Table 1. Age (U–Pb, SIMS) and isotope-geochemical ($\delta^{18}O_{Zrn}$ ‰, $\varepsilon Hf(t)_{Zrn}$, $\varepsilon Nd(t)_{rock}$) characteristics of zircons from granites of the Northern Urals
Таблица 1. Возраст (U-Pb, SIMS) и изотопно-геохимические ($\delta^{18}O_{Zrn}$ ‰, $\varepsilon Hf(t)_{Zrn}$, $\varepsilon Nd_{вал}$) характеристики цирконов (и пород) гранитов севера Урала

Pegion, Megazone	Massif	Section West Borzovsky (1)	Kyzygey complex (2)			Ochety (3)	Left Shchuchye (Syadatayakha complex) (4)	Poetarsky (Nodeyaga) (5)		
Polar Ural, Central Uralian	Name of granites	Q diorite	Q diorite		Granodiorite	Granite	Leucogranite	Granite		Leucogranite
	Tool	SHRIMP II	SHRIMP II			SHRIMP II	SHRIMP II	SHRIMP II		
	Age, Ma	542±9	491.8±2	500.1±5.1	501±4	500±5	503±6.3	559.3±7.2	558.4±7.7	561.6±6.9
	Source [literature]	[State Geological Map..., 2013b]				[Shishkin et al., 2009]	[State Geological Map..., 2013c]	[Melgunov et al., 2010]		
	Gratite type	–	I			A	I	I		
	№ sample	491	5036/5	4034/1	4029/1	70-41-03	3788-3	3211-4 (n=9)	3209-1 (n=8)	3207-4 (n=10)
	$\delta^{18}O_{Zrn}$ ‰	–	–			–	–	–		
	$\varepsilon Hf(t)_{Zrn}/T_{DM2}$, Ga	–	–			–	–	–		
	$\varepsilon Nd(t)_{wr}/T_{DM2}$, Ma	–	–			+5.6/780	–	–		

	Massif	Gerdiz (6)				Small bodies in the Marunkeu (7)				Ingilor (8)	
	Name of granites	Gneissic plagiog-ranite	Granite			Granite	Gneissic granite	Mica plagiogneiss		Granite	Leucogranite
	Tool	SHRIMP II	SHRIMP RG			SHRIMP RG	SHRIMP II			SHRIMP RG	SHRIMP II
	Age, Ma	529±6	496.2±7.1	573±10.2	1788-516	495±2.4	524±3	481±3	527±5	487±7	503±5
	Source [literature]	[State Geological Map..., 2013c]	[Shuyskiy et al., 2018]		[Shuyskiy et al., 2020]	[Kulikova et al., 2012]	[State Geological Map..., 2013c]	[Melgunov et al., 2008]		[Shuyskiy et al., 2015]	[State Geological Map..., 2013c]
	Gratite type	I	A	I		A	–			A	–
	№ sample	3758-2	A52/14 (n=10)	178 (n=6)	GR12 (n=10)	M143 (n=10)	3520-3	8019-1		A24/11(n=10)	3525
	$\delta^{18}O_{Zrn}$ ‰	–	+6.9	–	+6.22		–			+4.7	–
	$\varepsilon Hf(t)_{Zrn}/T_{DM2}$, Ga	–	+2.15 to +4.82/1.16–1.03	–5.84 to +7.52/1.72–0.9	–	+2.98 to +7.97/1.12–0.87	–			+2.16 to +5.40/1.10–0.99	–
	$\varepsilon Nd(t)_{wr}/T_{DM2}$, Ma	–	+0.7/1181	–		–				+0.6/1184	–

	Massif	Evyugan comlex (9)	Neudachny (10)	Ust-Mramorny (11)							
	Name of granites	Granite	Granite	Granite						Granite	Rare metal granite
	Tool	SHRIMP II	SHRIMP II	SHRIMP II						SHRIMP II	ID TIMS
	Age, Ma	533±4	563±3	524.3±9.2	522±7.5	322±8.8	516±16	536±31	526±8	522±7	474±11
	Source [literature]	[State Geological Map..., 2013c]	[Udoratina et al., 2015a]	[State Geological Map..., 2013c]			[Melgunov et al., 2010]			[Melgunov et al., 2010]	[Udoratina, Kudryashov, 2018]
	Gratite type	I	A_2	–			–			–	A_2
	№ sample	7061-4	172 (n=9)	3577			6059	6062	6063	6065	453-1
	$\delta^{18}O_{Zrn}$ ‰	–	–	–						–	+5.66
	$\varepsilon Hf(t)_{Zrn}/T_{DM2}$, Ga	–	+5.97 to +13.51/1.02–0.64	–						–	+4.1 to +12.1/1.48–0.76
	$\varepsilon Nd(t)_{wr}/T_{DM2}$, Ma	–	–	–						–	

