited age	
				3781±5		Inherited age	
31	05FW0306	Baijiafen	Trondhjemitic gneiss	3140±31	SHRIMP	Crystallization age	Wu et al., 2008
				3319±10		Inherited age	
				3157±7		Inherited age	
32	A0513	Dongshan	Gneissic monzogranite	3122 ± 9	SHRIMP	Crystallization age	Wan et al., 2012
				3.3 Ga		Inherited age	
33	A9013	Chentaigou	Granite with an augen texture	3306 ± 13	SHRIMP	Inherited age	Song et al., 1996
34	05FW027	Chentaigou	Granite	3128±6	SHRIMP	Crystallization age	Wu et al., 2008
				3360±10		Inherited age	
				3773±40		Inherited age	

35	05FW028	Chentaigou	Granite	3138±40 3353±17 3672±3	SHRIMP	Crystallization age Inherited age Inherited age	Wu et al., 2008
36	05FW029	Chentaigou	Granite	3119±50 3312±48	SHRIMP	Crystallization age Inherited age	Wu et al., 2008
37	A9203	Lishan	Trondhjemite	3142±7	SHRIMP	Crystallization age	Song et al., 1996
38	AT834	Tiejiashan	Syenogranite	2962±4	SHRIMP	Crystallization age	Song et al., 1996
39	Ch26	Tiejiashan	Syenogranite	2964±6	SHRIMP	Crystallization age	Song et al., 1996
40	AB87-4	East Anshan BIF mining	Granite	2994±8	SHRIMP	Crystallization age	Song et al., 1996
41	Ch16	West Anshan BIF mining	Granite	3001±8	SHRIMP	Crystallization age	Song et al., 1996
42	RZ29	Luojiajie	Tonalitic gneiss	2857±27 2514± 29	LA-ICP-MS	Crystallization age Metamorphic age	Liu et al., 2017
43	LQ30-1	Luojiajie	Tonalitic gneiss	3003±26 2532± 18	LA-ICP-MS	Crystallization age Metamorphic age	Supplementary materials Table S3

*LA-ICP-MS, laser ablation inductively coupled plasma mass spectrometer; SHRIMP, sensitive high-resolution ion microprobe; SIMS, secondary ion mass spectrometry.

Table S2 Representative geochronological data of Neoarchean rocks on the Liaodong Peninsula and its vicinity

No.	Samples	Lithologies	Inherited/detrital zircon age (Ma)	Crystallization age (Ma)	Metamorphic age (Ma)	Methods*	Source
Supracrustal rock in Qingyuan							
1	LQ0107	Amphibole leptynite		2515±6	~2.52Ga	SHRIMP	Wan et al., 2005a
2	LF0107	Amphibole leptynite		2510±7		SHRIMP	Wan et al., 2005a
3	LQ0104	Amphibole leptynite			2479±5	SHRIMP	Wan et al., 2005a
4	12LN25-2	Amphibolite		2530±5	2507±11	SHRIMP	Wan et al., 2005a
5	P10NC5	Amphibolite			2480±9	SIMS	Peng et al., 2015
6	14NL01-2	Granulite	2791±6 2679±7	2537±8	2482±5	SHRIMP	Wu et al., 2016
7	14NL17-1	Granulite	2653±15	2515±39	2485±3	SHRIMP	Wu et al., 2016
8	14NL12-1	Amphibolite			2489±3	SHRIMP	Wu et al., 2016
9	14NL04-5	Grt-Hb-Bt-Pl gneiss		2555±10	2476±9	SHRIMP	Wu et al., 2016
10	14NL14-1	Grt-Bt-Pl gneiss	2675–2505		2484±14	SHRIMP	Wu et al., 2016
11	14NL16-1	Grt-Bt-Pl gneiss		2497±4	2476±10	SHRIMP	Wu et al., 2016
12	LQX6	Amphibolite		2530 ± 4		LA-ICP-MS	Li and Wei, 2017
13	LQH3	Amphibolite		2539 ± 7		LA-ICP-MS	Li and Wei, 2017

