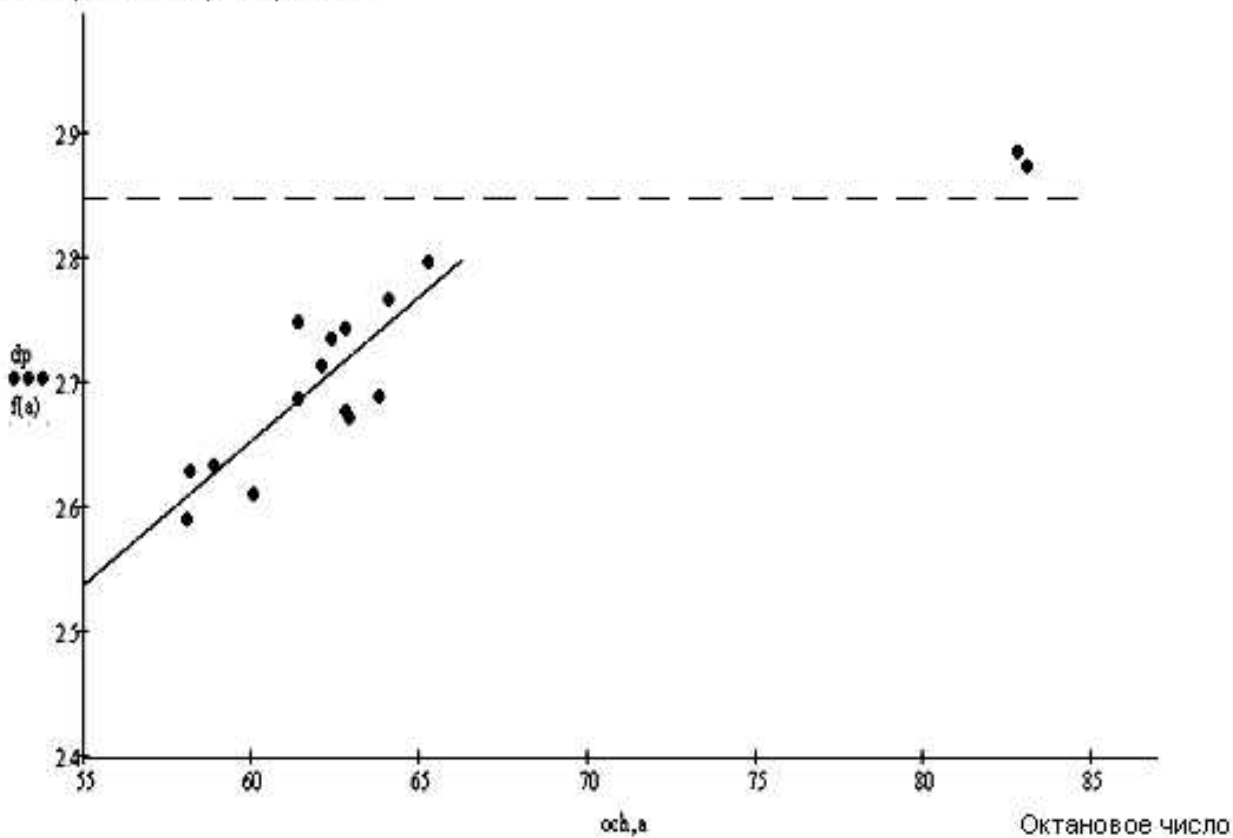


Диэлектрическая проницаемость



. 3.

3.

1979. – 275 . **2.** 6581-75. : **1.** : « », . . . . .  
 . – . 01.01.88. – . . . . . , 1975. – 30 . **3.** . . . . .  
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621.35

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

• • , • • , • • , • • , “ ”  
• • , • • , • • ,

Cathodic process of lithium ion reduction in aprotic solvent on nickel electrode were investigated by linear scan voltammetry. Based on the analysis of electrode reactions parameters with lithium participation it has been proposed the general scheme of mechanism and kinetic solution for reduction reaction. Crystalline lithium deposit was obtained under galvanostatic electrolysis.

• , -  
, • • -  
, -  
, [1]. -

• -  
, -  
, -  
, -  
, -  
, -  
[2]. -

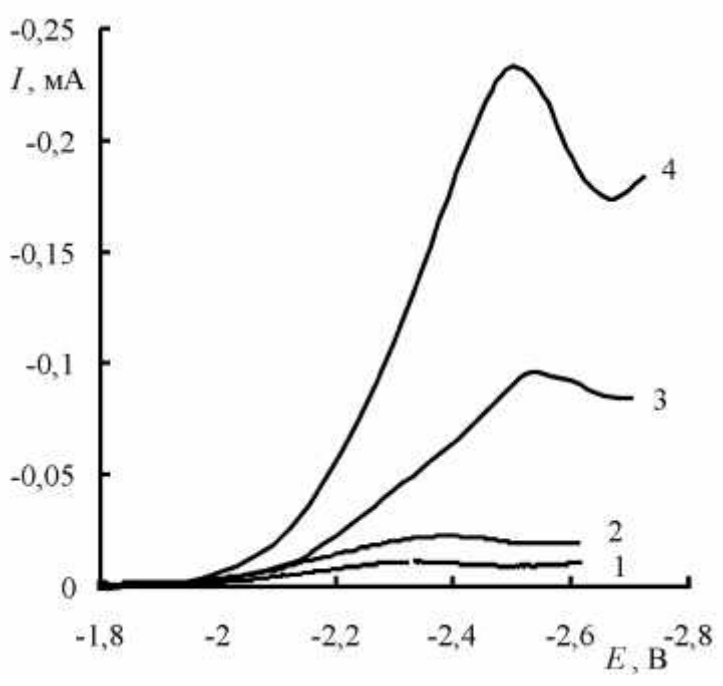
, -  
[3]. -  
, -

0,1 /  
( ).