Table 1. (continued)
Таблица 1. (продолжение)

Pegion, Megazone	Massif	Longotyugan (12)					Longot (13)			
Polar Ural, Central Uralian	Name of granites	Granite					Granite			
	Tool	ID TIMS		SHRIMP II			SHRIMP II			
	Age, Ma	512±8	605±18, 205±70	482±8	516.6±6.6	524±8	511±11	463±13	302.3±8.1	266.8±7
	Source [literature]	[Udoratina et al., 2009]	[Udoratina et al., 2015b]	[State Geological Map..., 2013c]	[Melgunov et al., 2010]		[State Geological Map..., 2013c]	[Dushin, 2017]		
	Gratite type	A_2		–			I			
	№ sample	170/01	54/90	3594	3058 (n=10)	3060 (n=9)	09-11-5	09-11-5		
	$\delta^{18}O_{Zrn}$ ‰	–	+5.71	–			–			
	$\varepsilon Hf(t)_{Zrn}/T_{DM2}$, Ga	–	+6.2 to+13.1/1.38–0.76	–			–			
	$\varepsilon Nd(t)_{wr}/T_{DM2}$, Ma	–					–			

	Massif	Taikeu (14)						Syadatayakha (15)	
	Name of granites	Granite			Leucogranite	Rare metal granite		Granite	Leucogranite
	Tool	SHRIMP II				LA ICP MS	ID TIMS	SHRIMP II	SHRIMP II
	Age, Ma	518.6±3.9	513±3.4, 525±9	523±10, 525±10	564±6, 444±10	436	408±3	516±2	544.4±3
	Source [literature]	[State Geological Map..., 2013c]	[Melgunov et al., 2010]		[Udoratina, 2007]		[Udoratina, Kudryashov, 2017]	[Andreichev et al., 2007]	[State Geological Map..., 2013c]
	Gratite type	–	–		A_2	A_1	A	A_2	–
	№ sample	3603	6045/07 (n=10, n=6)	6047/07 (n=4, n=7)	LH (n=8, n=3)	29/90 (n=6)	135/01	368/3 (n=5)	4271
	$\delta^{18}O_{Zrn}$ ‰	–	+6.29	–	–	+5.66	+6.03	+6.1	–
	$\varepsilon Hf(t)_{Zrn}/T_{DM2}$, Ga	–			+5.7 to +11.9/1.40–0.84	+6.7 to +14.3/1.22–0.52	+4.9 to +15.1/1.36–0.45	–	–
	$\varepsilon Nd(t)_{wr}/T_{DM2}$, Ma	–			+1.9/1142	–	–	+2.6/1044	–

	Massif	Kharbey (16)			Small bodies of the Kharbey block (17)				
	Name of granites	Leucogranite	Granite		Leucogranite	Bt-Pl gneiss		Plagiogneiss	Gneissic metaplagiogranite
	Tool	SHRIMP II	–			SHRIMP II			
	Age, Ma	592±10	591±8.6	525±34	507	664±5.2	518±4.6	1896	561±8
	Source [literature]	[Melgunov et al., 2008]		[Melgunov et al., 2010]	[State Geological Map..., 2014b]	[State Geological Map..., 2013c]		[State Geological Map..., 2014b]	[Krupenik et al., 2013]
	Gratite type		A_1	–	–	I	–		
	Sample №		1077-1	6054/07	6104	3501-3	41	4246	
	$\delta^{18}O_{Zrn}$ ‰		–	–	–				
	$\varepsilon Hf(t)_{Zrn}/T_{DM2}$, Ga		–	+8.3 to +12.5/1.12 (136)		–			
	$\varepsilon Nd(t)_{wr}/T_{DM2}$, Ma		–	–	–				

Table 1. (continued)
Таблица 1. (продолжение)