14	LQT2	Amphibolite		2530 ± 4		LA-ICP-MS	Li and Wei, 2017
15	LQF1	Amphibolite		2516 ± 3		LA-ICP-MS	Li and Wei, 2017
16	LQF2	Quartz amphibolite		2523 ± 12	2491 ± 17	LA-ICP-MS	Li and Wei, 2017
17	LQJ1	Amphibolite		2547 ± 19	2486 ± 37	LA-ICP-MS	Li and Wei, 2017
Granitoid in Qingyuan							
18	LQ0110	TTG gneiss		2556±18	2519±48	SHRIMP	Wan et al., 2005a
19	LF0106	TTG gneiss		2528±27	2477±13	SHRIMP	Wan et al., 2005a
20	MG-48	Trondhjemite		2553±7	2500±10	SHRIMP	Grant et al., 2009
21	MG-141	Tonalite		2534±4	2510±7	SHRIMP	Grant et al., 2009
22	MG-146	Trondhjemite			2497±7	SHRIMP	Grant et al., 2009
23	13LB49-3	Trondhjemitic gneiss	2674±48	2550±10	2508±49	LA-ICP-MS	Bai et al., 2014
24	12LN04-1	Tonalitic gneiss		2544±4		LA-ICP-MS	Bai et al., 2014
25	12LN27-1	Trondhjemitic gneiss		2518±23	2473±30	LA-ICP-MS	Bai et al., 2014
26	P10PJW1	Tonalite		2526±11		SIMS	Peng et al., 2015
27	P10BHG5	Tonalite		2520±12		SIMS	Peng et al., 2015
28	12LN39-3	Quartz dioritic gneiss		2571±7		LA-ICP-MS	Bai et al., 2014
29	12LN30-2	Quartz diorite		2496±18		LA-ICP-MS	Bai et al., 2014
30	P10PLH3	Quartz diorite	2661±12	2523±6	2478±18	SIMS	Peng et al., 2015
31	P10YJD3	Quartz monzodiorite		2512±10		SIMS	Peng et al., 2015
32	MG-47	Syenogranite		2502±11	2516±32	SIMS	Grant et al., 2009
33	12LN01-1	Granite		2522±4		LA-ICP-MS	Bai et al., 2014
34	12LN78-1	Trondhjemitic gneiss	2592±20	2558±4		LA-ICP-MS	Wang et al., 2016a
35	13LB47-3	Trondhjemitic gneiss	2608±5	2558±4		LA-ICP-MS	Wang et al., 2016a
36	13LB46-5	Tonalitic gneiss	2592±21 2646±23	2525±6	2496±6	LA-ICP-MS	Wang et al., 2016a
37	13LB26-5	Trondhjemitic gneiss	2559 ± 22 2553 ± 26	2505±5		LA-ICP-MS	Wang et al., 2016a
38	12LN59-1	Monzogranitic gneiss	2778 ± 54 2558 ± 54	2529±3	2499±55	LA-ICP-MS	Wang et al., 2016a
39	12LN80-1	Monzogranitic gneiss		2515±3		LA-ICP-MS	Wang et al., 2016a
40	12LN15-1	Tonalitic gneiss		2516 ± 10		LA-ICP-MS	Wang et al., 2016b
41	12LN16-1	Tonalitic gneiss		2531 ± 6		LA-ICP-MS	Wang et al., 2016b
42	13LB16-4	Biotite trondhjemitic gneiss		2595 ± 5		LA-ICP-MS	Wang et al., 2016b
43	13LB25-1	Trondhjemitic gneiss		2584 ± 5	2485 ± 4	LA-ICP-MS	Wang et al., 2016b
44	14LN32-1	Tonalitic gneiss	2855 ± 14 2682 ± 5	2524 ± 6		LA-ICP-MS	Wang et al., 2016b
45	15LQ20-1	Charnockite		2543±34	2496±12	LA-ICP-MS	Supplementary materials Table S3
46	15LQ8-1	Tonalitic gneiss		2557±8	2488±17	LA-ICP-MS	Supplementary materials Table S3
47	15LQ9-1	Trondhjemitic gneiss		2534±23	2491±18	LA-ICP-MS	Supplementary materials Table S3
Supracrustal rock in Anshan							
48	Ch17	Sedimentray rock	>2518 ± 14			SHRIMP	Song et al., 1996

Granitoid in Anshan							
49	A9169	Granite		2474±13		SHRIMP	Song et al., 1996
50	A1218	Massive syenogranite	>3.0 Ga			SHRIMP	Wan et al., 2015
51	A1123	Gneissic syenogranite	3452	2512± 29		SHRIMP	Wan et al., 2015
52	A1214	Weakly deformed syenogranite		2489±20		SHRIMP	Wan et al., 2015
53	A1125	Gneissic syenogranite	3435	ca. 2.5 Ga		SHRIMP	Wan et al., 2015
54	A1129	Gneissic syenogranite		2502± 30		SHRIMP	Wan et al., 2015
55	A1232	Gneissic syenogranite	2727± 10 3.45 Ga	ca. 2.5 Ga		SHRIMP	Wan et al., 2015
56	A1239	Weakly deformed syenogranite		2523± 29		SHRIMP	Wan et al., 2015
57	A1240	Weakly deformed syenogranite	2609 3477	ca. 2.5 Ga		SHRIMP	Wan et al., 2015
58	A1126	Banded granodiorite	3496± 17	2517± 19		SHRIMP	Wan et al., 2015
59	A1124	Gneissic quartz monzonite	2767 3407–3736	2507± 20		SHRIMP	Wan et al., 2015
60	A1235	Gneissic quartz monzonite	2711 3607	2507± 20		SHRIMP	Wan et al., 2015
61	A1228	Gneissic monzogranite		2512±10		SHRIMP	Wan et al., 2015
Supracrustal rock in southern Jilin							
62	14JN13-1	Felsic paragneiss	2772 2746 2742	2688 ± 12		LA-ICP-MS	Guo et al., 2016
63	13JN06-2	Hornblende plagioclase gneiss		2683 ± 11	2506	LA-ICP-MS	Guo et al., 2015
64	13JN02-4	Hornblende plagioclase gneiss	2934 2723	2671 ± 11	2496	LA-ICP-MS	Guo et al., 2015
65	13JN10-1	Hornblende biotite plagioclase gneiss	2774	2654 ± 5		LA-ICP-MS	Guo et al., 2015
66	13JN22-5	Garnet biotite plagioclase gneiss	2796 2702	2588 ± 9			Guo et al., 2016
67	13JN21-3	Garnet biotite plagioclase gneiss	2738 2704 2696	2579 ± 9		LA-ICP-MS	Guo et al., 2016
68	14JN11-2	Amphibolite		2558 ± 13	2510	LA-ICP-MS	Guo et al., 2016
69	14JN09-1	Pyroxene amphibolite		2557 ± 10		LA-ICP-MS	Guo et al., 2016
70	13JN21-6	Hornblende biotite trondhjemitic gneiss	2833	2544 ± 11		LA-ICP-MS	Guo et al., 2016
71	14JN17-1	Biotite plagioclase gneiss		2536 ± 7	2512	LA-ICP-MS	Guo et al., 2016
Granitoid in southern Jilin							
72	14JN04-4	Plagioclase gneiss		2578 ± 7	2497 2487	LA-ICP-MS	Guo et al., 2017
73	13JN17-1	Hornblende plagioclase gneiss		2574 ± 8		LA-ICP-MS	Guo et al., 2017

