ACCESSION NR: AT4008737

Enclosure). Conductivity was measured in an atmosphere of 66%CO+34%CO₂. It was established that isotherms for reduction depth--composition, CeO_{1.5} concentration-composition and conductivity--composition peak in the area of 15 to 20 mol% LaO1.5 (see Figs. 2 and 3 in the Enclosure and the table of total, ion and electron conductivity in the original. Reducibility and electron conductivity increase exponentially in relation to temperature (see Figs. 4, 6 and 7 in the Enclosure). Their temperature coefficients decrease as the content of LaO_{1.5} increases to about 20 mol%, then they increase when such content increases beyond that level (see Fig. 8 in the Enclosure). This pattern governs the presence of peaks on these isotherms. The authors demonstrated that the coulombic interaction of structural defects in a crystal provides an adequate quantitative explanation of the decrease in temperature coefficients of reducibility and conductivity as the concentration of admixture increases. Activation energy of electrons was determined and their mobility evaluated. Reducibility and electron conductivity of the studied solid solutions decrease as partial oxygen pressure in the gaseous phase increases (see Fig. 5 in the Enclosure). Orig. art. has: 34 formulas, 9 graphs, 2 tables.

ASSOCIATION: Institut Elektrokhimii, Ural'skiy filial AN SSSR (Institute of Electrochemistry, Ural branch AN SSSR)

Cord 2/11?

NEUYMIN, A.D.; PAL'GUYEV, S.F.

Transfer numbers in solid oxides. Dokl. AN SSSR 143 no.6:
1388-1391 Ap '62. (MIRA 15:4)

1. Institut elektrokhimii Ural'skogo filiala AN SSSR.

Predstavleno akademikom A.N.Frumkinym.
(Oxides) (Ions---Migration and velocity)

FILMATEV, A.T.; KARPACHEV, S.V.; PAL'GUYEV, S.F.

Capacitance of a double electric layer in solid electrolytes.

Dokl. AN SSSR 149 no.4:909-910 Ap '63. (MIRA 16:3)

1. Institut elektrokhimii Ural'skogo filiala AN SSSR. Predstavleno akademikom A.N.Frumkinym.

(Fused salts—Electric properties)

L 16608-65 ESD(gs)/ASD(a)-5/AS(mp)-2/AFETR ACCESSION NR: AT4048677

8/2631/64/000/005/0123/0131

AUTHOR: Chebotin, V. N.; Volchenkova, Z. S.; Pal'guyev, S. F.

B+1

TITLE: Electronic conductivity of lonic crystals in equilibrium with the gas phase. III.
Oxidation semiconductor with admixed acceptors

SOURCE: AN SSSR. Ural'skiy filial. Institut elektrokhimii, Trudy*, no. 5, 1964. Elektrokhimiya rasplavlenny*kh soleyy*kh i tverdy*kh elektrolitov (Electrochemistry of fused salt and solid electrolytes), 123-131

TOPIC TAGS: hatnium dioxide, ionic crystal conductivity, semiconductor impurity, oxygen pressure, solid electrolyte, oxidation semiconductor.

ABSTRACT: This study was prompted by the scarcity of information on hainium dioxide conductivity. It is a continuation of two former communications by the same authors where they worked out the system of equations which is applied here to an ionic crystal having, in addition to inherent defects, acceptors in the form of impurities. This theory having, in addition to inherent defects, acceptors in the p-conductivity of hafnium dioxide on is used to explain the abnormal dependence of the p-conductivity of hafnium dioxide on oxygen pressure. The theory is explained in 19 equations and the experimental procedures oxygen pressure. The theory is explained in 19 equations and the experimental procedures oxygen pressure. The theory is explained in 19 equations and the experimental procedures oxygen pressure. The theory is explained in 19 equations and the experimental procedures oxygen pressure. The theory is explained in 19 equations and the experimental procedures oxygen pressure. The theory is explained in 19 equations and the experimental procedures oxygen pressure. The theory is explained in 19 equations and the experimental procedures oxygen pressure. The theory is explained in 19 equations and the experimental procedures oxygen pressure. The theory is explained in 19 equations and the experimental procedures oxygen pressure.

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ACCESSION NR: AT4048677

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calcined again (1550C for 2 hrs.); tablets were polished and provided with Pt electrodes, In various boundary cases it has been found that the number of free electron holes depends on the temperature and on the pressure of the nonmetallic gas phase component with which the crystal is in equilibrium. Only considerable admixtures distort the behavior of the crystal, otherwise it acts as a normal oxidation semiconductor. The electrical conductivity and average transfers of HfO2 in different media and temperatures (700-1000C) have been measured. Ionic conductivity is affected only slightly by increased O2 pressure. Electronic conductivity depends on the oxidation of the crystal at high O2 pressures and is proportional to p^{1/4}. In a strongly reducing environment, HfO2 loses electron holes, thus compensating for the excessive negative charge with O2 vacancies and resulting in an electronic conductivity of practically zero. Orig. art. has: 2 figures, 30 formulas and 1 table.

ASSOCIATION: Institut elektrokhimii, Ural'skiy filial AN SSSR (Institute of Electrochemistry, Urals Branch, AN SSSR)

SUBMITTED: 00

ENCL: 00

SUB CODE: SS. EM

NO REF SOV: 006

OTHER: 004

Card 2/2

APPROVED FOR RELEASE: Tuesday, August 01, 2000

CIA-RDP86-00513R0012388

EWG(j)/EWT(m)/EP F(c)/EWG(m)/EPR/T/EWP(t)/EWP(b) Pr-4/Ps-4 RWH/JD/JG 5/2631/64/000/005/0133/0144 ACCESSION NR: AT4048678 AUTHOR: Volchenkova, Z. S.; Pal Quyev, S. P. TITIE: The electrical conductivity of solid oxides. IX. Mixtures of hafnium oxide with the oxides of beryllium, magnesium, calcium, strontium and barrum inii, Trudy, no. 5, 1964. ~*7* SOURCE: AN SSSR, Ural skiy filial. Institut elektrokhimii, Trudy, no. 5, 1964. Elektrokhimiya rasplavlennykh solevykh i tverdykh elektrolitov (Electrochemistyr of fused salt and solid electrolytes), 133-144 TOPIC TAGS: oxide conductivity, solid solution, hafnium oxide, beryllium oxide, magnesium oxide, calcium oxide, strontium oxide, barium oxide, ionic conductivity, electron conductivity ABSTRACT: Based on the method of electromotive force in a cell with different partial pressures of oxygen around the electrodes / the authors studied the nature of the conductivity of several samples of the solid oxide systems Hf02-Be0, Hf02-Mg0, Hf02-CaO, Hf02-SrO and Hf020BaO in a wide range of compositions and temperatures. They showed that the conductivity is considerably greater in systems where solid solutions of the substitution-deduction type (HfO2-MgO, HfO2-CaO) form than in Card 1/2

L 29985-65

ACCESSION NR: AT4048678

those systems where there is no formation of solid solutions (RfO₂-BeO, RfO₂-SrO, RfO₂-BaO). Measurements of the linear shrinkage of the sample during caking and of certain characteristics of the given oxide systems were also made, and it was shown that the formation of chemical compounds (CaHfO₃, SrHfO₃, and BaHfO₃) is accompanied by a minimum linear shrinkage in conductivity. At high temperatures, the solid solutions (RfO₂-MgO, RfO₂-CaO) are almost purely ionic conductors, while the conductivity of the samples of the RfO₂-SrO and RfO₂-BaO systems is chiefly electron in nature. It increases as the partial oxygen pressure in the gas phase increases, i.e., it becomes hole-type. Moreover, this relationship is somewhat stronger in a system containing BaO than in a system with SrO. In the RfO₂-BeO system, neither a solid solution for a chemical compound is formed, and the interaction of the components is not reflected in the magnitude and nature of the conductivity. Orig. art. has: 10 figures, 9 tables and 1 formula.