Pegion, Megazone	Massif	Small bodies of the Kharbey block (17)							
Polar Ural, Central Uralian	Name of granites	Gneissic metapla-giogranite	Gneiss granite			Mi granite	Bt granite	Gneiss	Granite
	Tool	SHRIMP II				–		ID TIMS	
	Age, Ma	571±5.5	557±2.2	497±3	487.1±2.1	498–359	532–316	643±16, 434±12	640, 435
	Source [literature]	[Krupenik et al., 2013]	[Golubeva, 2011]			[State Geological Map..., 2014b]		[Khain et al., 2005]	
	Gratite type	–	I			–		–	
	Sample №	4373	33-22 (n=16)	40 (n=19)	71 (n=17)	09-23	08-239	2127	2128
	$\delta^{18}O_{Zrn}$ ‰	–	–						
	$\varepsilon Hf(t)_{Zrn}/T_{DM2}$, Ga	–	–						
	$\varepsilon Nd(t)_{wr}/T_{DM2}$, Ma	–	–						
	Massif	Sandibey (18)	Malyi Sandibey (19)	Enganape (melange Manyukuyakha) (20)			Yuzhny (21)	Small bod-ies of the Kharamatalou (22)	Kykvomshor complex (23)
	Name of granites	Leucogranite	Leucogranite	Plagiogranite	Tonalite	Q diorites	Granodiorite	Granite	Plagiogranite
	Tool	SHRIMP II	SHRIMP II	ID TIMS	SHRIMP II	SHRIMP RG	SHRIMP II		–
	Age, Ma	535 ± 26, 1217	639 ± 6.5	670 ± 5	719 ± 10	733.9 ± 8.3	637.6 ± 4.5	521 ± 2	526
	Source [literature]	[State Geological Map..., 2014b]	[State Geological Map..., 2014b]	[Khain et al., 2003]	[State Geological Map..., 2007; Pystin et al., 2011]	[Morgunova, Soboleva, 2007]	[Soboleva et al., 2012]	[State Geological Map..., 2013b]	[State Geological Map..., 2004]
	Gratite type	I	A	–	I	I	–		–
	Sample №	09-18	11-51-8	2114	Ep100 (n=3)	63-2	1391 (n=6)	–	1120
	$\delta^{18}O_{Zrn}$ ‰	–	–	–	+5.58	–	–	–	–
	$\varepsilon Hf(t)_{Zrn}/T_{DM2}$, Ga	–	–	–	+8.7 to +10.6/1.23–1.07	–	–	–	–
	$\varepsilon Nd(t)_{wr}/T_{DM2}$, Ma	–	–	+1.7/1.57 [Khain et al., 2003]	–	–	–	–	–

Pegion, Megazone	Massif	Malyko (24)	Yanganape (25)	Yalyape (26)	Nganotsky I (27)	Rechnoy Paleovolcano (28)	Yurmenek (29)	Canyonny (30)	Granites of the Northern Trans-Urals (31)	
Polar Ural, East Uralian	Name of granites	Plagiogranite	Granite	Plagiogranite	Q diorite	Leuko-plagiogranite	Granite	Granite	Granodiorite	
	Tool	SHRIMP II	SHRIMP II	SHRIMP II	SHRIMP II	SHRIMP II	SHRIMP II	SHRIMP II	SHRIMP II	
	Age, Ma	451±14	429±4, 335±5, 522	454±4, 108±1	463±3	456±6, 985±17	385±2	368±3, 324	508±6	277±4
	Source [literature]	[Andreichev et al., 2012]	[Andreichev et al., 2017]	[Sobolev et al., 2017; Shadrin, Sobolev, 2017]	[Sobolev et al., 2017; Shadrin, Sobolev, 2017]	[Sobolev et al., 2017; Shadrin, Sobolev, 2017]	[Andreichev et al., 2017]	[Andreichev et al., 2017]	[Krupenik et al., 2013]	
	Gratite type	I	I	I	–	A_2(I)	I	I	–	
	Sample №	325/3 (n=8)	375/1 (n=8, n=2, n=1)	3010 (n=9, n=1)	1072 (n=6)	S221 (n=9, n=1)	331/3 (n=10)	329/2 (n=7, n=1)	3203	
	$\delta^{18}O_{Zrn}$ ‰	–	–	–	–	–	–	–	–	
	$\varepsilon Hf(t)_{Zrn}/T_{DM2}$, Ga	–	–	–	–	–	–	–	–	
	$\varepsilon Nd(t)_{wr}/T_{DM2}$, Ma	–	–	–	–	–	–	–	–	