74	13JN01-5	Biotite trondhjemitic gneiss		2551 ± 19	2502	LA-ICP-MS	Guo et al., 2015
75	13JN08-2	Trondhjemitic gneiss	2817 2732 2605	2551 ± 9	2508	LA-ICP-MS	Guo et al., 2015
76	13JN11-2	Biotite plagioclase gneiss		2546 ± 12		LA-ICP-MS	Guo et al., 2017
77	13JN13-1	Biotite plagioclase gneiss		2541 ± 10	2503	LA-ICP-MS	Guo et al., 2017
78	14JN19-2	Biotite hornblende plagioclase gneiss		2536 ± 5	2503	LA-ICP-MS	Guo et al., 2017
79	13JN09-4	Biotite trondhjemitic gneiss		2532 ± 4	2500	LA-ICP-MS	Guo et al., 2015
80	13JN18-2	Hornblende plagioclase gneiss		2524 ± 11		LA-ICP-MS	Guo et al., 2017
Granitoid in Dalian							
81	SK08-1	Quartz diorite		2501 ± 17		LA-ICP-MS	Lu et al., 2004
82	SK15-1	Granodiorite	2559 2606	2450± 16		LA-ICP-MS	Lu et al., 2004
Granitoid in Changhai							
83	DD09-2	Biotite monzogneiss	2744 ± 16	2541 ± 9		LA-ICP-MS	Meng et al., 2013
84	DD09-3	Granitic gneiss		2537 ± 16		LA-ICP-MS	Meng et al., 2013
85	DD09-6	Monzogranitic gneiss	2600 ± 19 2596 ± 19	2544 ± 14		LA-ICP-MS	Meng et al., 2013
86	DD09-8	Granodioritic gneiss		2541 ± 10		LA-ICP-MS	Meng et al., 2013
87	DD13-1	Granitic gneiss	2721 ± 28	2516 ± 11		LA-ICP-MS	Meng et al., 2013
88	DD14-3	Monzogranitic gneiss		2514 ± 15		LA-ICP-MS	Meng et al., 2013
89	DD014-4	Granitic gneiss	2737 ± 28	2517 ± 17		LA-ICP-MS	Meng et al., 2013
90	DD29-1	Granodioritic gneiss		2554 ± 14		LA-ICP-MS	Meng et al., 2013
Supracrustal rock in Changhai							
91	DD27-1	Muscovite schist	>2518 ± 17		1887 ± 29	LA-ICP-MS	Meng et al., 2013
92	DD31-1	Muscovite schist	>2544 ± 13		1885 ± 36	LA-ICP-MS	Meng et al., 2013
93	DD32-1	Muscovite–quartz schist	>2632 ± 19				

* LA-ICP-MS, laser ablation inductively coupled plasma mass spectrometer; SHRIMP, sensitive high-resolution ion microprobe; SIMS, secondary ion mass spectrometry.

Table S3 U–Pb data of zircons from representative rocks on the Liaodong Peninsula and its vicinity

Spot	Th/ ppm	U/ ppm	Th/U	Type	Isotopic ratios						Corrected ages/Ma						Disc. /%
					$^{207}Pb/^{206}Pb$	1σ	$^{207}Pb/^{235}U$	1σ	$^{206}Pb/^{238}U$	1σ	$^{207}Pb/^{206}Pb$	1σ	$^{207}Pb/^{235}U$	1σ	$^{206}Pb/^{238}U$	1σ	
LA–ICP–MS zircon U–Pb data of sample LHZ-1 (containing 4.087 Ga zircon)																	
Staurolite–garnet–mica schist																	
LHZ1																	
LHZ1-37	128	328	0.39	M	0.1121	0.0007	5.1059	0.0356	0.3302	0.0018	1835	12	1837	13	1839	10	–0.3
LHZ1–38	84	515	0.16	I	0.1553	0.0016	9.4878	0.0530	0.4434	0.0024	2389	14	2376	5	2362	11	1.1