ASSOCIATION: Institut elektrokhimii, Ural'skiy filial AN SSSR (Electrochemical institute, Ural'sk branch, AN SSSR)

APPROVED FOR RELEASE: Tuesday, August 01, 2000

SUPMITTED: 00

ENCL: 00

SUB CODE: IC, EM

NO REF SOV: 007

OTHER: 002

Card 2/2

CIA-RDP86-00513R0012388

EWG(j)/EWT(m)/EPF(c)/EPF(n)-2/EWG(m)/EPR/T/EWP(t)/EWP(b) Pu-4 IJP(c) RNH/JD/WW/JG ACCESSION NR: AT4048679 8/2631/64/000/005/0145/0151 AUTHOR: Neuymin, A. D.; Pal'guyev, S. F. TITIE: The electrical conductivity of solid oxides. X. Electrical conductivity and its characteristics in mixtures of zirconium oxide with the oxides of yttrium, lanthanum and neodymium SOURCE: AN SSER. Ural'skiy filial, Institut elektrokhimii. Trudy, no. 5, 1964. Blektrokhimiya rasplavlennykh solevykh i tverdykh elektrolitov (Electrochemistry of fused salt and solid electrolytes), 145-151 TOPIC TAGS: oxide conductivity, solid solution, zirconium oxide, yttrium oxide, lanthanum oxide, neodymium oxide, rare earth oxide, lonic conductivity, electron conductivity ABSTRACT: Using the electromotive force method, the authors measured the temperature dependence and nature of the conductivity of several compounds of the ZrO2-Y203, ZrO2-La203, and ZrO2-Nd2O3 systems in an atmosphere with a relatively high partial pressure of oxygen. The data obtained from the study of the conductivity and its characteristics agree fully with the results of studies on the structure of the systems studied. It was determined that the formation of heterotype solid 1/2

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ACCESSION IN: AT4048679

solutions from ZrO2 in ZrO2-Y2O3 and ZrO2-Nd2O3 systems with a higher concentration of oxygen-ion vacancies is accompanied by the occurrence of a relatively high ionic conductivity in the samples. It is shown that in the ZrO2-Nd2O3 system, heterotype solid solutions with a high Nd2O3 content have, depending on the composition, a larger or smaller portion of electron conductivity of the p-type; and the latter is proportional to pO2 1/4. In a wide range of compounds, heterotype solid solutions of Y2O3 in ZrO2 have purely ionic conductivity characteristics. It was noted that the curves relating the conductivity of certain compounds of the ZrO2-Y2O3 and ZrO2-Nd2O3 systems to temperature, obtained during temperature increases and decreases, did not correspond in different temperature intervals and produced a distinctive hysteresis loop. Orig. art. has: 4 figures, 1 table and 1 formula.

ASSOCIATION: Institut elektrokhimii, Ural'skiy filial AN SSSR (<u>Electrochemical</u> institut, Ural'sk branch, AN SSSR)

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ENCL: 00

SUB CODE: IC, EM

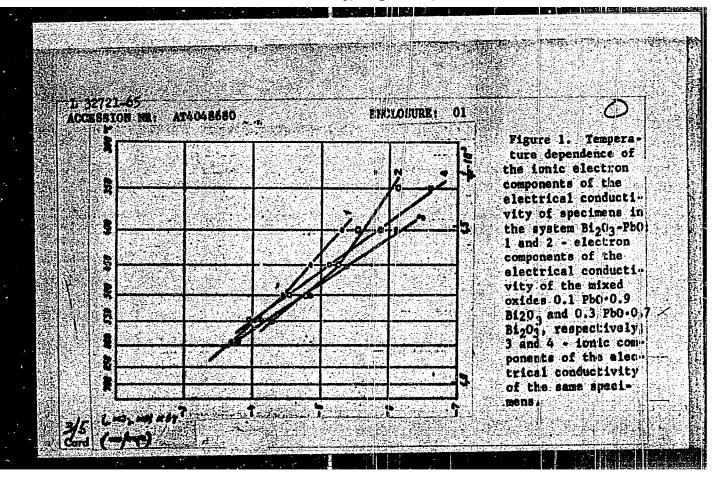
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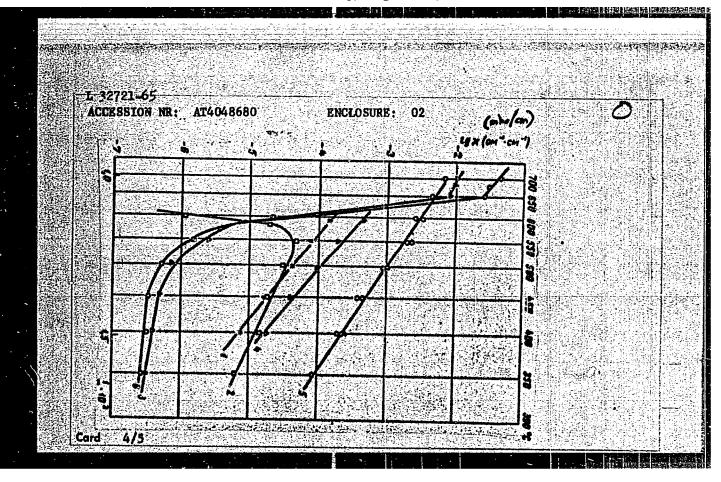
Card 2/2

	m)/EPF(c)/EWA(a)/EWF(t)/T/EPR/EWP(b) Pr-4/Ps-4
ACCESSION NE: AT4048680	8/2631/64/000/005/0153/0161 >
AUTHOR: Yushina, L. D.; Pal'go	uyev, 8, F.
TITIE: The nature of the elect	B + Crical conductivity of mixed oxides in the bismuth oxide - molybdenum oxide systems
SOURCE: AN SSSR. Ural'skiy f Blektrokhimlya rasplavlenny kh of fused salt and solid electro	llial. Institut elektrokhimii, Trudy , no. 5, 1964 solevy kh i tverdy kh elektrolitov (Electrochemistr Dlytes), 153-161
TOPIC TAGS; bismuth oxide, lestonic conductivity, electron conformation of the conductivity of the conduct	d oxide, molybdenum oxide, oxygen ion mobility, orductivity, metal oxide conductivity, electromotive
and temperature. The electrics a previous paper (8. F. Pal'guy DFAM SSSR. no. 2. Sverdlovsk. 1	the nature of the electrical conductivity of pure as molybdenum exides in relation to their composition 1 conductivity was measured by a method described in ev and A. D. Neumain, Trudy In-ta elektrokhimii 83, 1958). The nature of the conductivity was ree method. As shown by Figs. 1 and 2 of the En-

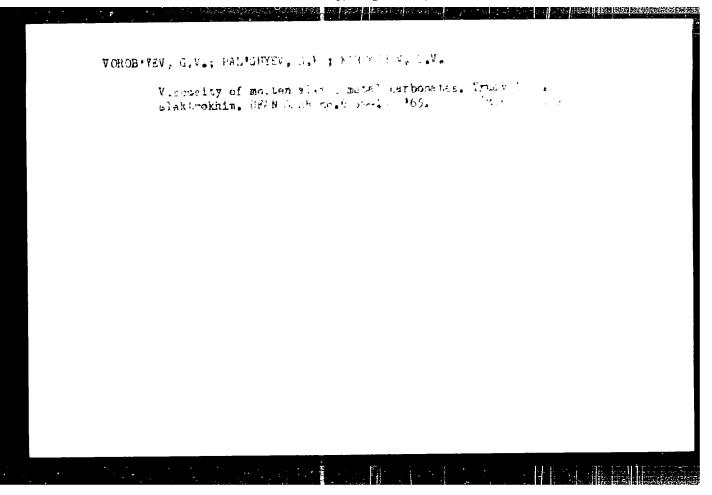
L 32721-65 ACCESSION RRI AT4048680		
ing temperature. At temperal small proportion of ionic con reformation of the atructure	both of these systems decreases a tures of 500-550C, Bi ₂ O ₃ , PbO, and nductivity (on the order of 10%). , additions of PbO and MoO ₃ great!	Moog have only a As a result of the
Pb0.0.9 Bi ₂ 03; 0.3 Pb0.0.7 Bi component of the conductivity oxygen ions. Orig. art. has	orrespondingly increasing the prop the data on the structure of the m 1203 and 3 Bi203 McO3, it is assum y of these compounds is related to 1 4 figures; I table and 2 formul rokhimii, Ural'skiy filial AM SECT N 886R)	wixed oxides 0.1 and that the ionic the mobility of the as.
Pb0.0.9 Bi ₂ 03; 0.3 Pb0.0.7 Bi Component of the conductivity oxygen ions. Orig. art. has	the data on the structure of the m 1203 and 3 Bi203. HcO3, it is assum y of these compounds is related to i 4 figures, 1 table and 2 formul rokhimii, Urāl'skiy filial AN SASS	wixed oxides 0.1 and that the ionic the mobility of the as.
ductivity. On the basis of Pb0.0.9 Bi ₂ 03; 0.3 Pb0.0.7 Bi ₂ component of the conductivity oxygen ions. Orig. art. has ASSOCIATION: Institut elektrinstitute, Ural branch, Ar	the data on the structure of the m 1203 and 3 Bi203 MoO3, it is assum y of these compounds is related to i 4 figures; I table and 2 formul rokhimii, Ural'skiy filial AN SASI N 888R)	eixed oxides 0.1 ed that the ionic the mobility of the ss. (Blectrochemistry



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Figure 2. Temperature dependence	of the louic and electron componen	ts of the
slectrical conductivity of specime slectron components of the electri	cal conductivity of the following	mixed oxides:
1 - 0.1 MoO3.0.9 Bi2O3; 2 - 0.3 Mo 6 are the ionic components of the	$0_3 \cdot 0.7$ Bi ₂ 0_3 ; $3 \div 0.95$ Mo $0_3 \cdot 0.05$ leterical conductivity of the same	11273; 4, J an me specimens.
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2-66 EWP(e)/EPA(s)-2/EWT(m)/EPF(c)/EWP(1)/EPF(n)-2/EPA(w)-2/EWP(t)/EWP(b) C NR: AP5025351 IJP(c) JD/WW/JG/WH SOURCE CODE: UR/0131/65/000/010/0040/0042
THOR: Ovchinnikov, Yu. M.; Karpachev, S. V.; Neuymin, A. D.; Pal'guyev, S. F.
G: Institute of Electrochemistry, Urals Branch, AN SSSR (Institut
TIE: Penetration of oxygen in ceramics having a airconium dioxide base URCE: Ogneupory; no. 10, 1965, 40-42
PIC TAGS: ceramic product, gas diffusion, oxygen, carbon monoxide, argon, titanium
FIRACT: The authors describe an experiment of oxygen diffusion through ceramics ring a composition of 0.85+ZrO ₂ 0.15 CaO, in the temperature range of 600-900°C. It was also carried out to determine the genetration carbon monoxide at a temperature of 900°C. It was less than 4 • 10° cm/sec.
than 4 10 cm/sec.