Table 1. (continued)
Таблица 1. (продолжение)

Pegion, Megazone	Massif	Small bodies of the Rai-Iz ophiolites (32)	Lagortayu complex in the Voykar ophiolites (33)							
Polar Ural, East Uralian	Name of granites	Oligoclazites	Plagiogranite					Trondhjemite	Leucocratic veins	Granite
	Tool	LA MC ICP MS	SHRIMP II		LA MC ICP MS			SHRIMP II	SHRIMP II	–
	Age, Ma	383±2	452.7±5.1	441.1±6.5	428.1±7.4	444±2	490±7	399.1±2.8	454.8±1.1	549±4.5
	Source [literature]	[Meng et al., 2018]	[Remizov et al., 2012]		[Queiroga et al., 2016]	[Estrada et al., 2012]	[Khain et al., 2005, 2008]	[Estrada et al., 2012]	[Estrada et al., 2012]	[State Geological Map..., 2021b]
	Gratite type	–	–		I	–		I	–	
	Sample №	P-1-1.3	8813	13503	116-09	RUB-347	2570	RUR-32	RUB-145	AB 304102
	$\delta^{18}O_{Zrn}$ ‰	–	–					–		
	$\varepsilon Hf(t)_{Zrn}/T_{DM2}$, Ga	–11.2...+11.4 [Meng et al., 2018]	–					–		
	$\varepsilon Nd(t)_{wr}/T_{DM2}$, Ma	–	–					+5.4 [Estrada et al., 2012]	–	
	Massif	Sobsky (Lagorta-Kokpela complex) (34)					Yanaslor (35)			Pogurey (36)
	Name of granites	Granodiorite	Q diorite	Granodiorite			Leucogranite	Granite	Q diorite	Plagiogranite
	Tool	SHRIMP II		–			SHRIMP II	–	SHRIMP II	SHRIMP II
	Age, Ma	395±5	386±3	389.5±4.1	394.7±5.8	411.8±6.3	383±8	382.9–386.5	390.3±7.3	450±3
	Source [literature]	[Udoratina, Kuznetsov, 2007]		[State Geological Map..., 2014a]	[Saltykova et al., 2008]		[Udoratina et al., 2005]	[Saltykova et al., 2008]	[State Geological Map..., 2007]	[Estrada et al., 2012]
	Gratite type	I		–			I	–		–
	Sample №	L-985 (n=9)	2005 (n=10)	8027/1	513	2080/1	JI98	1020/4	8208-1	RUR-11
	$\delta^{18}O_{Zrn}$ ‰	–	+5.69	–			+4.19	–		–
	$\varepsilon Hf(t)_{Zrn}/T_{DM2}$, Ga	–	+11.9 to 14.7/0.72–0.47	–			+8 to +15.7/1.07–0.37 (U-81-14)	–		–
	$\varepsilon Nd(t)_{wr}/T_{DM2}$, Ma		+4.1 +6.1	–			–			+7.4 [Estrada et al., 2012]
Pegion, Megazone	Massif	Lapchavozh (37)				Khatalamba-Lapchinsky (38)	Kuzpuayuss (39)	Kozhim (40)		Maldy (41)
Subpolar Urals, Central Uralian	Name of granites	Granite	Granodiorite	Q diorite	Granodiorite	Granite	Granite	Leucogranite	Granite	Granite
	Tool	SHRIMP RG			SHRIMP II	SHRIMP II	SHRIMP II	SHRIMP RG	SHRIMP II	SHRIMP RG
	Age, Ma	553.3±3.4	558±4	554.8±4.5	578±4	582±4, 253±4	601±5	485.5±6.4, 619.8±9.1	598±3	515±8
	Source [literature]	[Soboleva et al., 2016]			[Pystin, Pystina, 2008]	[Pystin, Pystina, 2008]	[Pystin, Pystina, 2008]	[Udoratina et al., 2020]	[Pystin, Pystina, 2011]	[Soboleva, 2020]
	Gratite type	I				–		A_2(S)	–	–
	Sample №	11/93 (n=9)	13/93 (n=10)	Б-21 (n=7)	–	Kh-L (n=3, n=7)	Kp (n=4)	9-114 (n=5, n=4)	Kzh (n=5)	43/93
	$\delta^{18}O_{Zrn}$ ‰	–	+7.29	–	–	+7.47 (75/03)	–	–	–	–
	$\varepsilon Hf(t)_{Zrn}/T_{DM2}$, Ga	–				–	–	–3.35 to+3.42/1.41–1.07	–	–
	$\varepsilon Nd(t)_{wr}/T_{DM2}$, Ma	–				–	–	–	–	–

