Supplementary Table S5

40Ar-39Ar dating results of muscovite from pegmatite samples of the Tochka deposit

T⁰C	^{40}Ar (cm³ STP)	$^{40}Ar/^{39}Ar$	±1σ	$^{38}Ar/^{39}Ar$	±1σ	$^{37}Ar/^{39}Ar$	±1σ	$^{36}Ar/^{39}Ar$	±1σ	Ca/K	$\sum^{39}Ar$ (%)	Age (Ma) ±1σ	±1σ	$^{40}Ar^{*}$ (%)
Sample 63-TO, weight 39.93 mg, J = 0.004450 ± 0.000052, plateau age (800-1250ºC) = 293.2 ± 3.5 Ma (1σ)														
500	6.3×10^{-9}	30.119	0.172	0.1572	0.0107	0.6234	0.0305	0.0572	0.0017	2.244	0.4	103.19	4.04	43.9
600	4.9×10^{-9}	38.553	0.787	0.4810	0.0128	1.5719	0.1272	0.0882	0.0117	5.659	0.7	97.55	26.15	32.4
700	20.5×10^{-9}	43.620	0.331	0.0858	0.0063	0.2710	0.0428	0.0290	0.0092	0.975	1.6	261.48	19.19	80.3
800	118.3×10^{-9}	42.124	0.201	0.0313	0.0013	0.0650	0.0073	0.0085	0.0018	0.234	7.4	292.86	4.91	94.0
880	205.1×10^{-9}	40.814	0.051	0.0160	0.0008	0.0342	0.0037	0.0028	0.0009	0.123	17.7	295.47	3.66	98.0
940	592.2×10^{-9}	39.975	0.046	0.0139	0.0005	0.0082	0.0011	0.0010	0.0001	0.030	48.0	293.3	3.2	99.2
1000	239.2×10^{-9}	39.843	0.064	0.0160	0.0014	0.0261	0.0036	0.0002	0.0007	0.094	60.3	294.0	3.5	99.8
1070	179.2×10^{-9}	40.243	0.040	0.0204	0.0011	0.0244	0.0029	0.0017	0.0010	0.088	69.4	293.83	3.72	98.8
1140	422.5×10^{-9}	39.958	0.028	0.0156	0.0004	0.0084	0.0015	0.0012	0.0004	0.030	91.1	292.87	3.27	99.1
1210	153.5×10^{-9}	39.963	0.039	0.0166	0.0004	0.0081	0.0031	0.0010	0.0007	0.029	99.0	293.22	3.44	99.2
1250	20.1×10^{-9}	39.456	0.166	0.0343	0.0030	0.1049	0.0118	0.0012	0.0019	0.378	100.0	289.32	5.12	99.1
Sample 64-TO, weight 40.35 mg, J = 0.005376 ± 0.000075, plateau age (880-1240ºC) = 292.3 ± 3.6 Ma (1σ)														
500	2.8×10^{-9}	21.011	1.679	0.7509	0.0292	3.1179	0.1227	0.0667	0.0103	11.225	0.2	12.6	32.1	6.2
600	2.8×10^{-9}	24.669	1.113	0.9832	0.0406	3.8809	0.2691	0.0783	0.0090	13.971	0.5	14.7	25.9	6.2
700	9.7×10^{-9}	35.022	0.935	0.1970	0.0099	0.9417	0.0484	0.0435	0.0085	3.390	1.0	203.1	22.3	63.3
800	46.5×10^{-9}	38.267	0.212	0.0524	0.0022	0.1160	0.0112	0.0124	0.0012	0.418	3.2	307.9	5.2	90.5
880	178.1×10^{-9}	34.835	0.091	0.0214	0.0004	0.0320	0.0054	0.0062	0.0005	0.115	12.8	294.7	4.0	94.8
940	597.5×10^{-9}	33.104	0.072	0.0135	0.0004	0.0077	0.0008	0.0010	0.0001	0.028	46.4	293.2	3.8	99.1
1000	72.8×10^{-9}	32.844	0.094	0.0180	0.0012	0.0271	0.0029	0.0026	0.0011	0.098	50.5	286.9	4.6	97.6
1080	204.5×10^{-9}	32.992	0.079	0.0169	0.0005	0.0228	0.0033	0.0017	0.0005	0.082	62.0	290.4	4.0	98.5
1120	138.9×10^{-9}	33.051	0.057	0.0202	0.0005	0.0215	0.0063	0.0002	0.0006	0.077	69.9	294.5	4.1	99.8
1160	352.9×10^{-9}	32.900	0.054	0.0165	0.0004	0.0131	0.0032	0.0009	0.0004	0.047	89.9	291.7	3.9	99.2
1240	179.0×10^{-9}	32.872	0.058	0.0150	0.0009	0.0145	0.0038	0.0001	0.0006	0.052	100.0	293.3	4.1	99.9

J – characteristic of the neutron flux during irradiation of samples.

T⁰C	^{40}Ar (cm³ STP)	$^{40}Ar/^{39}Ar$	±1σ	$^{38}Ar/^{39}Ar$	±1σ	$^{37}Ar/^{39}Ar$	±1σ	$^{36}Ar/^{39}Ar$	±1σ	Ca/K	$\sum^{39}Ar$ (%)	Age (Ma) ±1σ	±1σ	$^{40}Ar^{*}$ (%)
Sample 65-TO, weight 20.16 mg, J = 0.005335 ± 0.000074, plateau age (850-1150ºC) = 290.4 ± 4.2 Ma (1σ)														
500	2.0×10^{-9}	20.762	1.742	2.0477	0.1436	5.1444	0.3548	0.0592	0.0428	18.520	0.5	31.2	119.7	15.8
630	7.5×10^{-9}	33.773	1.736	0.7325	0.0381	1.9362	0.2412	0.1020	0.0340	6.970	1.5	34.7	94.0	10.8
750	36.2×10^{-9}	35.519	0.306	0.0831	0.0031	0.1413	0.0368	0.0187	0.0073	0.509	6.3	267.7	18.2	84.4
850	89.5×10^{-9}	36.568	0.114	0.0330	0.0028	0.0294	0.0144	0.0098	0.0027	0.106	18.0	298.0	7.6	92.1
920	178.1×10^{-9}	34.867	0.071	0.0192	0.0015	0.0154	0.0022	0.0068	0.0023	0.056	42.2	291.5	6.7	94.3
990	257.7×10^{-9}	33.871	0.068	0.0149	0.0010	0.0134	0.0021	0.0039	0.0007	0.048	78.3	290.3	4.1	96.6
1060	72.4×10^{-9}	34.133	0.106	0.0170	0.0030	0.0633	0.0152	0.0066	0.0031	0.228	88.4	285.9	8.4	94.3
1150	83.0×10^{-9}	33.893	0.088	0.0274	0.0018	0.0441	0.0026	0.0042	0.0021	0.159	100.0	289.8	6.4	96.4

J – characteristic of the neutron flux during irradiation of samples.