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oxygen dif	os tested proved t fused directly thr ased on the experi	rough the ceram ments of Kings	nic body and n ary W. D Pap	ot through the pis J., Doty M	. E., Hill
figures an	n. Amer. Cer. Soc. d 1 table. MT, GC SUBM DATE				
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1 48970-65 EWT(m)/EWG(m)/T RWH \$/0364/65/001/001/0090/0093 ACCESSION NR: AP5007751 AUTHOR: Perfil'yev, M. V.; Pal'guyev, S. F.; Karpachev, S. V. TITLE: Impedance of the electrode-electrolyte interface and the double layer capacity in solid electrolytes SOURCE: Elektrokhimiya, v. 1, no. 1, 1965, 90-93 TOPIC TACS: electrode, electrolyte, platinum, impedance ABSTRACT: The alternating current method of studying aqueous and fused electrolytes was used to investigate the electrode processes in solid electrolytes. Cells of the type Pt, 02 sclid electrolyte 02; Pt were used in the 700-800°C temerature range. The electrolyte was a solid solution of 0.15 CaO.0.85CeO2. This was made in the form of a cylinder with pointed conical depressions at the ends. The operating electrode was platinum applied as powder on the surface of the central cylinder. An auxiliary electrode was applied on the external surface of the cylinder. Prior to the measurements the electrode was treated with a current having a density of not less than 0.5 a/cm2. A bridge was used for the measurements which made it possible to perform measurements in a frequency range of from 20 cycles to 20 kild-Card 1/8

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surement was on the control of the oxyger are shown in table? Orig. art, has:	order of 1-2 ft. All m n electrode being inve l of the Enclosure whe 2 figures, 1 table, 4	easurements stigated. re A¢ is equations.
are shown in table. 2. Orig. art. has:	of the Enclosure whe 2 figures, 1 table, 4	re Δ¢ is equations.
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10. 11. 自己是有效的情况是他是一个人的情况,我们就是一个人的情况,我们就是一个人的人的人的人的,也可以是一个人的情况,但是一个人的人们的人们就是一个人的人们的人们们们的人们们们们们们们们们们们们们们们们们们们们们们们们们们们	ENCL: 01	ENCL: 01 SUB CODE: 0

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is found t constant o data on th determinat has: 6 fi	hat as the amou f the solid sol e total electri ion of the tran gures and 2 tab	int of calcium lution changes lcal conductive nsference numb ples.	n oxide added i s. This phenom vity and data o pers of ions an	position were detencreases, the unit enon is correlated btained earlier frod electrons. Orig	cell with the om a . art.
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(Institute SUBMITTED: BO REF SOV	of Electroches	istry, Ural	Sranch, Academy SNCL: 00 OTHER: 005	of Sciences SSSR) SUB COD	

OVCHINNIKOV, Yu.M.; KARPACHEV, S.V.; PAL'GUYEV, S.F.; ZHDANOVA, G.M.; NEUYMIN, A.D.

Kinetics of the reduction by carbon monoxide of solid solutions based on cerium dioxide. Elektrokhimiia 1 no.10:1196-1201 0 165.

(MIRA 18:10)

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1. Institut elektrokhimii Ural'skogo filiala AN SSSR.

ENT(m)/T/EWP(t)/PTI IJP(c)DS/JD ACC NR: AT6021372

(A)

SOURCE CODE: UR/2631/65/000/007/0157/0162

AUTHOR: Perfil'yev, M. V.; Pal'guyev, S. F.

ORG: none

TITIE: Electrode polarisation in solid electrolytes. Establishment of the potential of oxygen electrodes on platinum when the polarization current is switched on

SOURCE: AN SSSR. Ural skiy filial. Institut elektrokhimii. Trudy, no. 7, 1965. Elektrokhimiya rasplavlennykh solevykh i tverdykh elektrolitov; termodinamika i kinetika elektrodnykh protsessov (Electrochemistry of fused salts and solid electrolytes; thermodynamics and kinetics of electrode processes), 157-162

TOPIC TAGS: electrode potential, platinum, electric polarization, oxygen

ABSTRACT: The cell

Pt, 02 | solid electrolyte | 02, Pt

was studied at 670-1000 °C. The electrolytes used were solid solutions of the composition 0.15Ca0.0.85CeO2 and 0.15Ca0.0.85ZrO2. Polarization was induced, and it was mea-

 $\eta_{\mathbf{a}} = \mathbf{U}_{\mathbf{a}} - \mathbf{I}\mathbf{R}_{\mathbf{a}}$

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where IR_a and IR_c are the voltage drops on the resistances of the electrolyte R_A and R_C, whose sum is equal to the resistance of the electrolyte between the anode and cathode. During instantaneous reversals of the polarization current in the range of 600-1000 °C; the platinum electrode potential was found to vary in a complex manner with time. It depends on the temperature, current density, individual properties of the material, and the preceding treatment of the electrode. The cause of this behavior of the electrode potential may be the interaction of the electrode with oxygen, which would change the reactive properties of the platinum surface. Orig. art. has: 6 figures and 2 formulas.

SUB CODE: 07/ SUEM DATE: 23 Aug65/ ORIG REF: 006/ OTH REF: 008

Cord 2/2 1111

L 38370-66 EWT(m)/T/EWP(t)/ETI IJP(c) DS JD JG AT6021373 SOURCE CODE: UR/2631/65/000/007/0163/0168 Perfil'yev, M. V.; Pal'guyev, S. F. ORG: none* TITLE: Electrode polarization in solid electrolytes. Polarie the platinum oxygen electrode SOURCE: * AN SSSR. Ural'skiy filial. Institut elektrokhimii. Trudy, no. 7, 1965. Elektrokhimiya rasplavlennykh solevykh i tverdykh elektrolitov; termodinamika i kinetika elektrodnykh protsessov (Electrochemistry of fused salts and solid electrolytes; thermodynamics and kinetics of electrode processes), 163-168 TOPIC TAGS: platimum, electric polarization, electrode potential, calcium compound, strontium compound, cerium compound, lanthanum compound ABSTRACT: The dependence of the anodic and cathodic polarization of a platinum oxygen electrode on the current density and the change of the electrode potential with time after the current was switched off were studied. The measurements were made at 650-900°C in cells of the type Pt, '02 | solid electrolyte | 02. Pt. The activation energy of oxygen evolution at the anode in solid electrolytes of the

