

533.9

Cr-

Ni-
-

. . . , . . . , . . . ,
. . . , . . .
. . . , . . . ,
. . . , . . .
. . . , . . . ,
. . . , . . .

(Ni—Cr)

() ,

Ni—Cr-

. ,
- ,
,
, : ,
-

Ni—Cr-

, ,

.) ()

(, ,

[1].

:

; ;

;

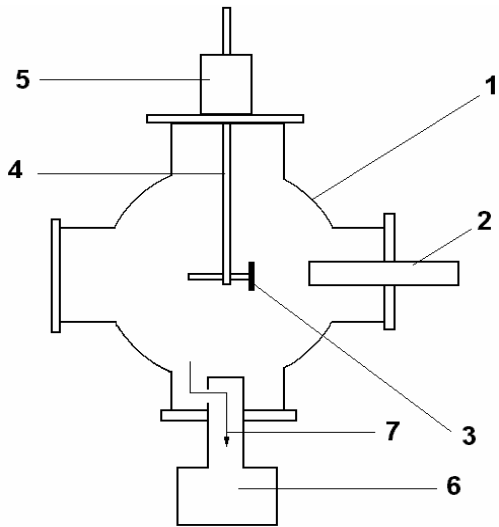
(,).

[2—5].

8].

[6—

80 %.



1. 1— ; 2— ; 3— ; 4— ; 5— ; 6— ; 7—

50

0,05

0,01— [10]



. 2.

() . : Ni — 62 %, Cr — 25 %, (Ni—Cr) — 10 %, % (NL,). — 3

~1

4x4x12

950 °

5

Ni—Cr-

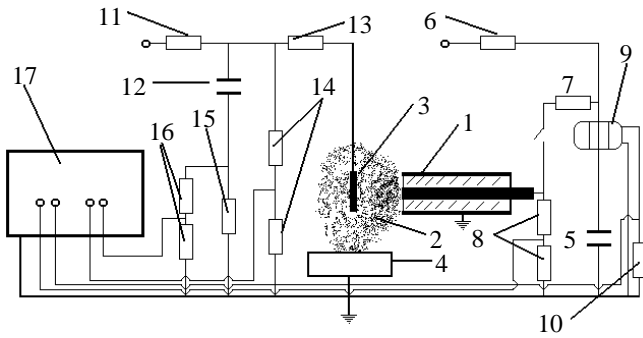
(1,5 , 20),

(90—80 %)

(10—20 %), 1 % [11]. [12—14].

4x4x12

30



0,19 / .
1250 .

- 1 — .3. ; 2 — ; 3 — " " ;
- 4 — ; 5 — ; 6 — ; 7 —
- 8 — ; 9 — ; 10 — ; 11 — 60.
- 12 — ; 13 —
- 14 — ; 15 — ; 16 —
- 17 — Tektonix TDS3014

20
HRC

(—)

: 0,2; 0,5; 1; 1,5;
4; 5;
0,2

2; 2,5; 3;
6; 7 . . 30
1

-3 (9450—60)
200, 100, 50 20 (15).
7—10

H

$$H = D / (2 \times \text{tg} 68^\circ) = D / (2 \times 4,95), \quad D —$$

(201).

×2000

×200.

(*H*_{max})

" -4", -1314.

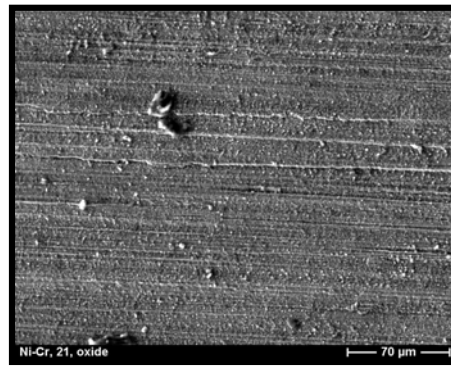
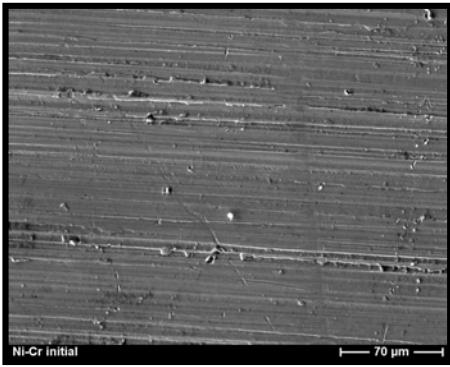
Ni—Cr (

)
Ni—Cr

(950 ° 5)