Table 1. (continued)
Таблица 1. (продолжение)

Pegion, Megazone	Massif	Naroda (42)				Small body of Mt. Severnoe Lezvie (Panechaiz complex) (43)	Perevalny (43-1)	Nikolayshor (44)	
Subpolar Urals, Central Uralian	Name of granites	Granite		Granodiorite	Q diorite	Plagiogranite	Q diorite	Granite	
	Tool	ID TIMS				SHRIMP II	SHRIMP II	SHRIMP II	
	Age, Ma	518±10	515±8	544±3	548±6	625.3±4.8	625±8	640.6±6.7	606±3
	Source [literature]	[Soboleva et al., 2004a]				[Kuzenkov et al., 2005]	[Kuzenkov et al., 2005]	[Soboleva et al., 2005a]	[Pystin, Pystina, 2008]
	Gratite type	A	I			–	–	S	–
	Sample №	104/00	33/00	58/00	27/00	100/00 (n=7)	52/00 (n=8)	57/03 (n=7)	–
	$\delta^{18}O_{Zrn}$ ‰	–	+7.87		+7.67	+7.1	–	–	
	$\varepsilon Hf(t)_{Zrn}/T_{DM2}$, Ga	–				–	–	–	
	$\varepsilon Nd(t)_{wr}/T_{DM2}$, Ma	–				–	–	–	
	Massif	Nyarta complex (45)			Ambarshor (46)	Khalmeryu (47)	Lavkashor (48)	Svobodnensky (49)	Malaya Tynagota (50)
	Name of granites	Gneiss granite			Granite	Granite	Granite	Granite	Q diorite
	Tool	SHRIMP RG	SHRIMP II		SHRIMP II	SHRIMP II	SHRIMP II	SHRIMP II	SHRIMP II
	Age, Ma	517.6±10.2, 619±5.4	498±8, 1745±6.9	555±120 2127±31	520±7	638±6	1756±19, 560±4, 489±6, 327±3	553±8	519.6±3.7
	Source [literature]	[Udoratina et al., 2019]	[Pystin, Pystina, 2008]	[Pystin, Pystina, 2019]	[Soboleva et al., 2005a; State Geological Map..., 2007]	[Soboleva et al., 2005a; State Geological Map..., 2007]	[Soboleva et al., 2005a]	[Soboleva et al., 2005a, 2005b]	[Kuzenkov et al., 2004]
	Gratite type	A(S)	–		S	S	S	I	I
	Sample №	806 (n=4, n=2)	3006-3	K-7	200801(n=9)	201201 (n=12)	36/03 (n=1, n=3, n=1, n=2)	28/03 (n=3)	254902 (n=7)
	$\delta^{18}O_{Zrn}$ ‰	+7.31	–		–	–	–	–	+6.6
	$\varepsilon Hf(t)_{Zrn}/T_{DM2}$, Ga	–2.09 to +6.67/1.49–1.02	–		–	–	–	–	–
	$\varepsilon Nd(t)_{wr}/T_{DM2}$, Ma	–			–	–	–	–	–
	Massif	Tynagota (51)	Vangyr (52)	Mansaraniz (53)		Pioner-gora (54)			Neroyka-Patok (55)
	Name of granites	Granite	Granite	Granite		Granite			Granite
	Tool	SHRIMP II	SHRIMP II	ID TIMS	SHRIMP II	SHRIMP II			SHRIMP II
	Age, Ma	497.9±3.8	598±5, 1224	432±30	626	536.9±5.9	537±4.8	545.5±7.8	611.1±6.2 / 618.1±5.2
	Source [literature]	[Kuzenkov et al., 2004]	[Kuznetsov, Udoratina, 2007]	[Kuzenkov et al., 2004; Soboleva et al., 2004b]	[State Geological Map..., 2013a]	[Sokerin et al., 2017]	[State Geological Map..., 2017b]		[Melgunov et al., 2010]
	Gratite type	A	I	S	–	A_1	–		–
	Sample №	403601 (n=7)	103 (n=4, n=1)	46a/03	266002	601406 (n=10)	601416	601402	3375 (n=10) / 6554-1 (n=9)
	$\delta^{18}O_{Zrn}$ ‰	+6.46	+7.53	–		–			–
	$\varepsilon Hf(t)_{Zrn}/T_{DM2}$, Ga	–	+1.97 to +6.82/1.76–1.32	–		–			–
	$\varepsilon Nd(t)_{wr}/T_{DM2}$, Ma	–	–	–		–			–

