

SHORT COMMUNICATIONS

550.93(470.5)

K-Ar

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22 2005 .

K-Ar

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251-245

K-Ar

- 239±5

Re-Os

(262±7,3

). - , K-Ar

« »

: K-Ar

K-Ar DATING RESULT OF ADUISKY GRANITE MASSIF
(EASTERN SLOPE OF MIDDLE URALS)

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K-Ar dating results of the largest in the Urals Aduisky granite massif are presented. K-Ar ages of all granite kinds of this massif coincide in the limit of dating mistake. According to these data, the massif formed 251-245 Ma ago. Rare metal pegmatites in the eastern exocontact of Aduisky massif have younger K-Ar age - 239±5 Ma. It contradicts the geological data about genetic relationship of rare metal pegmatites with Aduisky massif granites and Re-Os dating of molybdenites from rare metal pegmatite veins (262±7,3 Ma). Probably K-Ar dating of rare metal pegmatites is a result of the «rejuvenation» of age. The «rejuvenation» may be caused by location of studied pegmatite veins in the large-scale fault, which separates Murzisko-Aduisky crystalline block and Eastern-Uralian volcanic zone.

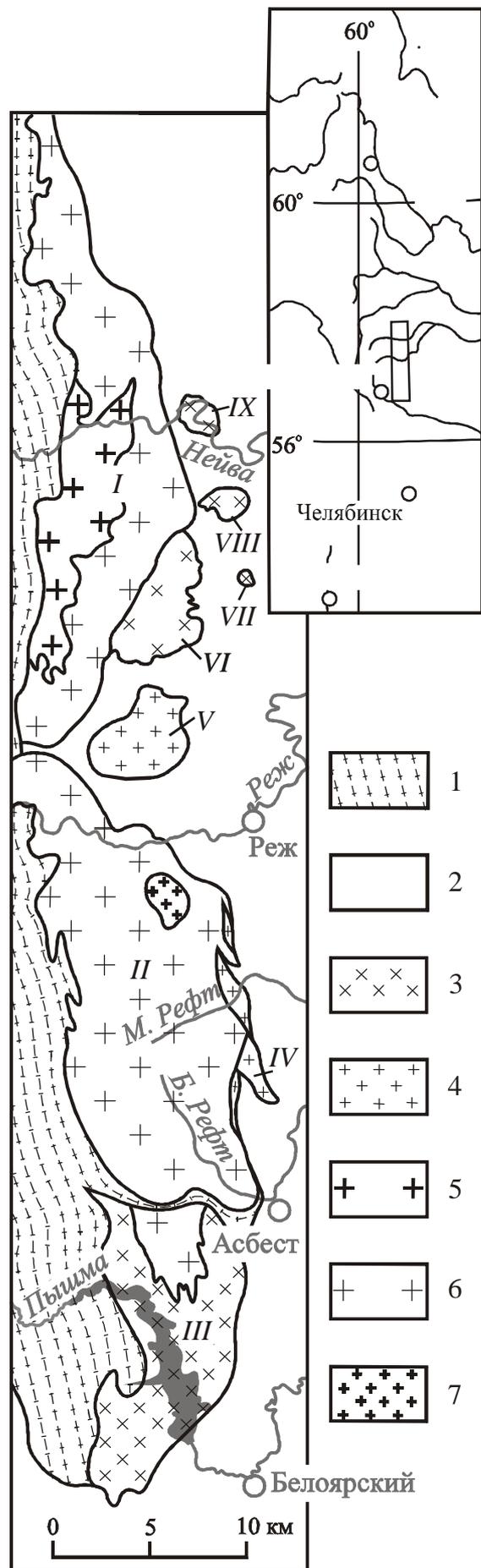
Key words: K-Ar dating, granites, Urals.