« »

0,22  $\cdot$   $^2$ ,  
 ( )  
 -50-1.1, -8  
 4-003.  
 0,002 - 0,1 / .  
 $\text{Li}^+$  (c)

(s) ( . 1).



. 1.  
 , / : 1 - 0,005; 2 - 0,020; 3 - 0,050; 4 - 0,100

( ),  
 s,  
 $I / s^{1/2}$   
 $s \rightarrow 0$

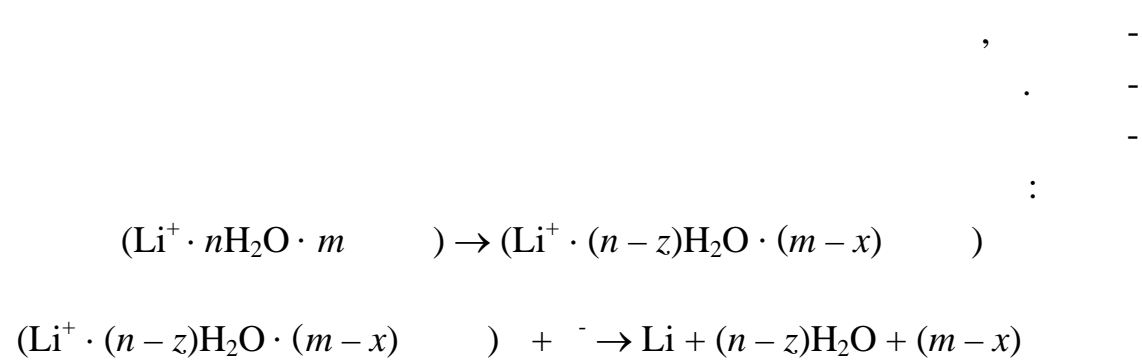
$$\lg I - \lg c \left( \dots \right) \quad 0,88 \dots 1,0.$$

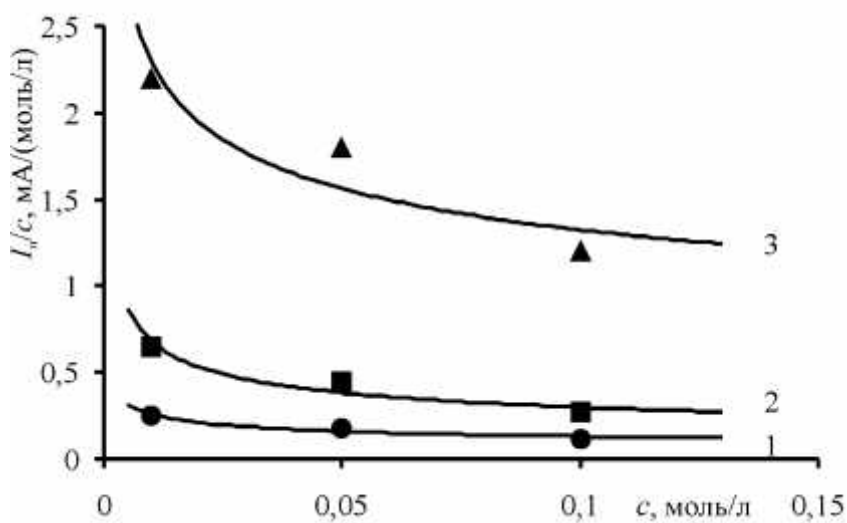
( (LiClO<sub>4</sub>) = 0,1 / )

<i>s</i> , /	,	/2,	,
0,002	0,0124	-2,112	-2,223
0,005	0,0140	-2,115	2,304
0,010	0,0268	-2,176	-2,369
0,020	0,0533	-2,250	-2,436
0,050	0,1116	-2,258	-2,454
0,100	0,2633	-2,263	-2,476

*I* - , -  
 , -  
*I* / - ( . 2). , -  
*I* / , -  
 , -  
 . -  
 , -  
 [2]. , -  
 , -  
 . -  
 , -  
 ln*I* - lnc,  
 :

$$I = k \cdot c^{0,7} \cdot \exp(n \cdot F \cdot E / R \cdot T).$$





2.  $I_p/c$  vs  $Li^+$  concentration.  $I_p/c$  (mA/(mole/l)) vs  $c$  (mole/l).  
 , / : 1 – 0,002; 2 – 0,010; 3 – 0,050

$$0,5 / ^2$$

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