Table 1. (continued)
Таблица 1. (продолжение)

Pegion, Megazone	Massif	Malyi Patok (56)					Salner (57)	Torgovaya (58)	
Subpolar Urals, Central Uralian	Name of granites	Granite					Granite	Granite	
	Tool	SHRIMP II				ID TIMS	SHRIMP II	SHRIMP II	
	Age, Ma	537.7±5.1	544.1±4.5	500±9	498±4	529	564±6	541.8±3.7	543.2±2.9
	Source [literature]	[Melgunov et al., 2010]		[State Geological Map..., 2010]		[Chervyakovsky et al., 1992]	[Melgunov et al., 2010]	[Melgunov et al., 2010]	
	Gratite type	–					–	A	–
	Sample №	M-P	M-P-1	7	VI-6-10	–	4502 (n=11)	3367 (n=6)	3368 (n=8)
	$\delta^{18}O_{Zrn}$ ‰	–					–	–	
	$\varepsilon Hf(t)_{Zrn}/T_{DM2}$, Ga	–					–	–	
	$\varepsilon Nd(t)_{wr}/T_{DM2}$, Ma	–					–	–0.3/1304 (12/66)	–
	Massif	Keftalyk (59)	Khartess (60)					Mt. Rovnaya (61)	Vyrayu (62)
	Name of granites	Granite	Granite					Granite	Granite
	Tool	SHRIMP II	SHRIMP II		–			SHRIMP II	SHRIMP II
	Age, Ma	578.6±6.6	630.7±4.9	599±8	590±8	611±11	600±8	627±6	614±7
	Source [literature]	[Melgunov et al., 2010]	[Melgunov et al., 2010]	[State Geological Map..., 2010]	[State Geological Map..., 2021a]			[Melgunov et al., 2010]	[Melgunov et al., 2010]
	Gratite type	A_2	A_2	–				–	–
	Sample №	4	5546 (n=10)	15	1040	905009	1007	3301 (n=7)	5525 (n=8)
	$\delta^{18}O_{Zrn}$ ‰	–	–					–	–
	$\varepsilon Hf(t)_{Zrn}/T_{DM2}$, Ga	–	–					–	–
	$\varepsilon Nd(t)_{wr}/T_{DM2}$, Ma	–2.7/1500 (50/66)	–4.8/1738 (285/66)	–				–	–
	Massif	Kulemshor (63)			Granite bodies of the Lyapin anticliorium (64)				
	Name of granites	Granite			Granite				
	Tool	SHRIMP II		SHRIMP RG	–			SHRIMP II	
	Age, Ma	514±4.6	542.1±4, 544.4±5.1	540±8.1, 249±30	595–599	609±8	614±7	519.6±3.7	
	Source [literature]	[Udoratina et al., 2014b; Vodolazskaya et al., 2011]	[Melgunov et al., 2010]	[Udoratina et al., 2015c]	[State Geological Map..., 2021a]			[State Geological Map..., 2007]	
	Gratite type	A_2	–	A_2	–				
	Sample №	Pr91p9 (n=15)	2531 (n=7, n=10)	Pr93p2 (n=5, n=3)	1065	203001	604201	254902	
	$\delta^{18}O_{Zrn}$ ‰	+3.27	–	–	–				
	$\varepsilon Hf(t)_{Zrn}/T_{DM2}$, Ga	–			–				
	$\varepsilon Nd(t)_{wr}/T_{DM2}$, Ma	–			–				

Table 1. (continued)
Таблица 1. (продолжение)