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ALL ING AILRICEJIM	
AUTHOR: Pilyayev, A. T.; Karpachev, S. V.; Pal'guyev, S. F.	
TITLE: Study of the polarization of the oxygen electrode in a solid electrolyte	ı
Study of the polarization of the oxygen electrode in a	Ì
Title: Study of the factor of	
SOURCE: AN SSSR. Ural'skiy filial. Institut elektrokhimii. Trudy, no. 7, 1965. Elek-source: AN SSSR. Ural'skiy filial. Institut elektrokhimii. trudy, no. 7, 1965. Elek-source: AN SSSR. Ural'skiy filial. Institut elektrokhimii. trudy, no. 7, 1965. Elek-source: AN SSSR. Ural'skiy filial. Institut elektrokhimii. trudy, no. 7, 1965. Elek-source: AN SSSR. Ural'skiy filial. Institut elektrokhimii. trudy, no. 7, 1965. Elek-source: AN SSSR. Ural'skiy filial. Institut elektrokhimii. trudy, no. 7, 1965. Elek-source: AN SSSR. Ural'skiy filial. Institut elektrokhimii. trudy, no. 7, 1965. Elek-source: AN SSSR. Ural'skiy filial. Institut elektrokhimii. trudy, no. 7, 1965. Elek-source: AN SSSR. Ural'skiy filial. Institut elektrokhimii. trudy, no. 7, 1965. Elek-source: AN SSSR. Ural'skiy filial. Institut elektrokhimii. trudy, no. 7, 1965. Elek-source: AN SSSR. Ural'skiy filial. Institut elektrokhimii.	
Amobigator Pasplay tomo was a series of Chang Bull South	
elektrodnykh protessas (m. of electrode processes), 169-174	
thermodynamics and kinetics of officer and compound, calcium	
TOPIC TAGS: electric polarization, oxygen, platinum, zirconium compound, calcium	
compound, electric impedance, electrode	
compounts of electrode polarization in solid electron	
ABSTRACT: Contiming their investigation of electrode polarization in solid electro- lytes, the authors studied the polarization of the platinum oxygen electrode as a lytes, the authors studied the solid solution 0.85Zr02.0.15CaO. The anodic polytes, the authors to a solid solution of the polarization of the polarization of the platinum oxygen electrode polarization in solid electro-	
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function of current and assistance of the electrons of the electrons of the	
larization was development was switched off. At relatively as a + b log i,	
larization was determined from vostitched off. At relatively low polarization being in after the polarizing current was switched off. At relatively low polarization of the polarization, after the equation, after a + b log i, after the polarization obeyed Tafel's equation, after a + b log i, current dependence of the polarization obeyed Tafel's equation, after a + b log i, after be a section of the coefficient is compatible where b = 1.3 2.3 RT. It is shown that this value of the coefficient is compatible where b = 1.3 2.3 RT.	
where b = 1.3 2.3 RT. It is shown that this value	
2F The impedance of the electrode - electroly to interest the electroly to interest the electroly to interest the electroly to interest the electroly th	
where $b = 1.3 \frac{2.5 \text{ Rf}}{2F}$. It is shown that the shown that the shown discharge theory. The impedance of the electrode - electrolyte interwith the slow discharge theory.	
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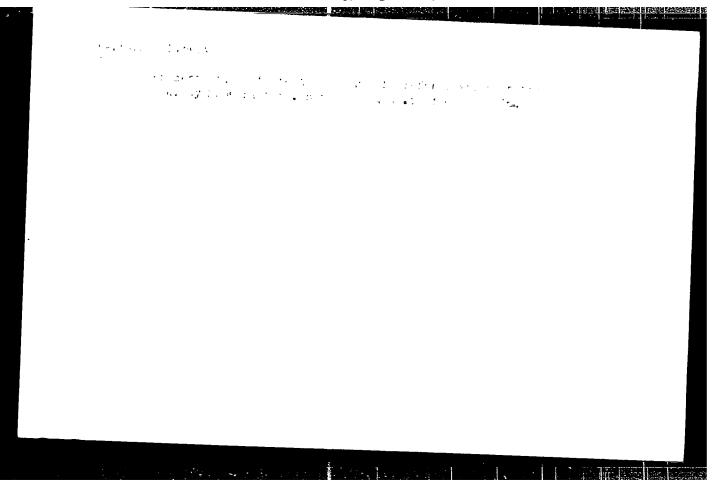
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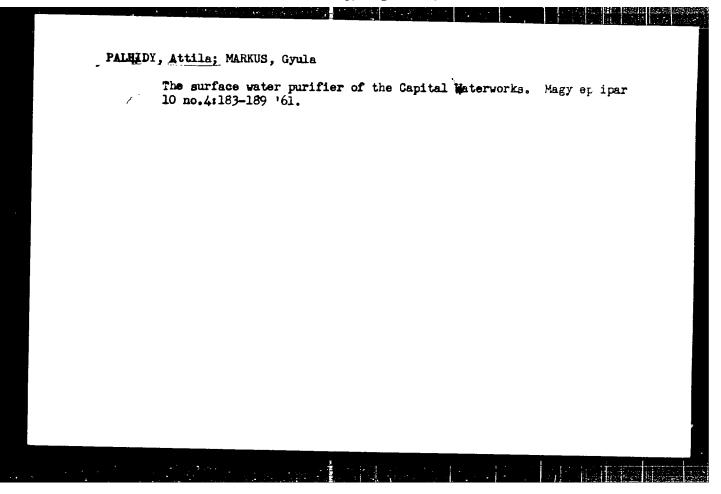
ACC NR: AT6021374

face was studied as a function of the polarization of the exygen electrode and frequency of the alternating current. In addition, the dependence of the polarization on the current intensity was studied at low polarizations. It was found that the rate of the electrochemical stage proper of the process probably plays an appreciable part in the electrode reaction kinetics. It is possible that some other nonelectrochemical stages of the process also have to be taken into account when the rate of the electrode process is determined. The capacity of the electric double layer was evaluated. Orig. art. has: 7 figures, 2 tables, and 7 formulas.

SUB CODE: 07/ SUBM DATE: 23Aug65/ ORIG REF: 007/ OTH REF: 001

Card 2/2 ZC





"APPROVED FOR RELEASE: Tuesday, August 01, 2000 C

CIA-RDP86-00513R001238

\$ 261 62 000 012 002 002 1007-1207

Szakáll, Kalmán, Pálhidy, Attila and Endrey, Gyula

TITLE Synchronous diaphragm-pump

PERIODICAL Referativnyy zhurnal, otdel'nyy vypusk. 34 Kompressory i kholodil'naya tekhnika. 12

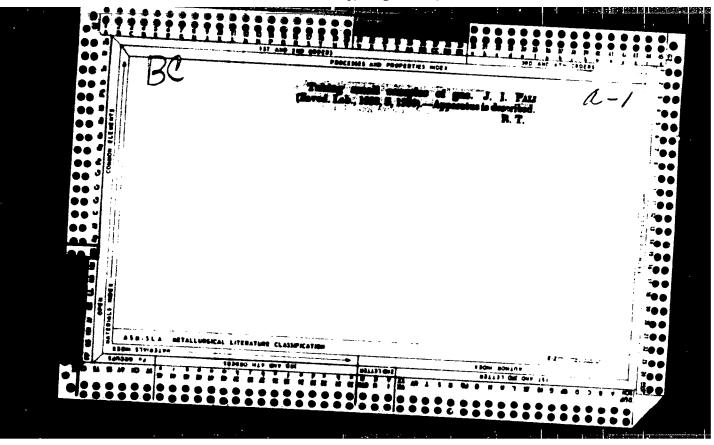
1962, 16, abstract 32.2.34 Hungarian patent, class 59, no. 148211, March 31, 1961

TEXT none given.

AUTHOR

[Abstracter's note: Translation of title.]

Card 1/1



LAJOS, L.; SZONTAGH, P.; PALI, K.

Property of gonadotropins in normal and toxemic pregnancies. Kiserletes orvostud. 5 no.2:97-101 Mar 1953. (CIML 24:4)

1. Obstetric and Oynecological Clinic of Pecs Medical University.

IAJOS, L.; PALI, K.; CSARA, I.

Function and blood supply to the pituitary in advanced pregnancy toxemias. Kiserletes orvostud. 5 no.2:102-106 Mar 1953. (CIML 24:4)

1. Obstetric and Gynecological Clinic of Pecs Medical University.

PALL, K.

GATI I., PALL K.

Bickemiai vizagalatek kolcoksainerverral. Biochemical investigations of umbilical cord blood Orv. hetil., Budap. 92:27 8 July 51 p. 858-9.

1. Destors. 2. Obstatric and Gynscological Clinic, Pecs University.

1. Vol. 20, No. 10 Oct 1951

LAJOS, L.; PALI, K.

New method in early diagnosis of neoplasms of portio vaginalis. Orv. hetil., Budap. 92 no.31:1005-1008 5 Aug 51. (CIML 21:1)

1. Obstetric and Gynecological Clinic (Director -- Prof. Dr. Laszlo Lajos), Pecs Medical University.

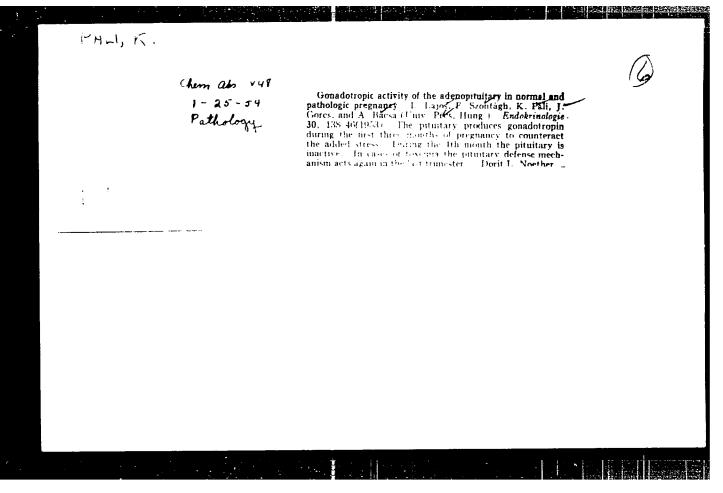
LAJOS, L.: PALI, K.; GATI, I.