LHZ1–39	86	370	0.23	I	0.1648	0.0017	10.9154	0.0625	0.4807	0.0026	2505	4	2516	5	2530	11	–1.0
LHZ1–40	215	293	0.74	I	0.1553	0.0016	9.6313	0.0553	0.4501	0.0024	2405	4	2400	5	2396	11	0.4
LHZ1-41	497	472	1.05	I	0.1737	0.0018	11.5231	0.0641	0.4812	0.0026	2594	4	2566	5	2533	11	2.4
LHZ1-42	41	50	0.82	I	0.1701	0.0020	13.0499	0.1099	0.5566	0.0037	2559	6	2683	8	2852	15	–11.4
LHZ1-43	15	29	0.51	I	0.1593	0.0020	9.0786	0.0850	0.4135	0.0027	2448	8	2346	9	2231	12	8.9
LHZ1-44	68	113	0.60	I	0.1249	0.0015	6.4711	0.0556	0.3759	0.0024	2027	7	2042	8	2057	11	–1.5
LHZ1-45	69	94	0.74	I	0.1650	0.0018	10.5061	0.0673	0.4620	0.0026	2413	20	2417	9	2422	12	–0.4
LHZ1-46	122	148	0.82	I	0.1664	0.0018	9.7716	0.0647	0.4261	0.0024	2479	20	2385	9	2277	12	8.1
LHZ1-47	188	526	0.36	I	0.1553	0.0016	9.6313	0.0543	0.4499	0.0024	2405	4	2400	5	2395	11	0.4
LHZ1-48	189	570	0.33	I	0.1555	0.0016	9.1530	0.0515	0.4270	0.0023	2357	15	2321	6	2280	10	3.3
LHZ1-49	158	249	0.64	I	0.1349	0.0014	7.0796	0.0423	0.3807	0.0021	2047	20	2052	8	2058	10	–0.5
LHZ1-50	711	320	2.22	I	0.1602	0.0017	9.9381	0.0571	0.4501	0.0024	2458	4	2429	5	2396	11	2.5
LHZ1-51	129	183	0.71	I	0.1630	0.0017	9.9592	0.0592	0.4433	0.0024	2389	19	2366	8	2339	12	2.1
LHZ1-52	240	194	1.23	I	0.1673	0.0017	11.1145	0.0647	0.4820	0.0026	2531	4	2533	5	2536	11	–0.2
LHZ1-53	122	145	0.84	I	0.1592	0.0017	9.6302	0.0589	0.4388	0.0024	2380	20	2356	9	2327	12	2.2
LHZ1-54	106	171	0.62	I	0.1603	0.0017	9.6046	0.0582	0.4348	0.0024	2378	18	2345	8	2306	11	3.0
LHZ1-55	100	132	0.76	I	0.1656	0.0018	10.1940	0.0624	0.4466	0.0025	2417	19	2388	9	2353	12	2.6
LHZ1-56	470	1332	0.35	I	0.1492	0.0015	8.0271	0.0442	0.3903	0.0021	2337	4	2234	5	2124	10	9.1
LHZ1-57	499	926	0.54	I	0.1464	0.0015	7.9344	0.0446	0.3932	0.0021	2304	4	2224	5	2138	10	7.2
LHZ1-58	84	80	1.05	I	0.1359	0.0016	7.0425	0.0518	0.3759	0.0022	2176	6	2117	7	2057	10	5.5
LHZ1-59	54	144	0.37	I	0.1614	0.0017	10.4355	0.0638	0.4691	0.0026	2470	5	2474	6	2480	11	–0.4
LHZ1-60	1252	1166	1.08	I	0.1601	0.0017	10.2469	0.0565	0.4644	0.0025	2456	4	2457	5	2459	11	–0.1
LHZ1-61	420	514	0.82	I	0.1644	0.0017	10.1673	0.0570	0.4487	0.0024	2416	19	2393	8	2366	12	2.1
LHZ1-62	314	589	0.53	I	0.1941	0.0020	11.9421	0.0664	0.4463	0.0024	2384	25	2326	12	2259	11	5.2
LHZ1-63	80	134	0.60	I	0.1625	0.0017	10.4676	0.0649	0.4674	0.0026	2481	5	2477	6	2472	11	0.4
LHZ1-64	13	537	0.02	M	0.12	0.0013	5.5801	0.0320	0.3379	0.0018	1930	14	1900	5	1873	8	3.0
LHZ1-65	116	270	0.43	I	0.1557	0.0016	9.2673	0.0539	0.4318	0.0023	2338	16	2318	7	2296	11	1.8
LHZ1-66	90	196	0.46	I	0.1438	0.0015	8.0836	0.0485	0.4077	0.0022	2181	18	2183	7	2184	10	–0.1
LHZ1-67	133	439	0.30	I	0.1678	0.0018	10.3053	0.0584	0.4456	0.0024	2536	4	2463	5	2375	11	6.3
LHZ1-68	26	48	0.55	I	0.1493	0.0019	9.1143	0.0841	0.4429	0.0030	2338	8	2350	8	2364	13	–1.1
LHZ1-69	212	614	0.35	I	0.1439	0.0015	8.0672	0.0463	0.4068	0.0022	2243	15	2219	6	2194	10	2.2
LHZ1-70	319	422	0.76	I	0.1687	0.0018	10.5340	0.0598	0.4531	0.0024	2429	19	2405	8	2376	12	2.2
LHZ1-71	14	39	0.36	I	0.1608	0.0019	10.1113	0.0804	0.4562	0.0028	2378	20	2388	9	2399	13	–0.9
LHZ1-72	232	261	0.89	I	0.1667	0.0018	10.5429	0.0626	0.4589	0.0025	2525	4	2484	6	2435	11	3.6
LHZ1-73	115	249	0.46	I	0.1678	0.0018	12.1730	0.0729	0.5262	0.0029	2536	4	2618	6	2726	12	–7.5
LHZ1-74	92	106	0.86	I	0.1706	0.0019	10.7105	0.0684	0.4554	0.0026	2564	5	2498	6	2419	11	5.7
LHZ1-75	125	223	0.56	I	0.1585	0.0017	9.7604	0.0576	0.4468	0.0024	2336	18	2344	8	2354	11	–0.8
LHZ1-76	104	171	0.61	I	0.1406	0.0016	7.9168	0.0518	0.4084	0.0023	2235	5	2222	6	2208	10	1.2
LHZ1-77	1814	1492	1.22	I	0.1296	0.0014	6.8794	0.0382	0.3850	0.0020	2093	4	2096	5	2100	9	–0.3
LHZ1-78	37	67	0.56	I	0.1782	0.0020	11.8767	0.0812	0.4836	0.0028	2636	5	2595	6	2543	12	3.5
LHZ1-79	870	680	1.28	I	0.1749	0.0018	11.4756	0.0642	0.4760	0.0025	2605	4	2563	5	2510	11	3.6

