

Table S1 EPMA data of clinopyroxene from the IOA deposit and biotite from the Shaxi Cu-Au deposit.

Nihe clinopyroxene											P	T	H
Spot	SiO ₂	TiO ₂	Al ₂ O ₃	Cr ₂ O ₃	FeO	MnO	MgO	CaO	Na ₂ O	K ₂ O	/MPa	/°C	/km
1	51.88	0.00	1.32	0.00	7.60	0.33	13.34	24.25	0.58	0.00	39.3	1121	1.2
2	49.77	0.06	2.64	0.00	13.05	0.36	9.94	23.57	0.47	0.00	43.5	1070	1.3
3	48.93	0.37	2.25	0.02	14.89	0.47	8.51	23.41	0.62	0.00	32.7	1043	1.0
4	50.47	0.21	1.36	0.03	13.76	0.75	9.06	23.16	0.59	0.00	96.0	1038	2.9
5	50.37	0.21	2.30	0.01	10.46	0.34	11.31	24.03	0.63	0.00	88.9	1095	2.7

Shaxi Biotite											P	T/	H	Fe
Spot	SiO ₂	TiO ₂	Al ₂ O ₃	Cr ₂ O ₃	FeO	MnO	MgO	CaO	Na ₂ O	K ₂ O	/MPa	°C	/km	/Fe+Mg
1	37.19	4.25	13.32	0.03	15.32	0.13	15.86	0.00	0.34	8.89	68.6	717	2.1	0.34
2	37.26	4.07	13.38	0.01	15.34	0.11	15.90	0.00	0.22	8.79	72.3	706	2.2	0.34
3	37.28	4.02	13.73	0.00	15.37	0.15	15.57	0.00	0.30	9.06	88.8	701	2.7	0.34
4	37.36	4.29	13.33	0.05	15.32	0.17	15.79	0.00	0.23	9.20	66.5	709	2.0	0.34
5	37.84	4.25	13.08	0.03	14.92	0.11	15.80	0.00	0.21	9.30	51.9	711	1.6	0.35
6	37.19	4.36	13.33	0.03	15.45	0.13	15.73	0.00	0.29	9.02	68.7	706	2.1	0.35
7	37.16	4.33	13.21	0.01	15.38	0.18	15.79	0.00	0.21	9.04	63.6	706	1.9	0.35
8	37.28	4.28	13.50	0.00	15.17	0.11	15.85	0.00	0.31	9.12	75.7	707	2.3	0.35
9	36.93	4.32	13.98	0.00	15.31	0.09	15.42	0.00	0.28	9.24	103.1	711	3.1	0.35
10	37.37	4.08	14.15	0.02	14.70	0.15	15.64	0.05	0.31	8.95	107.8	734	3.3	0.35
11	37.19	4.17	14.02	0.04	14.83	0.13	15.79	0.05	0.33	8.99	102.1	716	3.1	0.35
12	37.09	4.40	13.93	0.06	14.97	0.12	15.36	0.05	0.30	8.82	101.0	704	3.1	0.35
13	37.13	4.13	13.92	0.00	14.89	0.13	15.67	0.00	0.31	8.92	100.0	694	3.0	0.35
14	37.45	4.07	13.78	0.00	14.81	0.11	15.98	0.01	0.37	8.93	87.9	692	2.7	0.35
15	37.42	4.11	13.86	0.05	15.18	0.09	15.84	0.02	0.24	9.14	91.0	704	2.8	0.35
16	37.38	4.17	14.05	0.06	14.32	0.13	15.78	0.05	0.28	8.92	103.6	656	3.1	0.35
17	37.02	4.28	13.62	0.01	15.23	0.29	15.43	0.01	0.28	8.89	86.9	657	2.6	0.35
18	37.22	4.11	13.62	0.00	15.30	0.25	15.52	0.00	0.25	8.95	85.0	660	2.6	0.36
19	37.20	4.05	13.44	0.01	15.04	0.27	15.80	0.01	0.29	9.02	76.1	650	2.3	0.36
20	37.51	4.33	13.85	0.00	15.29	0.25	15.31	0.00	0.29	9.00	91.2	663	2.8	0.36
21	37.17	4.37	13.79	0.02	14.50	0.31	15.52	0.00	0.36	9.10	93.3	665	2.8	0.36
22	37.30	4.03	13.87	0.04	14.89	0.22	15.45	0.00	0.28	9.13	97.0	638	2.9	0.36
23	36.77	5.76	14.16	0.00	15.17	0.07	14.70	0.01	0.60	8.69	108.5	647	3.3	0.36
24	36.48	5.99	14.37	0.01	15.30	0.13	14.22	0.00	0.60	8.88	121.7	651	3.7	0.37
25	36.50	5.62	14.54	0.00	14.23	0.13	15.18	0.08	0.58	8.69	129.4	651	3.9	0.38