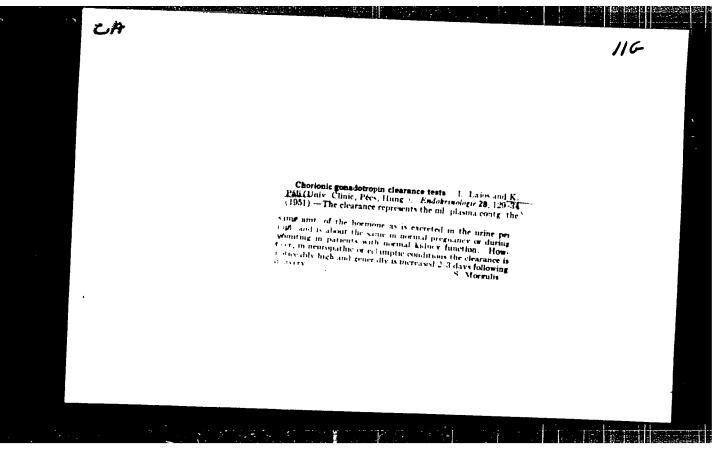
New factors in puerperal hypoprothronbinaemia. Magy.nooff.lap.
13 no.4:106-113 Ap '50. (CLML 19:3)

1. Obstetric and Gynecologic Clinic (Director -- Dr. Lasulo Lajos),
Pece University.

"APPROVED FOR RELEASE: Tuesday, August 01, 2000

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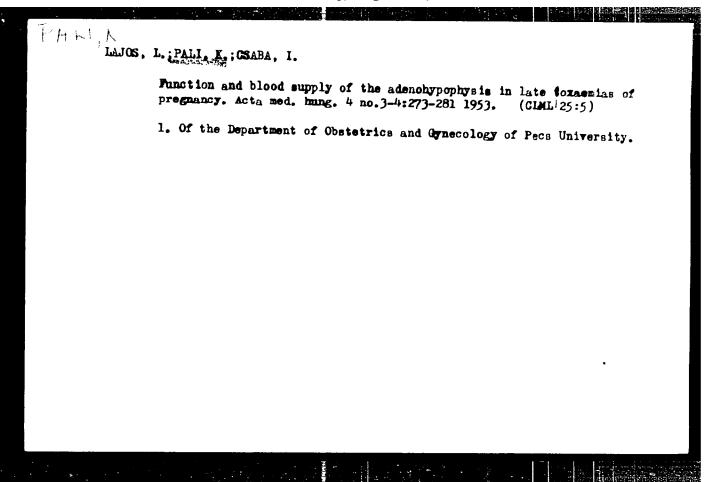




LAJOS, L.; SZOTAGH, F.; PALI, K.

Characteristics of the gonadotrophic hormone in normal and toxeenic pregnancy. Acta med. hung. 4 no.3-4:265-273 1953. (CIMI 25:5)

1. Of the Department of Obstetrics and Oynecology of Pecs University.



IAJOS, L.; PALI, K.; SZONTAGH, F.; GATI, I.; HUSVET, F.; CSARA, I.; HALVAX, L.

Improvement of results of abdominal operations with the utilization of recent pathophysiological knowledges. Orv. hetil. 94 no.13:348-351 29 Mar 1953. (CIML 24:4)

1. Doctors. 2. Obstetric and Gynecological Clinic (Director -- Prof. Dr. Laszlo Lajos), Pecs Medical University.

HUNGARY/Human and Animal Physiclogy (Normal and Pathelegical).

Multiplication

Abs J ur: Ref Zhur-Eill., No. 17, 1958, 79905.

Author : Lajos, Laszlo ; Pali, Kalman ; Goros, Jen ...
Inst :
Title : Morphological and Functional Changes of the Hypophysis
During Pregnancy.

Orig Pub: Magyar neary lapja, 1955, 18, N. 4, 194-204.

Abstract: No abstract

Card : 1/1

66

THE RESERVE OF THE PARTY OF THE

PALI, Kalman, dr.; VESEGRADY, Iajos, dr.; PEJTSIK, Bela, dr.

Liagnostic value of hysteroalpingography with special reference

to water-soluble contrast media. Orv. hetil. 161 no.20:691-695
15 My 160.

1. Baranyamegyei Tanacs Korhaza, Szulesmeti, Nogyogyaszati es Rontgen Osztaly.
(HYSTEROSA IPINGOGRAPHY)

(HYSTEROSA LPINGOGRAPHY) (CONTRAST MEDIA)

PALI, Kalman; SAPSZKY, Vilmos

Hymophysis and allergy. Magy. noorv. lap. 21 no.4:236-240 Aug 58.

1. Tolna megve Tanacs Balassa Janos Korhaza (Igazgato: Pelikan, Erzsebet dr.) Szuleszeti Osztalyanak kozlemenye.

(ALLERGY, ther.

anterior pituitary implants in women, relation to possible pituitary origin of allergy (Hun))

(PITUITARY GIAND, ANTERIOR, transpl.

implants in ther. of allergy in women, relation to possible pituitary origin of allergy (Hun))

PALI, Kalman, dr.; VISEGRADY, Lajos, dr.; REMSEY, Erno, dr.

Our experience with the treatment of incontinence in women.

Magy.noorv.lap. 20 no.6:301-306 N '59.

1. A Baranya Megyei Tanacs Korhaza (Igazgato: Steinmetz Endre dr.)

Szuleszeti es Nogyogyaszati Osztalyanak (Foorvos: Pali Kalman dr.)

es Hontgen Osztalyanak (Foorvos: Visegrady Lajos dr.) kozlemenye.

(URINATION DISCRIERS surg)

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LAJOS, Laszlo, dr.; PALI, Kalman, dr.; GORCS, Jeno, dr.

Morphologic and functional changes of hypophysis in pregnancy. Magy. noorv. lap. 18 no.4:194-204 July 55.

1. A Pecsi Orvostudomanyi Egyetem Szuleszeti es Nogyogyaszati Klinikajanak kozlemenye (Igazgato: Lajos, Laszlo dr. egyetemi tanar).

(PITUITAHY GLAND, in pregn.

morphol. & funct. changes. (Hun))

(PREGNANCT, physiol.

pituitary gland morphol. & funct. changes. (Hun))
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PALI, Tivadar

Bud i hegyvidek; portyavezeto. Sport Lap- es Konyvkiado, 1954. 63; (The Highlands of Buda; a tourist guide. fold. map, index)

SOURCE: East European Accessions List (EMAL), LC, Vol. 5, no. 2 February 1956

PALJAK, F.

Hydrobotanical problems of production bick y. p. 17. HDELIGIAL KOZLONY. HYDRODOGICAL COURTAL (Magyar Hidrologial Tarsasa;) Budapest. Vol. 35, no. 5/6 May/June 1991.

SCURCE: Past European Accessions List (MEAL), Vol. 5, No. 2, February 1956.

PALIAN, B.

Sheep breeding and kinds of sheep in Italy. p. 403.

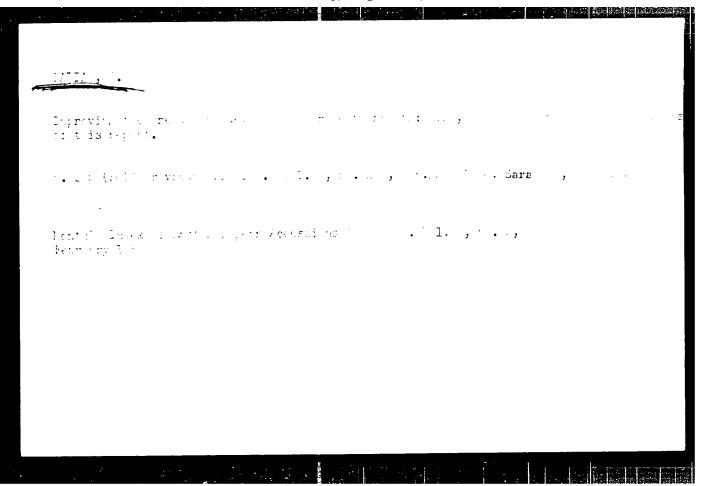
Periodical: POLJOPRIVREDNI PREGLED.

