Table S5. Contents of major (wt.%) elements in pyroxenes of the granitoids of the Burgali and Arga-Ynnakh-Khaya ore fields

Massif	Levo-Dzholokag				Verkhne-Burgali ethmolith			Western Arga-Ynnakh-Khaya			Kester harpolith		
Rock	granodiorite		diorite	granite	microcline-albite granite			granite-porphyre	granite		microcline-albite granite	ongonite	
Mineral	ferrosilite		subcalcium magnezioaugite		ferrosilite			magnezioaugite			magnezioaugite		
Sample	602/1		301	602/4	2003			K6/1	K17		K14a	K21	
SiO_2	53.42	52.66	52.51	54.04	53.23	55.02	54.99	50.56	54.00	55.09	51.92	52.11	50.40
TiO_2	0.04	0.03	0.29	0.32	0.15		n d	1.06	0.15	0.09	0.18	0.36	0.90
Al_2O_3	0.47	0.74	3.05	3.39	2.43	0.99	0.73	2.59	1.68	1.42	1.38	2.11	1.99
Cr_2O_3	n d	n d	0.32	n d	0.02	0.02	n d	0	0.59	0.63	0.02	0.06	0.01
Fe_2O_3	0	0	0	0	0	0	0	2.59	1.39	0	3.73	3.83	6.54
FeO	30.47	31.06	18.93	15.39	19.15	27.98	28.54	11.70	3.90	5.59	12.01	4.76	8.84
MnO	1.41	1.54	0.49	0.44	0.75	1.30	1.14	0.40	0.54	0.20	0.45	0.31	0.33
MgO	11.46	12.50	11.61	13.29	11.85	12.78	12.61	13.61	17.94	21.03	10.79	13.64	14.34
CaO	1.64	1.31	11.13	12.36	10.78	1.92	1.27	15.34	19.95	15.71	19.71	22.45	16.86
Na_2O	0.11	0.14	0.56	0.52	0.47	0.16	0.16	0.95	0.55	0.29	1.10	0.89	0.84
K_2O	0.01	0.01	0.24	0.10	0.16	0	0	0	0.01	0.02	0	0.02	0
Total	99.02	99.97	99.12	99.84	98.98	100.19	99.48	98.80	100.70	100.07	101.29	100.51	101.05
Si	2.142	2.082	2.036	2.046	2.066	2.154	2.157	1.924	1954	1.986	1.954	1.927	1.882
Ti	0.001	0.001	0.008	0.009	0.004	0	0	0.031	0.004	0.002	0.005	0.01	0.025
Al	0.022	0.034	0.139	0.151	0.111	0.046	0.034	0.116	0.072	0.06	0.061	0.092	0.088
Cr	0	0	0.01	0	0.001	0.001	0	0	0.017	0.018	0.001	0.002	0
Fe^{3+}	0	0	0	0	0	0	0	0.074	0.038	0	0.106	0.106	0.184
Fe^{2+}	1.022	1.028	0.614	0.488	0.622	0.917	0.953	0.373	0.118	0.169	0.378	0.147	0.276
Mn	0.048	0.052	0.016	0.014	0.025	0.043	0.039	0.013	0.017	0.006	0.014	0.01	0.01
Mg	0.685	0.737	0.671	0.751	0.686	0.746	0.750	0.772	0.968	1.131	00.606	0.752	0.799
Ca	0.07	0.056	0.463	0.502	0.449	0.081	0.054	0.626	0.774	0.607	0.795	0.890	0.675
Na	0.00	0.011	0.042	0.038	0.035	0.012	0.012	0.07	0.039	0.02	0.08	0.064	0.061
Wo	3.8	2.9	22.2	24.2	22.3	4.3	2.9	27.5	36.4	29.2	37.5	40.8	27.9
En	36.6	37.9	32.3	36.2	34.1	39.7	40.2	38.6	48.4	55.6	30.3	37.6	39.9
Fs	54.6	52.9	29.5	23.5	30.9	48.8	51.1	18.6	5.9	8.3	18.9	7.4	13.8
Rhod	2.6	2.7	0.8	0.7	1.2	2.3	2.1	0.6	0.8	0.3	0.7	0.5	0.5
Jad	0.9	1.1	3.1	3.7	3.5	1.2	1.3	7.0	2.2	0.2	6.1	6.2	6.1
Aeg	0	0	0	0	0	0	0	0	0	0	1.8	0	0
Ure	0	0	0.9	0	0.1	0.1	0	0	1.7	1.8	0.1	0.2	0
Tsch	0	0	0	0	0	0	0	7.6	4.6	1.4	4.6	7.3	11.8
Fe/(Fe+Mg)	59.9	58.2	47.8	39.4	47.6	43.9	56.0	36.6	13.8	13.0	44.4	25.2	36.5
P, kb	12.4	13.3	15.5	14.9	15.3	13.7	13.5	11.4	14.1	13.0	10.3	13.9	10.2
T°C	1012	1025	1100	1118	1096	1025	1016	1231	1230	1247	1151	1196	1190

Notes: the analyses were performed by L.A. Pavlova and S.P. Roev at DPMGI SB RAS using the Camebax-micro x-ray microanalyzer. Calculations T°C and P, kb during crystallization by [1].

1. Yavuz, F. Win Pyrox: A Windows program for pyroxene calculation classification and thermobarometry. *American Mineralogist* **2013**, *98*, 1338–1359, doi: 10.2138/am.2013.4292.