Table S2: The zircon LA-ICP-MS U-Pb dating from the Nihe IOA deposit and the Shaxi Cu-Au deposit..

Spot	U	Th	Th /U	^{207}Pb / ^{206}Pb	1σ	^{207}Pb / ^{235}U	1σ	^{206}Pb / ^{238}U	1σ	$^{206}\text{Pb}/^{238}\text{U}(\text{Ma})$	1σ	Concordance
Nihe magma zircon												
1	3426	5419	1.58	0.04947	0.00145	0.13857	0.00396	0.02031	0.00019	129.60	1.23	0.98
2	6020	9494	1.58	0.05062	0.00110	0.14477	0.00331	0.02070	0.00022	132.10	1.38	0.96
3	2910	4569	1.57	0.05075	0.00151	0.14383	0.00454	0.02046	0.00019	130.59	1.21	0.95
4	4111	5410	1.32	0.04903	0.00125	0.13901	0.00354	0.02064	0.00021	131.68	1.31	0.99
5	2985	2731	0.91	0.04654	0.00157	0.12977	0.00443	0.02026	0.00020	129.30	1.29	0.95
6	3915	4727	1.21	0.04921	0.00128	0.13982	0.00362	0.02064	0.00017	131.73	1.08	0.99
7	7644	12874	1.68	0.05002	0.00116	0.13962	0.00361	0.02017	0.00018	128.75	1.13	0.96
8	4426	7023	1.59	0.04843	0.00123	0.13758	0.00355	0.02065	0.00020	131.74	1.24	0.99
9	8476	14608	1.72	0.04913	0.00114	0.13880	0.00332	0.02049	0.00022	130.78	1.40	0.99
10	2301	8014	3.48	0.04820	0.00157	0.13492	0.00445	0.02030	0.00020	129.58	1.27	0.99
11	5548	9979	1.80	0.05018	0.00125	0.14175	0.00371	0.02043	0.00020	130.35	1.24	0.96
12	3363	3960	1.18	0.05102	0.00142	0.14372	0.00402	0.02044	0.00021	130.45	1.32	0.95
Nihe hydrothermal zircon												
1	8644	14867	1.72	0.05054	0.00105	0.14275	0.00314	0.02042	0.00021	130.31	1.32	0.96
2	33015	67911	2.06	0.04916	0.00091	0.13883	0.00280	0.02040	0.00022	130.21	1.42	0.98
3	15316	30924	2.02	0.04834	0.00099	0.13691	0.00303	0.02045	0.00021	130.48	1.34	0.99
4	4335	3587	0.83	0.05025	0.00121	0.14241	0.00362	0.02045	0.00020	130.48	1.29	0.96
5	6079	9327	1.53	0.04854	0.00123	0.13761	0.00358	0.02051	0.00025	130.86	1.56	0.99
6	6259	12969	2.07	0.05011	0.00120	0.14208	0.00349	0.02051	0.00022	130.88	1.42	0.96
7	12721	33829	2.66	0.04988	0.00101	0.14139	0.00314	0.02046	0.00022	130.54	1.38	0.97
8	4476	8008	1.79	0.05123	0.00151	0.14460	0.00418	0.02046	0.00021	130.54	1.31	0.95
9	8208	17335	2.11	0.04920	0.00134	0.13911	0.00385	0.02044	0.00024	130.45	1.50	0.98
10	6275	12386	1.97	0.04801	0.00119	0.13632	0.00346	0.02052	0.00021	130.91	1.30	0.99
11	14192	17534	1.24	0.05103	0.00147	0.14291	0.00287	0.02053	0.00026	131.00	1.63	0.96
12	13903	32773	2.36	0.04885	0.00097	0.13868	0.00291	0.02049	0.00022	130.73	1.37	0.99
13	6275	12581	2.01	0.04913	0.00125	0.13917	0.00381	0.02041	0.00022	130.25	1.38	0.98
14	9357	31091	3.32	0.04783	0.00109	0.13632	0.00319	0.02056	0.00022	131.18	1.40	0.98
Shaxi magma zircon												
1	969	322	0.33	0.05250	0.00265	0.14830	0.00736	0.02028	0.00028	129.43	1.76	0.91
2	967	538	0.56	0.04937	0.00256	0.13885	0.00689	0.02038	0.00027	130.07	1.69	0.98
3	945	607	0.64	0.05211	0.00259	0.14796	0.00719	0.02051	0.00025	130.89	1.61	0.93
4	791	429	0.54	0.04945	0.00305	0.13792	0.00779	0.02050	0.00033	130.81	2.11	0.99
5	1174	747	0.64	0.05041	0.00244	0.14105	0.00691	0.02035	0.00027	129.87	1.71	0.96
6	1573	1109	0.70	0.04615	0.00244	0.12927	0.00705	0.02030	0.00025	129.52	1.56	0.95