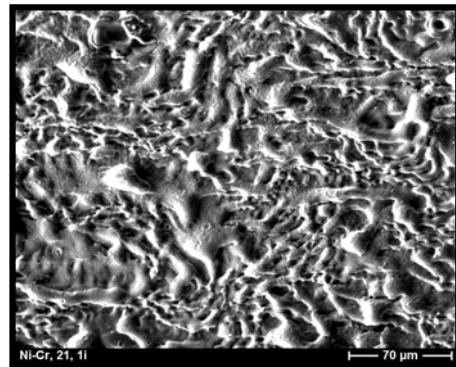
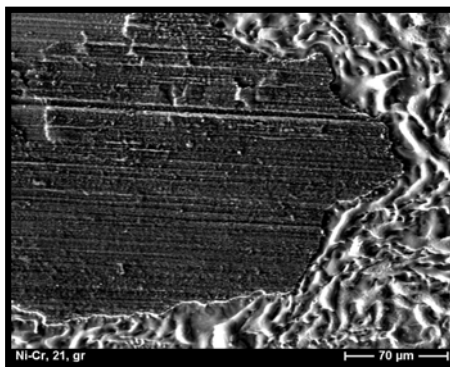
10—20 ,

			1—2)	
			10 ,	
			(15—20)	
		1 .		
		3 Ni—Cr	5·10 ¹²	1·10 ¹³ - ³ .
				100 %.
		Ni—Cr-		
	Comebax,			
		Comebax	50 ,	2,5—3
				(15—20) [16].
		c		
				[4, 5].
	Ni—Cr-			
				[17].
		×200, ×400 ×800,		
		50×50		
	1 .			
			()	
				7—14
	1·10 ⁷ —			
	5·10 ⁶ / [15].			
			4,	
			— 5.	
				2
				0,3—15
				0,6
		5·10 ¹¹ - ³ ,	10 ,	
			3 ^{2/} ,	
		20 .	0,5·10 ⁻⁴ · / ² [18].	— 200
1—10 :			(



.4.

Ni—Cr-
950 °



.5.

Ni—Cr-

— (.5.) ; — Ni—Cr- :
 , ,
 ()
) ()
 Ni—Cr- () , Ni—Cr-
 (.4,) ()
) Ni—Cr-
 (.5,).
 Ni—Cr-
 1—2
 ,
 950 ° (1) Ni—Cr-
 Ni—Cr- (.4,).
 .5, Ni—Cr- , Ni—Cr-
 Ni—Cr-

$(H_{\max m} =$
 $= 4,5$).
 50% .
 $T = 950 \text{ }^\circ\text{C}$,
 $H_{\max m} = 4,5$ 1 $H_{\max m} = 9$
 2 .
 50% .
 $T = 950 \text{ }^\circ\text{C}$,
 $= 800$) $H_{\max m} = 18$.
 $H_{\max m} = 5$
 Ni—Cr-
 Ni—Cr-
 1 7
 $H_v = 258—477 / ^2$.
 Ni—Cr-
 : 460—421 / 2 (
 1), 798—
 451 / 2 (2) 358—307 / 2 (-
 3).
 Ni—Cr- 1—3
 $477 / ^2$ 258—340 / 2 .
 ≈ 10
 Ni—Cr- 2
 Ni—Cr- 451 / 2 1—3 798—650 Ni—Cr-
 / 2 .
 5—18 , 2—4
 (,)
 ,
 450 / 2
 7 .
 Ni—Cr-
 250 / 2
 450
 200 (1)
 2
 Ni—Cr-
 2 3 (7) .
 400 800)
 () 2 4
 ,

Ni—Cr-

$0,5 \cdot 10^{-4}$

Ni—Cr-

Ni—Cr-

(06-08-01624-)

(I.I.182).

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Ni—Cr-
3

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Ni—Cr-

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Ni—Cr-

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18. Ni—Cr-

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Modification of a Ni—Cr alloy at interaction with the microplasma discharges

V. A. Ivanov, M. E. Konizhev, A. M. Spirin, A. A. Dorofeyuk, T. I. Kamolova
Prokhorov's General Physics Institute, Moscow, Russia

L. I. Kuksenova, V. G. Lapteva

Blagonravov's Institute for Engineering Science, Moscow, Russia

R. Kh. Zalavutdinov

Frumkin's Institute of Physical Chemistry and Electrochemistry, Moscow, Russia

The experimental examinations of strong local interaction of the microplasma discharges with metal Ni—Cr alloys have been made. The threshold values of electron density and temperatures of a pulse plasma (generated by a plasma injector), which are indispensable for irreversible excitation of the microplasma discharges on a surface of the alloys, was measured.