

Supplementary table S3 Whole-rock trace–element (ppm) compositions of the Wugongshan granites

Sample	La	Ce	Pr	Nd	Sm	Eu	Gd	Tb	Dy	Ho	Er	Tm	Yb	Lu	Y	Cs	Rb	Ba
CJZK05-1	54.32	51.61	50.69	49.72	52.51	72.19	71.76	71.99	71.64	70.63	71.79	71.58	73.53	70.95	71.24	7.24	203.72	551.89
CJZK05-2	17.69	16.42	15.38	15.45	14.35	14.64	14.64	14.92	15.22	15.80	14.87	15.99	14.90	16.14	14.64	13.99	207.74	402.33
DJFZK02-3	1.59	1.84	3.12	0.85	1.57	1.02	1.12	0.80	1.38	1.55	0.97	0.81	0.65	0.82	0.86	4.99	105.24	1372.09
DJFZK02-4	3.96	6	6.91	6.39	6.44	1.05	1.00	0.97	0.74	0.98	0.99	0.47	0.61	0.64	0.74	10.23	160.36	1164.57
DJFZK01-1	0.08	0.12	0.18	0.11	0.12	0.04	0.05	0.03	0.04	0.05	0.05	0.03	0.06	0.03	0.04	5.45	98.87	1087.60
DJFZK01-2	0.56	0.35	1.33	0.2	0.44	0.20	0.21	0.20	0.19	0.25	0.18	0.20	0.15	0.21	0.22	6.79	126.73	832.47
XQZK11-1	9.22	6.18	7.71	7.68	8.73	1.08	1.84	1.13	0.53	0.71	0.98	0.42	0.53	0.35	1.37	22.36	231.38	101.43
XQZK11-2	5.89	9.79	7.13	13.45	10.11	0.59	0.53	0.68	0.52	0.73	0.55	0.45	0.34	0.46	0.57	7.44	129.10	612.28
XQZK12-3	3.59	2.18	2.55	1.99	2.7	3.94	6.00	5.44	3.89	5.15	3.69	4.27	3.91	4.24	4.01	14.98	162.61	402.41
XQZK13-2	0.38	2.04	1.65	0.32	0.39	3.91	1.59	2.33	4.53	3.05	4.92	4.88	4.46	5.29	4.71	17.06	217.62	721.03
XQZK13-4	0.09	0.04	0.4	0.04	0.06	0.09	0.09	0.09	0.09	0.10	0.09	0.09	0.10	0.11	0.10	9.17	182.34	567.02
XQZK12-5	2.49	3.39	2.81	3.75	2.44	1.04	0.96	1.19	1.09	0.78	0.75	0.57	0.52	0.54	1.28	18.34	257.38	267.99
CJZK06-2	99.88	99.95	99.85	99.92	99.86	99.80	99.79	99.75	99.83	99.77	99.84	99.76	99.77	99.78	99.79	12.52	183.95	386.25
CJZK06-4	4.51		1.98		0.84	31.27	26.13	28.25	29.93	26.38	28.66	26.78	32.32	24.89	26.49	26.10	242.08	390.21
WGS06027	31.87	30.02	26.43	33.55	26.57	4.83	8.42	5.09	2.07	2.9	4.31	1.51	1.99	1.03	6.24	30.29	477.50	2.55
WGS06028	31.2	19.1	22.23	17.5	23.45	33.76	51.38	46.7	33.34	44.04	31.52	36.43	33.34	36.16	34.45	9.08	216.28	1019.73
Sample	Th	U	Nb	Ta	Pb	Sr	Zr	Hf	V	Co	Ni	(La/Yb) _N	(La/Sm) _N	(Gd/Yb) _N	ΣREE	ΣLREE	ΣHREE	ΣLREE/ΣHREE
CJZK05-1	17.38	6.57	12.04	1.34	37.69	173.45	152.93	4.40	41.56	5.97	6.23	10.49	3.81	1.77	168.71	152.48	16.23	9.39
CJZK05-2	21.96	7.64	12.75	1.47	38.83	132.12	149.90	4.50	46.15	6.65	6.93	11.38	3.82	1.78	203.30	184.64	18.66	9.89
DJFZK02-3	23.00	2.38	13.82	0.75	28.54	171.86	219.42	6.32	24.92	4.52	6.25	20.58	5.24	2.59	277.56	258.68	18.88	13.70
DJFZK02-4	27.73	2.24	13.57	0.67	20.61	252.47	372.93	10.30	23.31	4.41	5.76	21.02	5.69	2.57	334.05	312.27	21.79	14.33
DJFZK01-1	27.28	2.53	15.09	1.22	22.72	157.24	236.89	6.40	24.14	4.65	8.63	22.99	5.19	2.97	331.33	309.77	21.56	14.36
DJFZK01-2	23.99	2.85	14.28	0.73	27.85	130.60	208.35	6.08	23.23	4.12	5.59	19.19	4.42	2.79	281.21	259.62	21.59	12.02
XQZK11-1	1.40	8.77	19.92	8.76	32.32	28.34	31.09	1.99	1.82	0.33	1.92	2.91	2.05	0.99	13.29	10.02	3.27	3.06
XQZK11-2	21.40	3.75	9.70	0.84	27.78	120.14	183.67	5.90	19.66	3.23	2.81	14.22	4.22	2.11	221.76	203.13	18.63	10.90
XQZK12-3	8.64	4.49	8.41	1.46	35.62	180.88	110.05	3.11	16.85	2.92	3.65	16.63	5.10	2.13	75.12	69.10	6.02	11.48
XQZK13-2	14.75	1.61	14.42	0.74	14.76	172.77	222.04	5.83	65.49	8.85	7.74	25.97	5.58	3.09	241.36	227.05	14.30	15.88
XQZK13-4	10.58	1.82	10.64	0.63	18.31	117.68	169.25	4.70	56.31	7.17	6.88	20.88	5.14	2.61	175.06	162.99	12.06	13.51
XQZK12-5	8.42	7.68	14.57	2.32	34.88	66.53	67.22	2.25	11.90	1.74	2.89	15.23	3.36	2.86	75.54	68.58	6.96	9.85

CJZK06-2	15.53	4.85	12.21	1.51	34.40	145.69	146.76	4.44	52.54	7.30	7.22	7.91	3.48	1.50	145.75	128.59	17.16	7.49
CJZK06-4	12.64	7.40	9.79	1.15	13.21	80.47	128.22	3.84	42.68	5.12	6.68	9.58	3.83	1.61	95.48	85.85	9.63	8.91
WGS06027	8.83	32.48	29.33	6.11	20.65	3.53	37.67	2.71	0.45	0.10	0.46	1.99	1.22	0.83	38.94	30.26	8.68	3.49
WGS06028	24.70	2.13	10.63	0.74	25.27	199.89	215.61	6.19	18.71	3.80	5.40	15.74	5.18	1.97	302.83	279.73	23.10	12.11