7	586	245	0.42	0.05026	0.00272	0.14043	0.00693	0.02038	0.00032	130.04	2.00	0.97
8	841	620	0.74	0.04493	0.00245	0.12898	0.00644	0.02043	0.00027	130.38	1.70	0.94
9	892	422	0.47	0.04585	0.00335	0.12917	0.00884	0.02022	0.00035	129.02	2.21	0.95
10	971	421	0.43	0.04908	0.00229	0.13615	0.00562	0.02037	0.00025	130.02	1.55	0.99
11	612	278	0.45	0.04821	0.00301	0.14028	0.00779	0.02028	0.00027	129.44	1.73	0.97
12	674	191	0.28	0.04614	0.00283	0.13374	0.00702	0.02034	0.00028	129.79	1.74	0.98
13	903	375	0.42	0.04946	0.00263	0.14101	0.00670	0.02049	0.00029	130.72	1.85	0.97
14	1440	626	0.44	0.05034	0.00207	0.14517	0.00609	0.02082	0.00029	132.83	1.82	0.96
15	670	273	0.41	0.04669	0.00247	0.13390	0.00691	0.02057	0.00033	131.27	2.06	0.97
16	1055	535	0.51	0.04959	0.00236	0.13889	0.00613	0.02029	0.00031	129.51	1.93	0.98
17	881	504	0.57	0.04876	0.00226	0.13991	0.00618	0.02043	0.00028	130.36	1.78	0.98
18	515	106	0.21	0.04342	0.00271	0.13235	0.00693	0.02009	0.00035	128.26	2.21	0.98
19	863	390	0.45	0.04899	0.00236	0.13784	0.00665	0.02037	0.00028	130.00	1.76	0.99
20	818	535	0.65	0.05134	0.00291	0.14066	0.00738	0.01981	0.00025	126.48	1.60	0.94

Shaxi inherited zircon

1	320	157	0.49	0.06809	0.00207	1.25134	0.03758	0.13355	0.00132	808.08	7.52	0.98
2	467	415	0.89	0.06532	0.00187	1.17362	0.03304	0.13046	0.00111	790.47	6.36	0.99
3	2138	4316	2.02	0.06458	0.00138	1.20001	0.02747	0.13372	0.00175	809.06	9.95	0.98

Table S3: In situ trace element data of zircon from the Nihe IOA deposit and the Shaxi Cu-Au deposit.