Pegion, Megazone	Massif	Ilyaiz (65)						Mankhambo (66)	
Northern Urals, Central Uralian	Name of granites	Granodiorite	Bi granite	Granite				Granite	
	Tool	SHRIMP II			SHRIMP RG		–	–	SHRIMP II
	Age, Ma	519.7±6.3	510.1±3.8	491±5	498.2±6.2	496.5±7.4	501.6±5.2	1390	522±6
	Source [literature]	[Udoratina et al., 2012b]	[Udoratina et al., 2006]	[Udoratina et al., 2012b]	[Udoratina et al., 2017]		[State Geological Map..., 2016]	[Dushin et al., 2012; Dushin, Faust, 2008]	[Udoratina et al., 2006]
	Gratite type	–	I	–	I		A	–	A
	Sample №	401803 (n=13)	400704 (n=6)	400701 (n=12)	GP (n=8)	GL (n=8)	13-29-1	–	G-1 (n=7)
	$\delta^{18}O_{Zrn}$ ‰	+7.25	–	+6.58	+7.05	+7.33	–	–	+6.06
	$\varepsilon Hf(t)_{Zrn}/T_{DM2}$, Ga	–		–	–2.04 to +4.16/2.05–1.49	–2.49 to +6.74/2.09–1.26	–	–	+4.66 to +10.08/1.47–0.98
	$\varepsilon Nd(t)_{wr}/T_{DM2}$, Ma	–		–				–	

	Massif	Mankhambo (66)								
	Name of granites	Leucogranite	Granite	Rare metal granite	Leucogranite	Granite				
	Tool	SHRIMP II	SHRIMP RG		–					
	Age, Ma	513.8±5.6	507.2±5.5	336.2±10.4	501±3	510.4±5	523.5±4.7	489.9±6.2	509±5	510.4±5
	Source [literature]	[Udoratina et al., 2006]	[Udoratina et al., 2017]		[State Geological Map..., 2018a]					
	Gratite type	A_2	A		–					
	Sample №	189-1 (n=9)	G-3 (n=7)	729-1 (n=6)	M-07-6-1	M-07-18	M-07-17-1	15-231-1	15-638	M-07-18
	$\delta^{18}O_{Zrn}$ ‰	+4.7	–	–	–					
	$\varepsilon Hf(t)_{Zrn}/T_{DM2}$, Ga	+4.59 to +8.04/1.47–1.16	–1.95 to +6.24/2.05–1.31	+0.38 to +6.8/1.11–0.82	–					
	$\varepsilon Nd(t)_{wr}/T_{DM2}$, Ma	–			–					

	Massif	Torreporeiz (67)	Yadzhydlyagsky (68)	Belogorsky complex (69)	Verkhnyaya Man`ya (70)	Sedlovataya Parma (71)	Small bodies of the Isherim block (72)		Schegolikhinsky (73)	Saklaimsor (74)
	Name of granites	Granite	Granite	Grt-Bt-Amf gneiss	Granite	Granite	Hb granite	Granodiorite	Granite	Granite
	Tool	U-Pb LA ICP MS	U-Pb LA ICP MS	U-Pb LA ICP MS	U-Pb LA ICP MS	–	–	U-Pb LA ICP MS	–	U-Pb LA ICP MS
	Age, Ma	566.2±4.6	563.2±3.3, 567.6±3.2	597±7, 571±31	534±22	492±1.2	653.8±5.9	486.2±4.1	463±8.8	560±4.2, 566±20
	Source [literature]	[State Geological Map..., 2018b]	[Petrov et al., 2013]	[Petrov et al., 2014a]	[State Geological Map..., 2017a]	[State Geological Map..., 2017a]	[State Geological Map..., 2018a]	[State Geological Map..., 2018b]	[State Geological Map..., 2006]	[Petrov et al., 2017]
	Gratite type	I	I	–	I	I	I	–	–	–
	Sample №	2070-2	7036 (n=26, n=23)	5101-10 (n=1, n=4)	6037	7512	12-247	2281-5	–	5087 (n=3, n=14)
	$\delta^{18}O_{Zrn}$ ‰	–	–	–	–	–	–		–	–
	$\varepsilon Hf(t)_{Zrn}/T_{DM2}$, Ga	–	–	–	–	–	–		–	–
	$\varepsilon Nd(t)_{wr}/T_{DM2}$, Ma	–	–	–	–	–	–		–	–