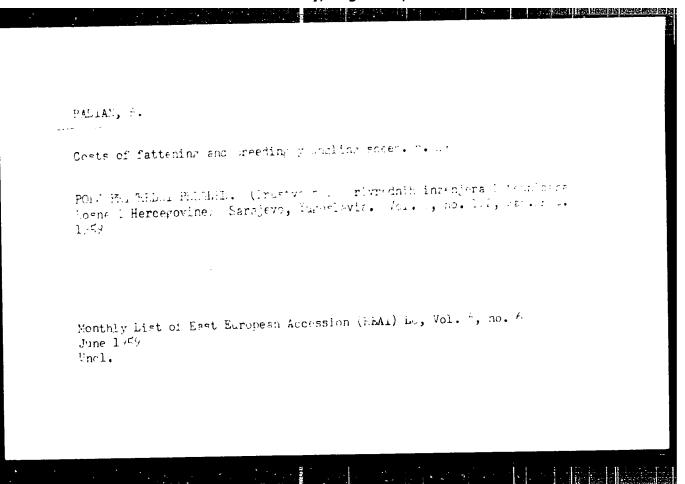
AGRICULTURE

Vol. 7, no. 9/10, Sept./Oct. 1958.

SO: Monthly List of East European Accessions (EEAI) LC

Vol. 8, No. 4 April 1959, Uncl.





e production of the

CHRU S/S

YUGOSLAVIA / Form Animals. Small Horned Stook.

Lts Jour: Rof Zhur-Biol., No 23, 1958, 105685.

Author : Palian, B. : Not liven. Inst

: Differences in the Growth During the Hilking Titl

Period of the Single and Twin Limbs of the

Pramonka Brood in Kupros.

Orig Pub: Votorinoria (Jugosl.), 1957, 8, No 2-3, 371-383.

Abstract: The results of studies of the growth of lambs

(single and twin) from birth until wanning are given. In all, during two years 20 to in and 26 single rams and 14 twin and 34 sample owes were under observation. The feeding of mother

Card 1/3

APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R0012388

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USSR / Farm Animals. Small Hornod Stock!

Q-2

Abs Jour: Rof Zhur-Biol., No 23, 1958, 105685.

Abstract: owes during prognancy was scanty. The average weight of single rams at birth was 4.2 kg. and that of twins 3.0 kg. For ewes the corresponding indexes were: 3.8 and 3.2 kg. During the first month of life singles were developed better than twins, so that at 30 days of age, live weight of twin rams constituted only 64.8% and that of twin ewes 77.8% of the weight of single animals. Thereafter differences in the growth of singles and twins were decreasing but were still great at the time of weaning. Consequently, the author considers as expedient under conditions of scanty feeding to leave twins for reproduction. However, on large forms which resort to the crossbreeding with the Karakuls it is advisable to increase prolificity,

BENZOLES CONTRACTOR INCOME.

The state of the s

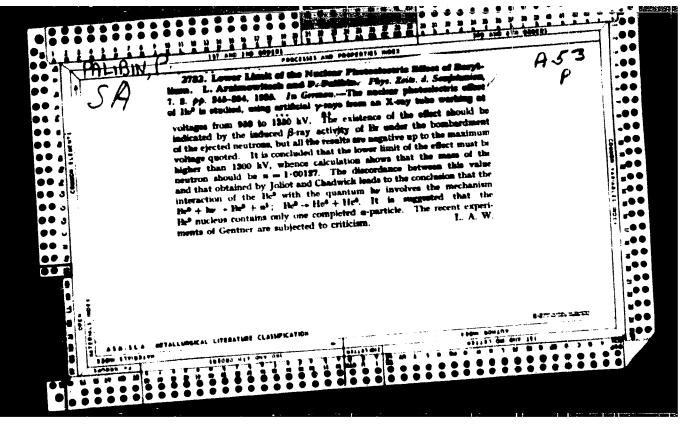
YUGOSLAVIA / Farm Animals. Sm.11 Horned Stock. 2-2 Abs Jour: Mof Zhur-Biol., No 23, 1958, 105685.

Abstract: since one-day lambs any be willed for fur and their mothers may be used for rearing twin lambs. -- Ya. L. Glembotskiy

Card 3/3

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PALIBIN, P.A.; SMIRNOV-AVERIN, A.P.; SEVAST'YANOV, Yu.G.; BULANOV, L.A.; SHASHARIN, G.A. Organic heat-transfer agents in reactor engineering. Inzh.-fiz. (MIRA 14:5) zhur. 4 no. 5:127-138 My '61. (Nuclear reactors Materials)

S/112/60/000/006/010/032

Translation from: Referativnyy zhurnal, Elektrotekhnika, 1960, No. 6, r. 235, # 4.4668

AUTHOR:

Palibina, N. A.

TITLE:

Methods of an Approximate Calculation of a Magnetic Converter With

a Permanent Magnet 1

PERIODICAL. Nauchno-tekhn byul. N-1 in-t teploenerg, priborostr., 1958,

No. 4-5 (43-44), pp. 3-11

The magnetic converter consists of a closed magnetic circuit with coils and a reference permanent magnet. A magnetic flux is produced in the magnetic circuit by the coil through which the current to be measured is flowing. This magnetic flux is compensated by the flux of the reference magnet. At an inequality of these fluxes an alternating magnetic flux, produced by the excitation coil, induces in the measuring coil an alternating voltage which acts on the servosystem turning the magnet into a position which provides a balance of the constant magnetic fluxes. Methods of calculation and results of tests of an experimental converter are given. They confirm the correctness of the methods adopted for calculation. M. B. M.

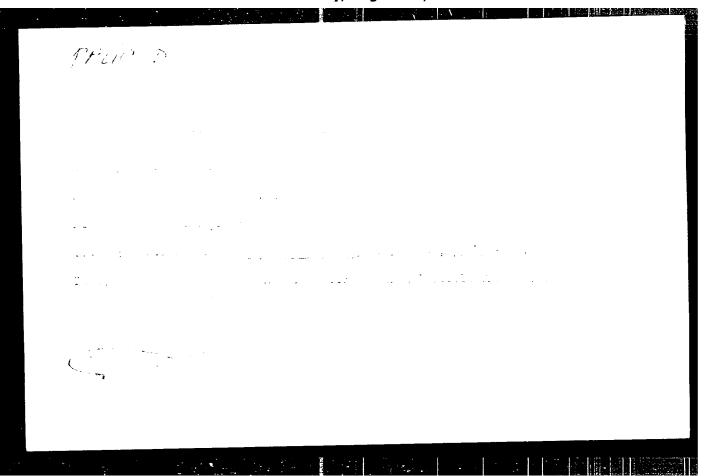
Card 1/1

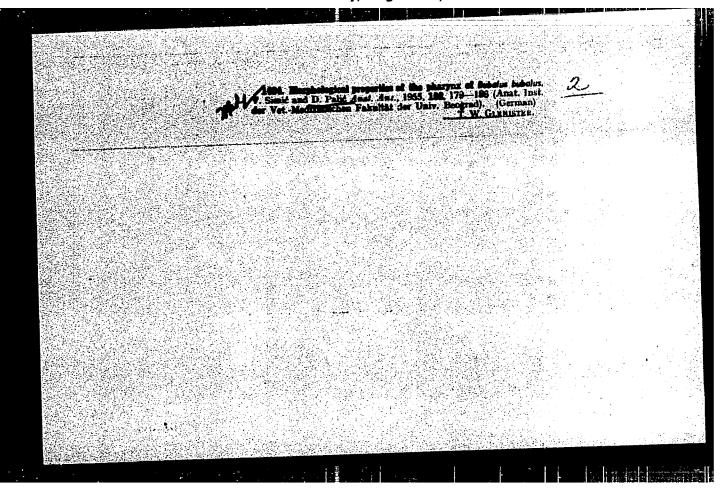
Magnetic converters with permanent magnets. Izm.tekh. no.2:47-52

Magnetic converters with permanent converters)

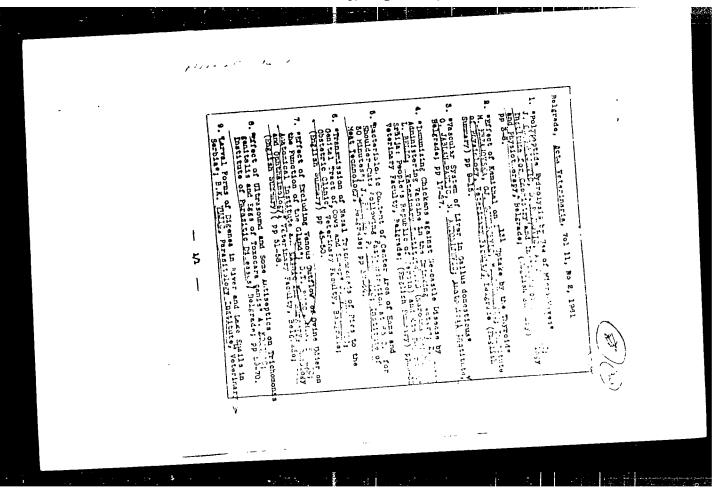
(Electric current converters)