3

Spot	Ti	T	Log f_{O_2}	ΔFMQ	La	Ce	Pr	Nd	Sm	Eu	Gd	Tb	Dy	Ho	Er	Tm	Yb	Lu	Hf	Y	U	Th
Nihe magmatic zircon																						
1	2.7	677	-17.35	0.39	0.02	20.65	0.03	0.41	1.23	0.45	6.30	1.86	22.42	9.40	47.03	11.76	127.53	29.13	5990.5	344.2	1331.6	1875.5
2	2.7	676	-17.29	0.48	0.09	20.89	0.15	1.48	1.24	0.76	7.0	2.3	25.0	9.8	50.2	12.7	140.3	31.8	6707.2	362.7	1252.4	1763.8
3	35.2	944	-12.85	-0.86	1.08	34.46	1.17	4.70	3.24	0.93	9.6	3.3	36.1	14.8	76.7	19.0	200.2	37.1	8606.3	497.6	1219.5	939.3
4	1.1	605	-18.28	1.64	0.27	26.92	0.73	6.36	5.12	1.63	18.3	5.2	56.4	22.9	115.0	27.7	295.0	65.6	5554.4	851.8	1409.1	2258.2
5	0.0				0.02	20.41	0.13	0.98	1.59	0.49	7.9	2.8	28.7	12.1	62.0	15.3	172.1	40.1	5893.7	449.5	1163.7	1460.7
6	0.1	485	-21.17	3.29	0.27	26.30	0.17	2.48	2.36	0.92	12.6	3.5	38.5	16.8	85.5	20.7	232.2	50.5	5491.7	626.1	1467.1	2255.8
7	1.4	625	-17.81	1.48	0.10	31.42	0.34	3.36	4.97	1.36	15.9	5.0	55.9	22.4	116.8	28.1	298.8	65.2	5432.2	840.8	1746.8	2883.7
8	1.2	613	-18.59	1.08	0.04	21.22	0.23	2.56	4.02	1.21	18.3	5.3	63.0	25.8	135.5	33.1	362.7	81.7	5296.1	954.1	1498.1	1928.8
9	0.9	595	-18.61	1.64	0.10	25.52	0.29	2.32	3.06	0.85	9.1	2.4	29.5	11.4	56.9	14.2	149.4	33.1	5369.0	423.8	1465.6	2215.6
10	4.7	723	-16.63	-0.08	0.01	19.66	0.14	2.13	2.34	0.68	9.8	3.0	35.8	15.3	80.9	19.9	212.0	49.6	6730.1	564.6	1230.2	1469.2
11	1.2	613	-18.54	1.11	0.02	20.84	0.10	1.18	1.34	0.63	8.8	2.5	30.9	12.2	64.0	16.2	172.2	38.6	6329.6	453.6	1381.6	1999.3
12	2.7	675	-17.10	0.71	0.10	25.50	0.54	4.31	5.46	1.57	18.7	5.5	60.8	23.9	120.4	29.1	312.5	70.2	5559.5	877.7	1456.6	2221.4
Nihe hydrothermal zircon																						
1	62.4	1026	-10.98	-0.27	0.23	155.23	1.28	14.38	18.33	1.25	69.2	20.9	202.0	68.8	297.8	63.9	599.0	113.8	12435.8	2407.0	7133.0	18146.0
2	33.7	938	-10.92	1.18	0.64	236.25	5.68	73.85	79.84	3.17	240.5	64.7	600.9	187.0	751.1	153.4	1389.0	253.0	9073.5	5938.4	5736.6	14344.9
3	41.3	966	-11.80	-0.16	0.31	79.51	2.04	22.52	27.92	1.38	91.9	24.7	240.3	77.9	322.9	67.3	624.1	119.2	10832.2	2593.7	2499.6	4586.7
4	33.3	937	-13.28	-1.16	0.06	33.72	0.48	6.13	10.08	0.73	34.5	9.9	102.9	34.6	155.8	35.1	356.7	72.7	10592.4	1155.1	1747.9	1195.2
5	45.8	981	-10.41	1.00	0.35	199.74	2.50	33.72	41.12	1.54	137.1	36.8	357.5	116.0	483.3	101.7	972.2	183.5	9571.3	4067.7	3734.7	12199.2
6	38.8	958	-11.98	-0.20	0.06	82.13	0.76	8.71	11.31	0.57	40.3	12.2	122.6	42.3	188.8	40.5	398.5	77.5	11638.0	1494.4	2957.3	5151.8
7	38.4	956	-11.97	-0.17	0.18	70.09	1.04	12.24	15.86	1.03	55.2	15.3	155.6	51.2	224.3	47.0	455.4	87.4	11463.8	1823.3	2096.9	4097.3
8	37.5	953	-13.07	-1.21	0.05	35.19	0.55	5.04	6.78	0.58	24.9	6.9	74.8	27.7	132.0	30.3	322.1	67.7	9396.5	954.1	1803.5	1749.4
9	27.2	911	-12.60	-0.02	0.22	68.77	1.49	17.35	23.58	1.23	79.3	22.1	213.0	70.8	300.2	62.3	589.2	112.4	10730.7	2452.3	2410.6	4070.2
10	22.6	888	-11.36	1.64	1.06	246.27	7.57	88.70	93.39	3.95	255.2	67.7	614.1	196.8	808.8	163.4	1502.8	281.7	6863.5	6078.8	5510.3	10391.8