Table 1. (continued)
Таблица 1. (продолжение)

Pegion, Megazone	Massif	Khalsor (75)	Moiva (76)	Posmak (77)	Vels (78)	Vagran (Krutaya Rechka complex) (79)
Northern Urals, Central Uralian	Name of granites	Granite	Granite	Granite	Granite	Granite
	Tool	–	U-Pb LA ICP MS	U-Pb LA ICP MS	U-Pb LA ICP MS	U-Pb LA ICP MS
	Age, Ma	565±2	566.2±4.6	560±4.1	530.5±4.5	537±2, 400±6, 1034, 1192, 1221
	Source [literature]	[Petrov et al., 2016]	[Petrov et al., 2014b]	[Petrov et al., 2014b]	[Petrov et al., 2014a]	[Korovko et al., 2019]
	Gratite type	–	I	A_2	I	I
	Sample №	–	2110 (n=46)	2126 (n=45)	2172-5 (n=60)	28 (n=13, n=9, n=1, n=1, n=10)
	$\delta^{18}O_{Zrn}$ ‰	–	–	–	–	–
	$\varepsilon Hf(t)_{Zrn}/T_{DM2}$, Ga	–	–	–	–	–
	$\varepsilon Nd(t)_{wr}/T_{DM2}$, Ma	–	–	–	–	–

Pegion, Megazone	Massif	Petropavlovsk complex (80)					Severorudnichny complex (81)
Northern Urals, East Uralian	Name of granites	Q diorite	Tonalite	Plagiogranite	Granite		Granite
	Tool	U-Pb LA ICP MS					U-Pb LA ICP MS
	Age, Ma	436±3, 374±3	439.4 1.3	431.3±4.6	436±3.7	435.1±4.2	422.4±3
	Source [literature]	[Petrov et al., 2016]		[State Geological Map..., 2018b]			[Petrov et al., 2016]
	Gratite type	I		–			–
	Sample №	5039-3 (n=36, n=3)	5114(n=30)	2327-1	2332	9505	5161 (n=27)
	$\delta^{18}O_{Zrn}$ ‰	–					–
	$\varepsilon Hf(t)_{Zrn}/T_{DM2}$, Ga	–					–
	$\varepsilon Nd(t)_{wr}/T_{DM2}$, Ma	–					–

Note. See numbers of massifs in the Fig. 1, c; «–» – no date.; isotope-geochemical ($d^{18}O_{Zrn}$, ‰, $eHf(t)_{Zrn}$, $eNd(t)_{rock}$) of autores data except for the indicated literary sources. Bt – biotite, Mi – microcline, Pl – plagioglaze, Hb – hornblendite, Grt – granate, Amf – amphibole. bold type – autores data. The O isotope composition was measured in GIN SB RAS (Ulan-Ude) following the technique described in [Demonterova et al., 2012]. The whole-rock Sm-Nd analysis of rocks was performed at the Institute of Precambrian Geology and Geochemistry RAS (St. Petersburg), following the technique in [Savatenkov et al., 2004; Udoratina et al., 2014a]. The Lu-Hf isotope system in the dated zircons was studied at the Institute of Geology and Mineral Resources (Tianjin, China), following the technique described in [Geng et al., 2011].

Примечание. Номера массивов показаны на рис. 1, с; «–» – нет данных; изотопно-геохимические ($d^{18}O_{Zrn}$, ‰, $eHf(t)_{Zrn}$, $eNd(t)_{rock}$) авторские данные, исключая приведенные по литературным источникам. Bt – биотит, Mi – микроклин, Pl – плагиоклаз, Hb – роговая обманка, Grt – гранат, Amf – амфибол. Жирный шрифт – авторские данные. Изотопно-геохимические данные по кислороду получены в ГИН СО РАН (г. Улан-Удэ) по методике, охарактеризованной в работе [Demonterova et al., 2012]. Sm-Nd исследования пород по валовому изотопному составу проведены в ИГГД РАН (г. Санкт-Петербург), методика описана в работах [Savatenkov et al., 2004; Udoratina et al., 2014a]. Lu-Hf изотопная система в продатированных цирконах исследована в Институте геологии и минеральных ресурсов (Тяньцзинь, Китай), методика описана в работе [Geng et al., 2011].