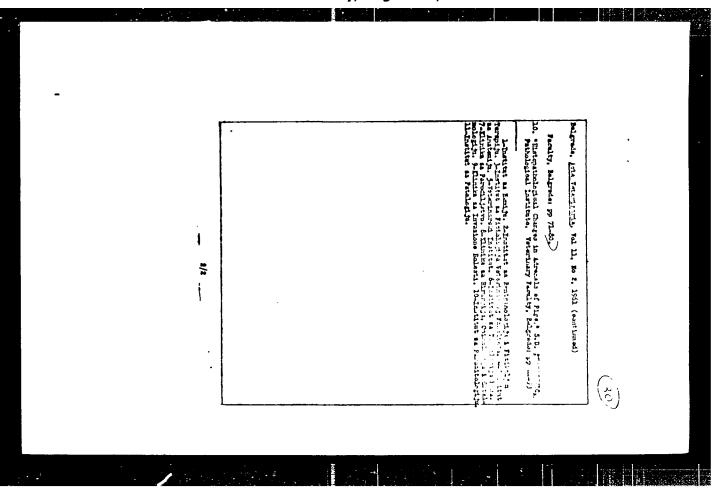
L 31448-66 ETC(f)/T 1JP(c) DS SOURCE CODE: RU/0003/65/016/002/0094/0096
ACC NR: AP602 3177
AUTHOR: Palibroda, E.; Fodor, T.
ORG: nono
TITLE: Laboratory electrolysis cell with high current charge
SOURCE: Revista de chimie, v. 16, no. 2, 1965, 94-96
TOPIC TAGS: electrolytic cell, electrolysis
ABSTRACT: The authors describe the construction and principle of operation of laboratory electrolysis cell with current charges of up to 2 Amperes per square centimeter in a 150 cubic centimeter volume of solution. The device can provide centimeter in a 150 cubic centimeter volume of solution. The device can provide centimeter in a 150 cubic centimeter volume of solution. The device can provide centimeter of hydrogen and 15 liters of oxygen per hour at 99.9 percent gas purity 30 liters of hydrogen and 15 liters of oxygen per hour at 99.9 percent gas purity with current fluctuations under 0.6 percent at maximum current charging. Orig. art.
SUB CODE: 07, 09 / SUBM DATE: none / ORIG REF: 001 / OTH REF: 001
13.48
Card 1/1 775





PAL 10 D SCHLAMA (in caps); Given Names Country: Yugoslavia Acquerate Degrees: / not given Additioning not given ; Bource: Belgrade, Votorinarski glasnik, No 7, 1961, pp 569-573. Data: "Age Determination of the Native Simenthals from Changes in Horns." PALIC, D. MILOSAVLJEVIC, S.





"APPROVED FOR RELEASE: Tuesday, August 01, 2000

CIA-RDP86-00513R001238

HENNERGO. Dorde, san.tetski pakevnik, dunent, dr.; Jevanevic, for a sanitetski majat, dr.; Vikozwilo, benarke, uz temunan sanite sanitetskog zapetara i ziene.

Velabetton ner mrti-smalljex immunity, has ins of var levice, varmunity, bes ins of var levice, varmunite in a sanite varmunity of a sanite pregi. The electric sanite varmunity of a sanite pregi. The electric sanita institute of a sanita zaveta. Appeared on a sanita sanita in a sanita in a sanita per levice.

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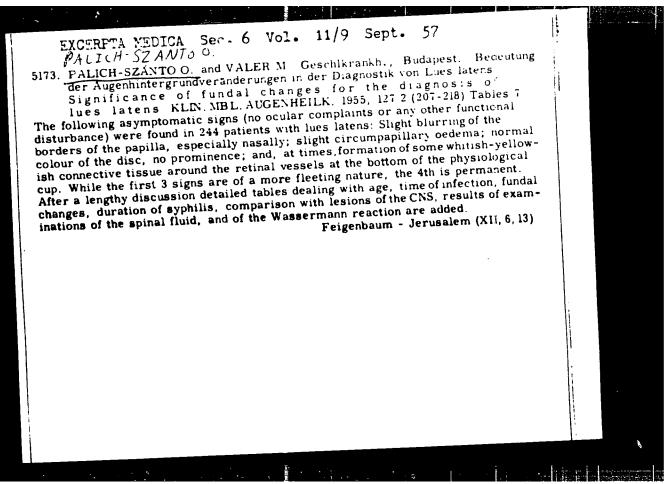
Machines for pilishing furniture part surfaces. irrevo 20 no.4:
139-142 Ap '65.

1. Vyvoj nabytka-skeho prunyalu, irre.

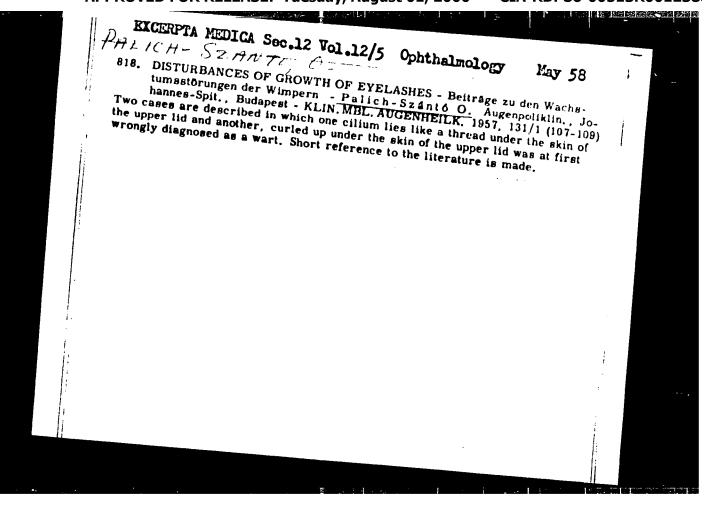
PALICH-SZANTO, O.

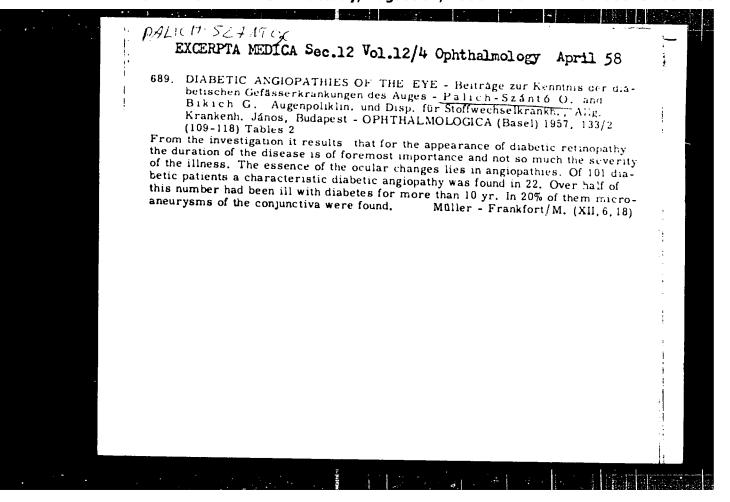
Syphilitic manifestations in the back of the eye with especial reference to latent syphilis. Orv. hetil. 94 no.34:941-944 23 Aug 1953.

1. Doctor.

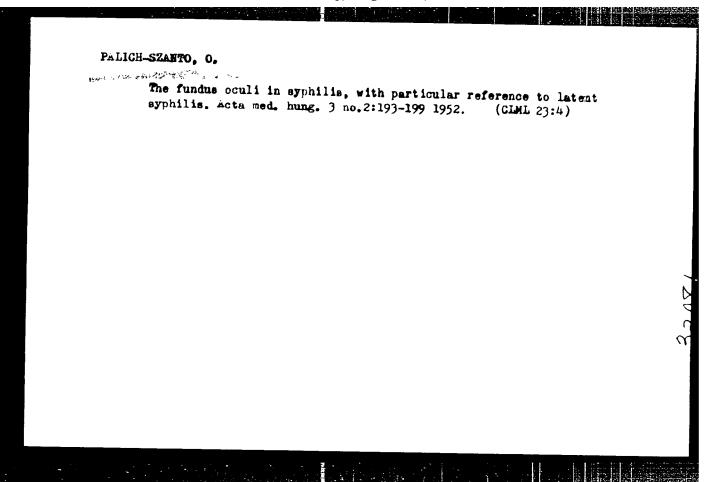


PALICH-SZAHTO, O. Toxic effects of PAS. Orv. hetil., Budap. 92 no. 41:1329-1330 Oct. 1951. (CIML 21:3) 1. Doctor.





PALICH-SZAHTO, 0. Recent contributions to the symptomatology and therapy of keratitis disciformis. Szemeszet 88 no.1:41-46 1951. (CIML 23:2) 1. Doctor.



PALIC-SZANTO, Ó.

"Syphilitic Alterations of the Fundus Oculi, with Particular Reference to Syphilis Latens (in Russian)".