Spot	Ti	T	Log f_{O_2}	ΔFMQ	La	Ce	Pr	Nd	Sm	Eu	Gd	Tb	Dy	Ho	Er	Tm	Yb	Lu	Hf	Y	U	Th
Shaxi magmatic zircon																						
1	5.9	744	-14.12	1.90	0.10	32.53	0.11	1.30	3.46	2.08	21.6	8.2	98.9	42.3	202.8	48.9	517.1	123.0	10091.2	1423.4	271.9	157.3
2	4.4	717	-15.29	1.41	0.00	15.02	0.04	0.62	1.73	0.92	8.0	2.9	33.2	14.4	71.8	17.5	200.6	49.3	9417.5	485.4	137.7	64.0
3	3.0	684	-15.70	1.85	0.01	21.38	0.03	0.63	1.79	0.99	11.9	3.9	46.3	20.6	98.7	24.6	270.9	65.1	11076.1	687.6	245.1	113.3
4	2.6	673	-15.98	1.89	0.03	18.05	0.04	0.60	1.64	0.84	9.9	3.6	43.5	18.9	93.5	23.3	252.4	62.3	10888.0	644.6	192.1	83.9
5	5.9	744	-14.67	1.34	0.10	25.71	0.09	1.31	2.55	1.60	17.5	6.2	76.0	33.5	165.7	40.5	440.7	106.4	10587.0	1135.5	320.6	179.4
6	3.8	704	-15.19	1.83	0.07	24.56	0.10	1.49	3.42	1.47	20.0	6.9	79.4	35.2	173.1	42.1	463.8	112.8	10479.5	1185.2	260.9	143.9
7	6.6	755	-14.43	1.33	2.49	24.57	1.14	6.04	3.41	0.92	15.8	5.3	60.5	25.0	121.4	28.5	305.2	72.0	11446.2	844.6	266.8	140.2
8	5.1	730	-14.69	1.68	0.01	32.04	0.06	0.90	2.87	1.76	20.9	7.4	89.8	39.4	190.6	46.0	493.2	119.1	10474.6	1315.8	396.1	201.1
9	5.9	744	-14.05	1.96	0.05	29.35	0.29	3.53	6.31	2.10	32.2	10.6	117.1	47.5	222.9	50.0	504.5	115.0	10312.9	1519.9	205.3	199.7
10	6.1	748	-13.92	2.01	0.02	47.82	0.08	1.53	4.41	2.40	26.3	9.2	106.6	45.4	213.4	49.9	523.6	124.5	10420.4	1512.8	496.3	345.3
11	3.5	699	-15.64	1.53	0.02	19.87	0.04	0.65	2.54	1.45	15.8	6.1	72.1	31.8	155.6	37.8	408.3	100.2	10715.0	1078.6	259.5	109.4
12	3.2	690	-15.56	1.84	0.00	22.27	0.03	0.66	2.23	1.17	14.2	5.6	69.0	31.9	161.3	40.1	439.1	108.0	10947.8	1100.5	251.4	101.7