LHZ1-80	112	269	0.41	I	0.1553	0.0017	8.7693	0.0520	0.4098	0.0022	2321	17	2260	7	2194	10	5.5
LHZ1-81	399	525	0.76	I	0.1660	0.0018	10.5182	0.0593	0.4597	0.0024	2405	19	2406	8	2407	12	–0.1
LHZ1-82	160	406	0.40	I	0.1626	0.0017	9.9630	0.0587	0.4445	0.0024	2400	16	2376	7	2348	11	2.2
LHZ1-83	24	46	0.52	I	0.2133	0.0025	13.5117	0.1031	0.4597	0.0029	2930	6	2716	7	2438	13	16.8
LHZ1-84	112	153	0.73	I	0.1835	0.0020	11.2139	0.0711	0.4433	0.0025	2389	24	2337	11	2279	12	4.6
LHZ1-85	76	203	0.37	I	0.1687	0.0018	10.4571	0.0623	0.4498	0.0024	2460	16	2419	7	2370	11	3.7
LHZ1-86	125	201	0.62	I	0.1572	0.0017	8.9674	0.0544	0.4139	0.0022	2277	20	2238	9	2197	11	3.5
LA–ICP–MS zircon U–Pb data of sample 15Q22 in Luanjiajie																	
Tonalitic gneiss																	
15Q22																	
15Q22-1	440	3490	0.13	M	0.1756	0.0037	10.2718	0.2119	0.4215	0.0031	2612	24	2460	19	2267	14	13.2
15Q22-2	65	442	0.15	M	0.1632	0.0031	10.2528	0.1935	0.4528	0.0029	2489	23	2458	17	2408	13	3.3
15Q22-3	319	2271	0.14	M	0.1673	0.0029	9.6804	0.1669	0.4175	0.0030	2530	19	2405	16	2249	14	11.1
15Q22-4	257	2787	0.09	M	0.1639	0.0027	10.8284	0.1789	0.4768	0.0036	2496	18	2509	15	2513	16	–0.7
15Q22-5	168	784	0.21	M	0.1586	0.0025	9.0007	0.1492	0.4097	0.0029	2441	19	2338	15	2214	13	9.3
15Q22-6	302	200	1.51	I	0.2163	0.0040	17.3719	0.3228	0.5806	0.0045	2953	20	2956	18	2951	19	0.1
15Q22-7	166	351	0.47	M	0.1866	0.0037	12.0892	0.2653	0.4675	0.0043	2712	24	2611	21	2473	19	8.8
15Q22-8	149	1625	0.09	M	0.1669	0.0031	10.6407	0.2041	0.4608	0.0032	2527	23	2492	18	2443	14	3.3
15Q22-9	489	276	1.77	I	0.2198	0.0038	17.2937	0.3006	0.5689	0.0039	2979	19	2951	17	2903	16	2.6
15Q22-10	218	2150	0.10	M	0.1662	0.0026	9.8043	0.1532	0.4264	0.0025	2520	18	2417	14	2290	11	9.1
15Q22-11	125	109	1.15	M	0.1580	0.0028	8.7747	0.1604	0.4020	0.0037	2435	19	2315	17	2178	17	10.6
15Q22-12	194	1582	0.12	M	0.1662	0.0027	9.8137	0.1580	0.4263	0.0027	2520	19	2417	15	2289	12	9.2
15Q22-13	79	1115	0.07	M	0.1670	0.0031	9.7947	0.1735	0.4232	0.0029	2528	21	2416	16	2275	13	10.0
15Q22-14	255	1952	0.13	M	0.1700	0.0034	9.6340	0.1892	0.4087	0.0033	2558	22	2400	18	2209	15	13.6
15Q22-15	156	1538	0.10	M	0.1697	0.0035	10.4506	0.2109	0.4436	0.0035	2554	23	2476	19	2367	16	7.3
15Q22-16	240	2017	0.12	M	0.1666	0.0030	9.6038	0.1694	0.4149	0.0030	2524	20	2398	16	2237	14	11.4
15Q22-17	158	320	0.49	M	0.1633	0.0032	8.2369	0.1667	0.3631	0.0043	2490	19	2257	18	1997	20	19.8
15Q22-18	177	155	1.14	M	0.1597	0.0034	8.5041	0.1710	0.3832	0.0033	2452	22	2286	18	2091	15	14.7
15Q22-19	137	853	0.16		0.0529	0.0018	0.2548	0.0084	0.0347	0.0004	326	54	230	7	220	2	32.5
15Q22-20	466	386	1.21	I	0.2138	0.0040	15.6981	0.2770	0.5272	0.0039	2934	19	2859	17	2729	16	7.0
15Q22-21	155	449	0.35	M	0.1599	0.0034	10.4243	0.2043	0.4674	0.0039	2455	22	2473	18	2472	17	–0.7
15Q22-22	145	611	0.24	M	0.1643	0.0035	8.2271	0.1567	0.3596	0.0034	2501	19	2256	17	1980	16	20.8
15Q22-23	151	1646	0.09	M	0.1664	0.0033	7.8166	0.1819	0.3356	0.0039	2521	24	2210	21	1865	19	26.0
15Q22-24	264	256	1.03	I	0.2223	0.0037	17.0906	0.2706	0.5523	0.0041	2998	16	2940	15	2835	17	5.4
15Q22-25	211	99	2.12	M	0.1677	0.0033	10.1206	0.2984	0.4313	0.0083	2535	25	2446	27	2312	37	8.8
15Q22-26	276	2605	0.11	M	0.1638	0.0028	10.6000	0.1785	0.4663	0.0047	2495	15	2489	16	2467	21	1.1
15Q22-27	108	715	0.15	M	0.1682	0.0027	10.5470	0.2141	0.4501	0.0056	2540	18	2484	19	2396	25	5.7
15Q22-28	161	915	0.18		0.0555	0.0047	0.2765	0.0220	0.0362	0.0011	430	19 4	248	18	229	7	46.7
15Q22-29	513	1160	0.44	M	0.1682	0.0057	8.1440	0.2191	0.3554	0.0117	2540	25	2247	24	1960	56	22.8
15Q22-30	102	100	1.02	M	0.1619	0.0030	10.4944	0.1932	0.4683	0.0050	2475	17	2479	17	2476	22	0.0