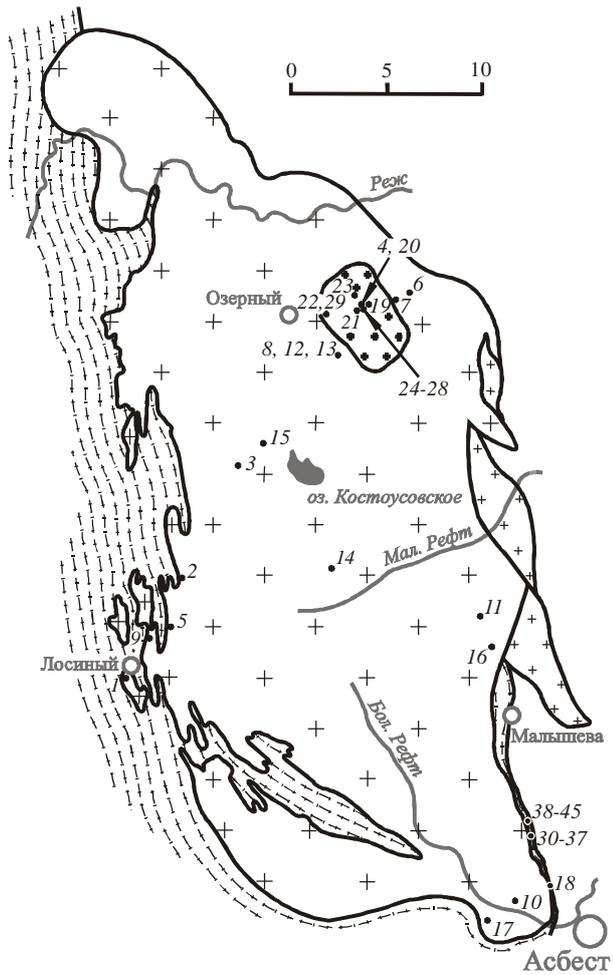
(1).

[Levin et al., 2000; 2003; 2004], [Levin et al., 2000; 2004], 2000;

50 20 650

1. 1 - ; 2 - ; 3 - ; 4 - ; 5 - ; 6, 7 - ; 7 - ; I - , II - , III - , IV - , V - , VI - , VII - , VIII - , IX -





.2.

.1.

0,5-1,5

[.., 2000; .., 2004].

(.2).

(.1).

5

-. 256

K-Ar

U-Pb

[2003]

[2003], 15 (!) Rb-Sr, $196,5 \pm 1,9$ ($= 0,25$),

4

Rb-Sr $260 \pm 3,9$
 $^{87}\text{Sr}/^{86}\text{Sr} = 0,7080$
 ($= 0,29$).

Rb-Sr
 Re-Os

($= 1,6$), $262 \pm 7,3$ ($= 1,6$), Rb-Sr
 ($196,5 \pm 1,9$).

229 ± 4

($= 5,4$),

K-Ar

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 -
 45 - 11 , 235 258 ,
 , - ,
 . 2. , - ,
 , -
 5 15 . , K-Ar - 249±5 . . . « » -
 5 -
 , -
 - 238 260 . . , -
 . - 245±5 . , -
 (-
) - , -
 , - , -
 100 % . - 246 . , -
 252 . . -
 . -
 -18 K-Ar , -
 . -
 [, 1997], -
 - 240 252 . ,
 (³⁸Ar) - 248±3 .
 -1330 -
 [, 1989]. - 244-257 . , -
 - 251±5 . . -
 (IUGS) [Steiger, Ja- -
 ger, 1977]. -
 , - 16 -
 . 1 (, -
) . -
 . - 224
 264 . . -
 , -
 - 239±5 . . , -
 . 1. -
 , -
 , - K-Ar -
 , -
 , -

K-Ar

			K, %	Ar , /	t, .
1	2	3	4	5	6
1	,		7,55	140	249
2			7,77	142	246
3			7,68	140	246
4			8,06	151	252
5			7,35	136	249
6			8,07	149	249
7			7,82	145	249
8			7,95	138	235*
9			7,68	134	236*
10			8,63	155	242
11			8,68	167	258
$t = 249 \pm 5$.					
12	,		7,96	145	246
13			8,50	150	238
14			8,05	156	260*
15			8,60	160	250
16			8,50	157	249
$t = 245 \pm 5$.					
17	,		8,10	148	246
18			8,01	150	252
19	.		8,17	152	250
20			7,98	146	246
21			7,85	147	252
22			8,15	145	240
23			7,90	147	250
$t = 248 \pm 3$.					
24	,	(.)	8,66	160	249
25			8,45	155	247
26			8,45	162	257*
27			8,57	163	255
28			8,85	160	244
29			8,64	163	253
$t = 251 \pm 5$.					

1	2	3	K, %	Ar , /	t, .
30			8,23	149	244
31			8,08	158	262*
32			8,40	149	238
33			8,70	155	240
34			8,50	146	232
35			8,30	149	242
36			8,35	153	246
37			8,40	151	242
38			8,18	148	244
39			8,50	149	237
40			8,07	159	264*
41			8,45	140	224*
42			8,75	152	235
43			8,55	147	233
44			8,60	156	244
45			8,80	150	231

$t = 239 \pm 5$

±3 %.

245 251- K-Ar - 239±5

5-10

K-Ar

(350±50 300±50° [Jaquer, 1979]),

[. , 2000; 2004],

Re-Os

262±7,3 [Mao et al., 2003].

K-Ar

260-248 [. « »

, 1989; Montero et al., 2000; Gerdes et al., 2002; , 2003] (. ,)

(224 264)