13	3.9	707	-15.02	1.93	0.00	24.68	0.06	0.97	2.28	1.43	17.0	6.5	80.0	34.1	166.7	40.3	438.8	105.1	10553.1	1156.7	228.1	96.3
14	3.5	699	-15.27	1.89	0.03	28.05	0.18	3.03	6.23	2.05	34.1	11.6	132.1	55.3	251.4	58.8	594.5	138.1	11031.0	1761.6	338.1	212.4
15	4.8	726	-14.95	1.52	0.13	21.60	0.08	1.34	2.68	1.47	16.9	6.1	71.4	30.3	150.8	37.5	412.3	102.3	10088.8	1051.7	226.5	96.2
16	8.8	783	-13.74	1.38	0.09	33.47	0.11	1.33	4.17	2.13	29.1	10.6	128.4	55.2	257.7	60.7	631.5	146.8	9993.6	1808.7	351.0	151.0
17	6.1	747	-14.00	1.95	0.03	38.00	0.07	1.22	2.71	1.56	19.5	6.7	81.6	35.2	173.3	43.0	456.7	111.7	10478.3	1203.8	338.1	162.1
18	5.8	743	-14.54	1.51	0.08	26.57	0.09	1.36	2.77	1.58	20.2	7.6	92.1	39.7	191.3	47.4	498.2	118.2	10614.7	1338.1	287.4	128.4
19	2.8	677	-15.38	2.35	0.02	24.32	0.05	1.14	2.70	1.20	15.2	5.4	63.7	27.7	137.0	33.0	362.1	89.4	10519.4	943.3	192.8	93.4
20	4.3	715	-15.43	1.32	1.89	15.55	0.64	4.32	4.47	2.01	22.1	6.3	68.1	27.7	127.4	29.8	320.6	77.5	10118.2	902.3	167.6	140.1
21	6.6	754	-15.34	0.44	0.01	8.75	0.14	1.31	2.59	1.34	11.5	3.5	35.3	14.3	66.1	16.6	184.7	47.2	8331.4	483.6	95.0	67.6
22	4.4	717	-15.19	1.52	0.00	10.73	0.10	1.37	1.91	1.14	10.1	3.0	32.2	12.9	62.2	14.8	163.5	41.2	9327.6	441.5	62.2	42.5
23	7.2	763	-14.11	1.48	0.17	23.12	0.14	1.77	3.12	1.53	17.6	6.3	75.8	33.6	167.0	40.3	423.2	102.5	9645.8	1141.7	184.1	129.1
24	5.4	737	-14.37	1.83	0.00	19.76	0.07	0.85	1.89	1.19	9.6	2.9	37.2	17.4	92.9	23.5	269.8	70.8	9578.2	613.2	117.7	53.8
25	4.8	725	-15.30	1.19	0.01	9.07	0.05	0.79	1.56	0.79	7.4	2.4	27.1	11.8	60.4	15.1	175.2	45.5	8831.7	415.0	58.6	29.9
26	4.7	722	-15.26	1.29	0.04	16.18	0.10	1.32	3.98	1.93	21.3	7.1	84.9	36.5	180.6	42.9	463.6	111.8	9061.5	1243.4	171.1	73.8