15Q22-31	310	3406	0.09	M	0.1643	0.0024	10.6516	0.1668	0.4670	0.0041	2501	15	2493	15	2470	18	1.2
15Q22-32	174	1798	0.10	M	0.1647	0.0025	9.2452	0.1341	0.4043	0.0026	2504	16	2363	13	2189	12	12.6
15Q22-33	407	3896	0.10	M	0.1632	0.0025	10.4077	0.1612	0.4594	0.0036	2489	16	2472	14	2437	16	2.1
15Q22-34	193	2131	0.09	M	0.1508	0.0026	7.7138	0.1309	0.3683	0.0028	2355	18	2198	15	2021	13	14.2
15Q22-35	231	427	0.54	M	0.1429	0.0036	6.7382	0.1756	0.3393	0.0042	2263	28	2078	23	1883	20	16.8
15Q22-36	115	695	0.16	M	0.0507	0.0032	0.2400	0.0082	0.0354	0.0004	226	56	218	7	225	3	0.4
15Q22-37	192	2029	0.09		0.0469	0.0012	0.1657	0.0042	0.0254	0.0002	46	40	156	4	162	1	–252.2
15Q22-38	141	862	0.16	I	0.2030	0.0035	13.8472	0.2258	0.4912	0.0031	2850	18	2739	15	2576	13	9.6
15Q22-39	187	1651	0.11	M	0.1672	0.0040	10.1943	0.2620	0.4387	0.0042	2530	30	2453	24	2345	19	7.3
15Q22-40	87	91	0.95	M	0.1567	0.0034	8.6623	0.1809	0.3984	0.0037	2421	23	2303	19	2162	17	10.7
15Q22-41	145	1758	0.08	M	0.1790	0.0035	10.3543	0.1930	0.4166	0.0027	2643	22	2467	17	2245	12	15.1
15Q22-42	95	108	0.88	M	0.1595	0.0043	9.2152	0.2502	0.4166	0.0052	2451	29	2360	25	2245	23	8.4
15Q22-43	285	272	1.05	I	0.2009	0.0045	13.8593	0.3162	0.4964	0.0047	2834	25	2740	22	2598	20	8.3
15Q22-44	2336	1348	1.73	I	0.2214	0.0042	18.0539	0.3371	0.5876	0.0042	2991	21	2993	18	2980	17	0.4
15Q22-45	991	625	1.58	I	0.2154	0.0038	17.5913	0.3013	0.5887	0.0043	2946	18	2968	16	2984	17	–1.3
15Q22-46	123	206	0.60	M	0.1586	0.0029	9.6764	0.1714	0.4397	0.0031	2441	20	2404	16	2349	14	3.8
15Q22-47	92	205	0.45	M	0.1350	0.0029	6.5962	0.2103	0.3494	0.0063	2163	31	2059	28	1932	30	10.7
15Q22-48	930	640	1.45	I	0.2220	0.0041	16.7877	0.3060	0.5445	0.0043	2995	19	2923	17	2802	18	6.4
15Q22-49	80	650	0.12	I	0.2082	0.0043	14.6582	0.3094	0.5073	0.0054	2892	21	2793	20	2645	23	8.5
15Q22-50	186	516	0.36	I	0.2086	0.0042	15.0195	0.2998	0.5181	0.0042	2895	22	2816	19	2691	18	7.0
15Q22-51	172	230	0.75	M	0.1656	0.0039	8.6060	0.1963	0.3745	0.0046	2514	22	2297	21	2051	22	18.4
15Q22-52	174	1945	0.09	M	0.1868	0.0033	11.5124	0.1893	0.4440	0.0040	2714	16	2566	15	2369	18	12.7
15Q22-53	172	102	1.69	M	0.1653	0.0030	10.7865	0.1882	0.4705	0.0038	2510	18	2505	16	2486	17	1.0
15Q22-54	171	1955	0.09	M	0.1658	0.0024	9.9241	0.1390	0.4309	0.0026	2516	15	2428	13	2310	12	8.2
15Q22-55	231	2358	0.10	M	0.1632	0.0025	9.8283	0.1462	0.4334	0.0031	2489	15	2419	14	2321	14	6.7
15Q22-56	224	107	2.09	M	0.1593	0.0035	9.0719	0.1829	0.4105	0.0036	2448	22	2345	18	2217	17	9.4
15Q22-57	215	116	1.86	M	0.1670	0.0031	11.1017	0.2628	0.4756	0.0058	2527	24	2532	22	2508	25	0.8
15Q22-58	191	2172	0.09	M	0.1684	0.0028	9.0506	0.2004	0.3861	0.0062	2542	18	2343	20	2105	29	17.2
15Q22-59	219	251	0.88	M	0.1632	0.0027	8.5207	0.1336	0.3763	0.0030	2489	16	2288	14	2059	14	17.3
15Q22-60	302	308	0.98	I	0.2159	0.0033	16.4734	0.2415	0.5490	0.0036	2950	15	2905	14	2821	15	4.4
15Q22-61	279	298	0.94	I	0.2161	0.0037	17.4219	0.2834	0.5800	0.0040	2952	17	2958	16	2949	16	0.1
15Q22-62	148	193	0.77	I	0.2189	0.0041	16.5014	0.2882	0.5422	0.0040	2972	19	2906	17	2793	17	6.0
15Q22-63	133	168	0.79	M	0.1642	0.0042	7.7857	0.3104	0.3365	0.0080	2499	36	2207	36	1870	39	25.2
15Q22-64	208	1869	0.11	M	0.1632	0.0039	10.7117	0.3968	0.4678	0.0086	2489	38	2498	34	2474	38	0.6
15Q22-65	92	130	0.71	M	0.1327	0.0040	4.0423	0.1155	0.2208	0.0029	2134	32	1643	23	1286	15	39.7
15Q22-66	311	269	1.15	I	0.2191	0.0039	17.6539	0.3093	0.5807	0.0054	2974	17	2971	17	2952	22	0.7
15Q22-67	149	1581	0.09	M	0.1749	0.0030	9.6940	0.1624	0.3986	0.0023	2605	20	2406	15	2163	11	17.0
15Q22-68	418	2395	0.17	M	0.1663	0.0029	11.1373	0.1841	0.4822	0.0030	2521	19	2535	15	2537	13	–0.6