27	8.9	784	-14.87	0.23	0.01	10.19	0.12	1.24	2.48	1.31	11.2	3.5	39.1	17.1	89.9	23.6	268.4	71.6	8227.4	616.8	121.2	61.8
28	5.9	745	-15.06	0.94	0.01	19.47	0.06	1.15	2.87	1.56	17.5	6.1	77.0	33.1	162.1	38.7	413.1	98.4	10248.2	1110.6	290.1	141.5
29	6.4	752	-14.83	0.99	0.00	19.33	0.06	1.15	3.64	2.11	24.1	8.0	93.8	40.7	196.5	46.0	486.3	114.9	9366.0	1349.9	249.7	106.2
30	10.7	803	-12.78	1.90	0.00	43.57	0.04	0.95	2.53	0.32	15.4	6.1	76.1	33.5	163.1	38.7	392.3	86.9	12196.7	1071.2	268.6	132.6

Table S4: In situ Hf isotopic data of zircon from the Nihe IOA deposit and the Shaxi Cu-Au deposit.

5

Spot	$^{176}\text{Hf}/^{177}\text{Hf}$	1 σ	$^{176}\text{Lu}/^{177}\text{Hf}$	1 σ	$^{176}\text{Yb}/^{177}\text{Hf}$	1 σ	$\varepsilon\text{Hf}(0)$	1 σ	$\varepsilon\text{Hf}(t)$	1 σ	T _{DM1}	T _{DM2}
Nihe magmatic zircon												
1	0.282394	0.000020	0.001832	0.000011	0.079201	0.000528	-13.37	0.88	-10.69	0.88	1240	1643
2	0.282373	0.000018	0.001174	0.000003	0.048002	0.000210	-14.11	0.81	-11.31	0.82	1247	1680
3	0.282392	0.000028	0.000832	0.000005	0.037288	0.000078	-13.45	1.12	-10.66	1.12	1210	1643
4	0.282386	0.000021	0.001067	0.000006	0.045378	0.000567	-13.63	0.89	-10.84	0.90	1225	1654
5	0.282374	0.000033	0.001150	0.000002	0.048930	0.000344	-14.06	1.28	-11.32	1.29	1244	1678
6	0.282377	0.000021	0.000986	0.000006	0.041313	0.000134	-13.95	0.89	-11.15	0.90	1235	1671
7	0.282373	0.000013	0.001744	0.000011	0.075561	0.000554	-14.11	0.69	-11.43	0.70	1266	1684
8	0.282384	0.000021	0.002183	0.000035	0.090002	0.002004	-13.72	0.90	-11.02	0.91	1266	1663
9	0.282366	0.000020	0.001781	0.000012	0.072186	0.000655	-14.35	0.86	-11.64	0.87	1277	1697
10	0.282378	0.000011	0.000231	0.000007	0.011517	0.000249	-13.95	0.63	-11.13	0.64	1210	1668
11	0.282397	0.000024	0.001278	0.000003	0.058191	0.000597	-13.27	1.00	-10.52	1.01	1217	1635
12	0.282370	0.000030	0.000880	0.000004	0.036349	0.000133	-14.21	1.18	-11.42	1.18	1241	1685
Nihe hydrothermal zircon												
1	0.282394	0.000011	0.001304	0.000004	0.060810	0.000765	-13.37	0.65	-10.62	0.66	1222	1641
2	0.282383	0.000011	0.000995	0.000001	0.042050	0.000270	-13.75	0.64	-10.96	0.65	1227	1660
3	0.282401	0.000012	0.001806	0.000002	0.082814	0.000704	-13.11	0.67	-10.40	0.68	1228	1629
4	0.282404	0.000016	0.001558	0.000020	0.067678	0.000381	-13.01	0.75	-10.28	0.76	1216	1622
5	0.282409	0.000019	0.002344	0.000017	0.116686	0.001800	-12.84	0.84	-10.19	0.84	1235	1616
6	0.282383	0.000015	0.002188	0.000005	0.098397	0.000913	-13.77	0.73	-11.11	0.73	1268	1667
7	0.282426	0.000018	0.002006	0.000004	0.097315	0.000601	-12.22	0.83	-9.52	0.83	1198	1580
8	0.282377	0.000018	0.001777	0.000044	0.084656	0.003177	-13.98	0.81	-11.28	0.82	1262	1677
9	0.282415	0.000017	0.002051	0.000014	0.089676	0.000779	-12.63	0.80	-9.96	0.80	1217	1603
10	0.282407	0.000019	0.002827	0.000006	0.125436	0.000580	-12.92	0.86	-10.31	0.86	1255	1623
Shaxi magma zircon												
1	0.282612	0.000015	0.001430	0.000014	0.051632	0.000693	-5.65	0.74	-2.92	0.75	916	1214
2	0.282612	0.000016	0.001656	0.000015	0.062775	0.000995	-5.64	0.76	-2.93	0.77	921	1215
3	0.282636	0.000016	0.001518	0.000007	0.053192	0.000443	-4.81	0.76	-2.09	0.77	885	1168
4	0.282633	0.000016	0.001688	0.000029	0.062212	0.001440	-4.91	0.76	-2.21	0.77	893	1174
5	0.282628	0.000018	0.001513	0.000006	0.051863	0.000590	-5.08	0.80	-2.36	0.81	895	1183
6	0.282639	0.000015	0.001696	0.000019	0.062283	0.001008	-4.72	0.74	-2.01	0.75	885	1163
7	0.282608	0.000015	0.001447	0.000017	0.056773	0.000767	-5.81	0.74	-3.08	0.75	923	1223
8	0.282604	0.000019	0.001353	0.000008	0.048799	0.000838	-5.93	0.85	-3.20	0.86	926	1229
9	0.282598	0.000018	0.001445	0.000015	0.056014	0.001069	-6.15	0.82	-3.43	0.83	937	1242
10	0.282608	0.000016	0.001729	0.000014	0.067572	0.000920	-5.81	0.75	-3.10	0.76	930	1224
11	0.282646	0.000015	0.001483	0.000015	0.057345	0.000680	-4.45	0.74	-1.73	0.74	869	1148
12	0.282636	0.000014	0.001390	0.000012	0.052295	0.000813	-4.82	0.71	-2.09	0.72	882	1168

13	0.282634	0.000015	0.002093	0.000035	0.080768	0.001858	-4.88	0.73	-2.21	0.74	901	1174
14	0.282605	0.000021	0.001452	0.000038	0.051584	0.001512	-5.90	0.90	-3.17	0.91	927	1228
15	0.282607	0.000015	0.001361	0.000009	0.048996	0.000449	-5.85	0.73	-3.11	0.74	922	1225
16	0.282631	0.000022	0.001763	0.000014	0.065295	0.000967	-4.97	0.93	-2.27	0.94	897	1178
17	0.282594	0.000016	0.001436	0.000013	0.053185	0.000798	-6.29	0.77	-3.56	0.78	942	1249
18	0.282622	0.000017	0.001861	0.000029	0.073585	0.001618	-5.32	0.78	-2.63	0.79	913	1198
19	0.282618	0.000021	0.001939	0.000030	0.071968	0.000783	-5.43	0.89	-2.75	0.90	920	1204
20	0.282668	0.000019	0.002505	0.000040	0.091448	0.000804	-3.67	0.84	-1.04	0.85	861	1109