LA–ICP–MS Zircon U–Pb data of the late Neoarchean rocks in Qingyuan

Trondhjemitic gneiss

15LQ09-1

15LQ09-1-01	59.83	1207.96	0.05	M	0.1654	0.00194	10.96939	0.1137	0.48111	0.00416	2512	20	2521	10	2532	18	–0.8
15LQ09-1-02	260.41	910.96	0.29	I	0.1663	0.00196	11.06354	0.11523	0.48261	0.00418	2521	20	2529	10	2539	18	–0.7
15LQ09-1-03	67.86	1312.26	0.05	M	0.16329	0.00192	10.59069	0.1097	0.47049	0.00406	2490	20	2488	10	2486	18	0.2
15LQ09-1-04	62.21	1338.71	0.05	M	0.16331	0.00192	10.48159	0.10869	0.46561	0.00402	2490	20	2478	10	2464	18	1.0
15LQ09-1-05	59.08	1185.66	0.05	M	0.16331	0.00192	10.55906	0.1095	0.46904	0.00405	2490	20	2485	10	2479	18	0.4
15LQ09-1-06	312.07	568.64	0.55	I	0.17083	0.00203	11.71889	0.12302	0.49763	0.00433	2566	20	2582	10	2604	19	–1.5
15LQ09-1-07	119.91	192.30	0.62	I	0.17114	0.00209	11.70568	0.12806	0.49617	0.00445	2569	20	2581	10	2597	19	–1.1
15LQ09-1-08	84.22	1694.93	0.05	M	0.16508	0.00194	11.18408	0.11607	0.49146	0.00424	2508	20	2539	10	2577	18	–2.7
15LQ09-1-09	143.06	1602.69	0.09	M	0.16756	0.00197	11.48384	0.11904	0.49718	0.00428	2533	20	2563	10	2602	18	–2.7
15LQ09-1-10	132.81	393.64	0.34	I	0.16593	0.002	10.83956	0.11675	0.47389	0.0042	2517	20	2510	10	2501	18	0.7
15LQ09-1-11	192.42	1162.09	0.17	I	0.16784	0.00198	11.03963	0.1151	0.47714	0.00412	2536	20	2527	10	2515	18	0.8
15LQ09-1-12	359.07	661.06	0.54	I	0.16948	0.00202	11.23277	0.1182	0.4808	0.00418	2553	20	2543	10	2531	18	0.9
15LQ09-1-13	62.97	1146.82	0.05	M	0.1628	0.00193	10.6301	0.11104	0.47367	0.00409	2485	20	2491	10	2500	18	–0.6
15LQ09-1-14	62.12	901.74	0.07	M	0.16435	0.00195	10.89279	0.11445	0.48081	0.00416	2501	20	2514	10	2531	18	–1.2
15LQ09-1-15	854.39	987.14	0.87	I	0.16987	0.00202	11.44325	0.11987	0.48869	0.00422	2556	20	2560	10	2565	18	–0.3
15LQ09-1-16	33.37	855.40	0.04	M	0.16378	0.00195	10.72436	0.11271	0.47501	0.00411	2495	20	2500	10	2506	18	–0.4
15LQ09-1-17	199.55	943.49	0.21	I	0.16616	0.00198	11.07675	0.1165	0.48361	0.00418	2519	20	2530	10	2543	18	–0.9
15LQ09-1-18	208.99	1176.97	0.18	I	0.16632	0.00198	10.87654	0.11426	0.4744	0.00409	2521	20	2513	10	2503	18	0.7
15LQ09-1-19	498.62	803.44	0.62	I	0.17132	0.00205	11.5733	0.12241	0.49006	0.00425	2571	20	2571	10	2571	18	0.0
15LQ09-1-20	337.80	1158.03	0.29	I	0.16563	0.00198	10.7693	0.11365	0.47168	0.00408	2514	20	2503	10	2491	18	0.9
15LQ09-1-21	188.30	830.49	0.23	I	0.16815	0.00203	11.17896	0.11914	0.48229	0.00417	2539	20	2538	10	2537	18	0.1
15LQ09-1-22	44.02	940.18	0.05	M	0.16265	0.00196	10.5018	0.11201	0.46838	0.00405	2483	20	2480	10	2477	18	0.3
15LQ09-1-23	218.04	346.79	0.63	I	0.17126	0.0021	11.82698	0.12909	0.50097	0.00441	2570	20	2591	10	2618	19	–1.9
Tonalitic gneiss																	
15LQ08-1																	
15LQ08-1-01	26.60	120.14	0.22	I	0.1671	0.00213	11.24273	0.1299	0.4881	0.00448	2529	21	2544	11	2562	19	–1.3
15LQ08-1-02	47.15	72.12	0.65	I	0.17163	0.00228	11.64907	0.14209	0.49238	0.00472	2574	22	2577	11	2581	20	–0.3
15LQ08-1-03	39.31	72.99	0.54	I	0.17165	0.00228	11.51749	0.14066	0.48676	0.00466	2574	22	2566	11	2557	20	0.7
15LQ08-1-04	35.04	60.05	0.58	I	0.17333	0.00234	11.63925	0.1452	0.48713	0.00474	2590	22	2576	12	2558	21	1.2
15LQ08-1-05	37.73	303.51	0.12	I	0.16931	0.0021	11.17967	0.12332	0.47902	0.00422	2551	21	2538	10	2523	18	1.1
15LQ08-1-06	35.99	92.99	0.39	I	0.16817	0.0022	10.61918	0.12667	0.45807	0.00428	2540	22	2490	11	2431	19	4.3
15LQ08-1-07	102.41	848.58	0.12	M	0.1646	0.00211	9.26321	0.10712	0.40825	0.00371	2504	21	2364	11	2207	17	11.8
15LQ08-1-08	89.74	791.49	0.11	M	0.16572	0.0021	9.08028	0.10278	0.39748	0.00354	2515	21	2346	10	2157	16	14.2
15LQ08-1-09	46.61	411.79	0.11	M	0.16346	0.00203	10.84264	0.11995	0.48119	0.00421	2492	21	2510	10	2532	18	–1.6
15LQ08-1-10	48.65	73.95	0.66	I	0.17255	0.00231	11.59766	0.14224	0.4876	0.00464	2583	22	2573	11	2560	20	0.9
15LQ08-1-11	15.35	329.78	0.05	M	0.16332	0.00205	10.03531	0.11245	0.44575	0.00393	2490	21	2438	10	2376	18	4.6
15LQ08-1-12	19.78	93.78	0.21	I	0.1708	0.00236	11.53256	0.1478	0.48981	0.00482	2566	23	2567	12	2570	21	–0.2
15LQ08-1-13	162.17	176.10	0.92	I	0.17059	0.00218	11.22866	0.12924	0.4775	0.00429	2563	21	2542	11	2516	19	1.8
15LQ08-1-14	51.63	66.79	0.77	I	0.17135	0.00233	11.35145	0.14182	0.48057	0.00461	2571	23	2552	12	2530	20	1.6
15LQ08-1-15	48.00	74.51	0.64	I	0.17196	0.00232	11.52241	0.14265	0.48609	0.00462	2577	22	2566	12	2554	20	0.9
15LQ08-1-16	48.76	211.56	0.23	I	0.1683	0.00215	11.33415	0.13021	0.48854	0.00436	2541	21	2551	11	2564	19	–0.9

15LQ08-1-17	24.79	58.66	0.42	I	0.16871	0.00234	11.22907	0.14409	0.48285	0.00471	2545	23	2542	12	2540	20	0.2
15LQ08-1-18	36.43	69.69	0.52	I	0.17064	0.00236	11.30346	0.14376	0.48054	0.00461	2564	23	2549	12	2530	20	1.3
15LQ08-1-19	32.36	87.39	0.37	I	0.166	0.00227	10.97931	0.13758	0.47981	0.00454	2518	23	2521	12	2526	20	–0.3
15LQ08-1-20	90.94	131.97	0.69	I	0.16953	0.00226	11.17643	0.13504	0.47826	0.00438	2553	22	2538	11	2520	19	1.3
15LQ08-1-21	94.05	257.90	0.36	I	0.17069	0.00222	11.19843	0.13105	0.47594	0.00424	2564	22	2540	11	2510	19	2.1
15LQ08-1-22	15.50	531.02	0.03	M	0.16339	0.00211	9.98574	0.11503	0.44337	0.00388	2491	22	2434	11	2366	17	5.0
15LQ08-1-23	36.75	62.58	0.59	I	0.17218	0.00244	11.55159	0.15127	0.4867	0.00476	2579	23	2569	12	2556	21	0.9
15LQ08-1-24	35.56	78.68	0.45	I	0.16876	0.00233	12.14908	0.15444	0.52226	0.00497	2545	23	2616	12	2709	21	–6.4
15LQ08-1-25	87.85	129.61	0.68	I	0.17007	0.0023	11.58739	0.14221	0.49427	0.00455	2558	22	2572	11	2589	20	–1.2
15LQ08-1-26	42.38	70.03	0.61	I	0.17087	0.00241	11.22582	0.14562	0.4766	0.00459	2566	23	2542	12	2512	20	2.1
15LQ08-1-27	83.51	122.75	0.68	I	0.17013	0.00239	11.42314	0.14795	0.48708	0.00469	2559	23	2558	12	2558	20	0.0
15LQ08-1-28	60.86	112.68	0.54	I	0.17129	0.00256	11.61718	0.1628	0.492	0.00509	2570	25	2574	13	2579	22	–0.4
15LQ08-1-29	42.30	67.38	0.63	I	0.16996	0.00252	11.59578	0.16135	0.49494	0.00506	2557	25	2572	13	2592	22	–1.4
15LQ08-1-30	83.33	140.76	0.59	I	0.16818	0.0023	11.30909	0.14059	0.48782	0.00447	2540	23	2549	12	2561	19	–0.9
15LQ08-1-31	50.76	87.30	0.58	I	0.17011	0.0024	11.13971	0.1439	0.47505	0.0045	2559	23	2535	12	2506	20	2.1
15LQ08-1-32	23.54	224.43	0.10	M	0.16217	0.0022	10.2472	0.12539	0.4584	0.00412	2478	23	2457	11	2433	18	1.9
15LQ08-1-33	17.48	156.58	0.11	M	0.16467	0.00228	10.52949	0.13278	0.46386	0.00427	2504	23	2483	12	2457	19	1.9
15LQ08-1-34	15.62	43.25	0.36	I	0.17376	0.00282	11.85626	0.18422	0.49499	0.00556	2594	27	2593	15	2592	24	0.1
15LQ08-1-35	28.45	54.11	0.53	I	0.16983	0.00252	11.46509	0.1588	0.48975	0.0049	2556	25	2562	13	2570	21	–0.5
15LQ08-1-36	135.65	151.21	0.90	I	0.17082	0.00237	11.45068	0.14457	0.48628	0.00446	2566	23	2561	12	2555	19	0.4
15LQ08-1-37	84.17	140.61	0.60	I	0.16529	0.00233	10.16002	0.13076	0.4459	0.00414	2511	24	2449	12	2377	18	5.3
15LQ08-1-38	35.35	257.12	0.14	I	0.16417	0.00226	11.33577	0.14123	0.50091	0.00451	2499	23	2551	12	2618	19	–4.7
Charnockite																	
15LQ20-1																	
15LQ20-1-01	137.43	1490.53	0.09	M	0.16327	0.00234	10.75507	0.1387	0.47785	0.0042	2490	24	2502	12	2518	18	–1.1
15LQ20-1-02	297.56	2133.21	0.14	M	0.16404	0.00235	10.92702	0.1412	0.48323	0.00424	2498	24	2517	12	2541	18	–1.7
15LQ20-1-03	141.09	146.81	0.96	I	0.16784	0.0025	11.11963	0.15105	0.48062	0.00444	2536	25	2533	13	2530	19	0.2
15LQ20-1-04	103.13	142.33	0.72	I	0.16842	0.00253	11.11343	0.15297	0.47868	0.00448	2542	25	2533	13	2522	20	0.8
15LQ20-1-05	147.80	216.01	0.68	I	0.16886	0.0025	11.16809	0.15046	0.47978	0.00437	2546	25	2537	13	2526	19	0.8
15LQ20-1-06	186.17	505.11	0.37	I	0.1646	0.00242	10.2362	0.13616	0.45112	0.00402	2504	25	2456	12	2400	18	4.1
15LQ20-1-07	279.55	1526.92	0.18	M	0.16333	0.00239	10.534	0.13904	0.46786	0.00412	2491	24	2483	12	2474	18	0.7
15LQ20-1-08	568.90	609.41	0.93	I	0.16787	0.00248	10.72073	0.14317	0.46329	0.00413	2537	25	2499	12	2454	18	3.2
15LQ20-1-09	894.51	1079.12	0.83	I	0.16473	0.00243	10.46091	0.13943	0.46069	0.00408	2505	25	2477	12	2443	18	2.5
15LQ20-1-10	227.61	347.62	0.65	I	0.16813	0.00252	11.21318	0.15262	0.48382	0.00438	2539	25	2541	13	2544	19	–0.2

Note: Disc. = [1–(^{206}Pb/^{238}U age)/(^{207}Pb/^{206}Pb age)]×100; M = metamorphic zircon; I = igneous zircons; Zircon grains were dated by the laser ablation–inductively coupled plasma–mass spectrometry (LA–ICP–MS) method.