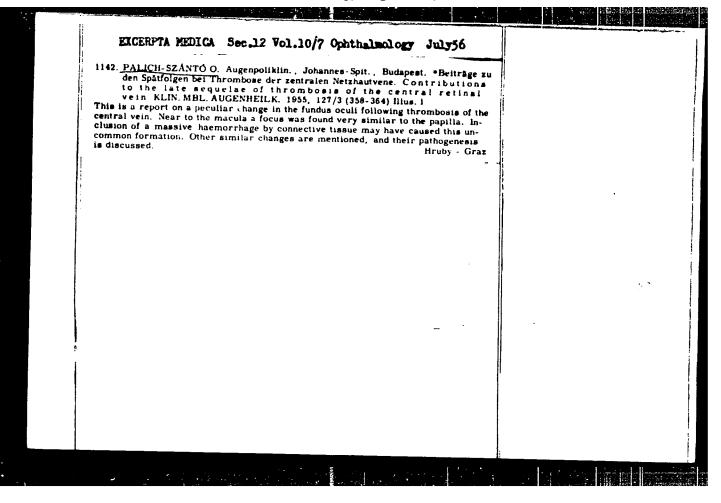
SO: ACTA MEDICA VOL. III. NO. 2. Feb. 1952. (AF 514291).

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PALIC - ZANTO, O. (Budapesht); YUZEFOVA, P.I., professor [translator]

Role of the Botian antigen in eye diseases. O.Palics-Szanto.
Translated from the German by F.I.IUzefova, Oft.zhur. 11 no.1:
29-34-156.

(ETH--DISEASES AND DEFECTS)

(ANTIGENS AND ANTIBODIES)
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PALICH-SZANTO, O.

PALICH-SZANTO, O., LICSKO, A.

Experience with Filatov's method of tissue therapy. Szemeszet No. 1, 1950. p. 18-22

1. Eye Department (Head Physician—Dr. Andor Licsko), Szent Rokus Hospital.

CIMIL 19, 5, Nov., 1950

PALICHNE SZANTO O.

Data on the development of ophthalmology in Russia and in the Soviet Union. Orv. hetil. 104 no.16:752-754 21 Ap '63. (OPHTHALMOLOGY) (HISTORY OF MEDICINE, MODERN)

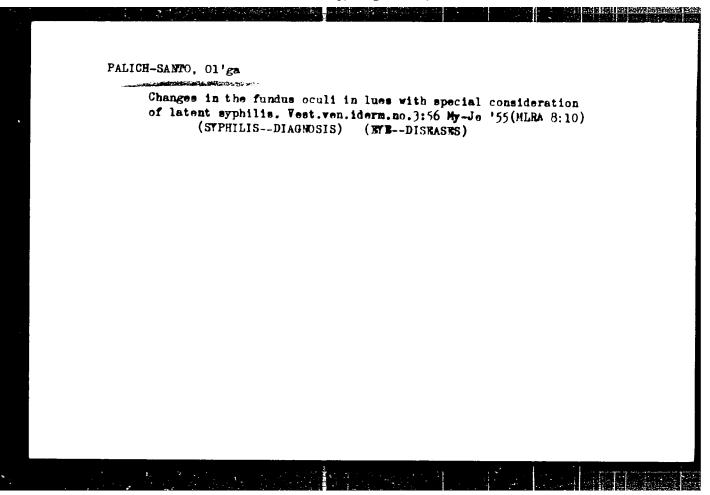
APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R0012388

PALICHNE SZANTO, Olga, dr.

The use of Chinorto eyewash to produce quick narrowing of the dilated pupils. Orv. hetil. 102 no.27:1258-1259 2 Je '61.

1. Budapesti Janos korhaz Rendelointezete, Szemeszeti szakrendelo.

(PUPILS pharmacol)
(HYPNOTICS AND SEDATIVES pharmacol)



- CC NR: AP6032120

(K,N)

SOURCE CODE: UR/0346/66/000/010/0036/6033

AUTHOR: Roslyakov, A. A.; Bisenov, K.; Popova, R. G.; Palichev, V. M.; Mukhamed'yarov, F. Sh.; Sal'nikov, F. Ye.

ORG: Alma-Ata Zootechnical-Veterinary Institute (Alma-Atinskiy zootekhnichesko-veterinarnyy institut)

TITLE: Problems in the epizoology and diagnosis of Rabies

SOURCE: Veterinariya, no. 10, 1966, 30-33

TOFIC TAGS: animal disease, infective disease, rabies, precipitation reaction, diagnostic medicine, veterinary medicine

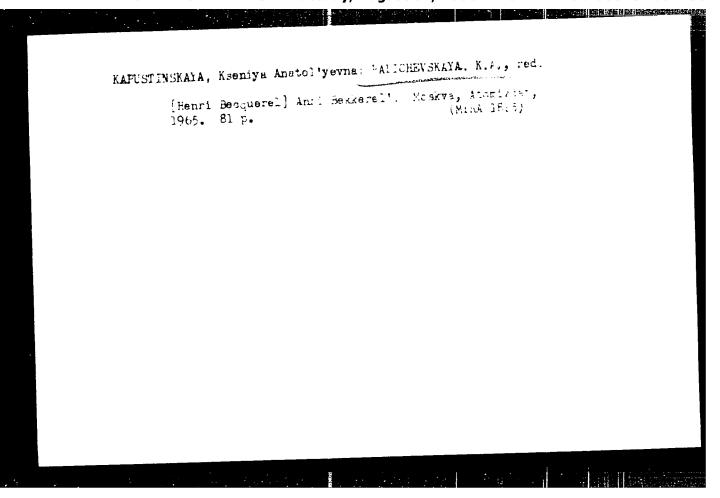
ABSTRACT: Rabies may be diagnosed rapidly using the precipitation reaction, and preventive measures may therefore be undertaken in minimal time. As rabies antigen does not appear in equal quantities in all parts of the brain, it is necessary to take samples from all of them; study of the spinal cord is particularly necessary. In the Gur'yev and some other oblasts of Kazakhstan, Babes-Negri bodies are found infrequently. Study of histological sections also increases diagnostic accuracy, though care must be taken not to mistake other inclusions for Babes-Negri bodies.

_Card _ 1/2

UDC: 619:616.988.21-036.2-07(574.12)

	AP6032120	
	The seasonality of rables (beginning in December, with nighest incidence in January—April) in the Gur'yev oblast is of epizoological interest. It is suggested that prophylactic and preventive measures be undertaken in the fall. A table shows the results of the authors' investigation using a diagnostic complex including examination for Babes-Negri bodies, precipitation reaction, and bioassay. [WA-50; VCBE No. 12]	
SUB CODE	: 06/ SUBM DATE: none/ ORIG REF: 011/ OTH REF: 001/	

APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R0012388



PALICKA, J. - POLASEK, J.

Examples of the production of mastings using the chemical-hardening method and adapting of the pattern technique. p. 294.

SLEVARENSTVI. (Ministerstvo tezkeho strojirenstvi a Ceskoslovenska vedecka technicka spolecnost pro hunictvi a slevarenstvi) Praha, Ozechoslovakia. Vol. 7, no. 7, June, 1959

Monthly 1 st of East European Accessions (EEAI) LC Vol. 8, No. 12, Dec., 1959 Uncl.

industrations

PALICHA, J.: MACHAC, J.

"Which work and how much should be ordered in the machine-tructor station."

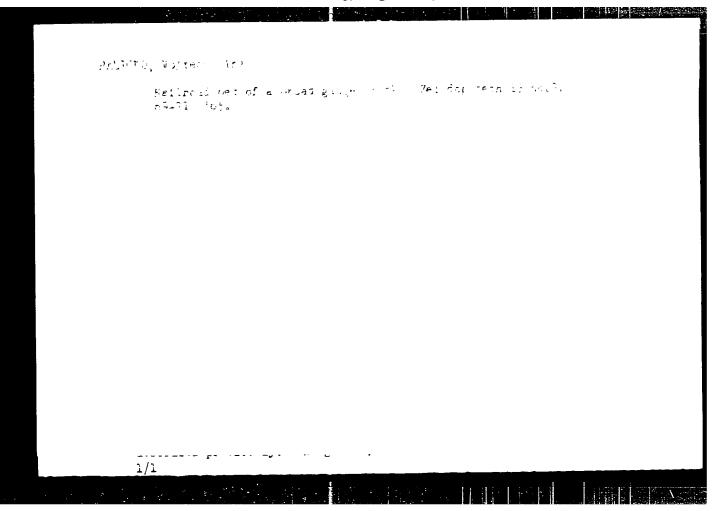
P. 13. (Ministe stwo zemejelstvi. Hlavni sprava jednotnych zemejelskych immitev) --- raha, Czechoslovka.) Vol. 11, no. 12, Dec. 1957.

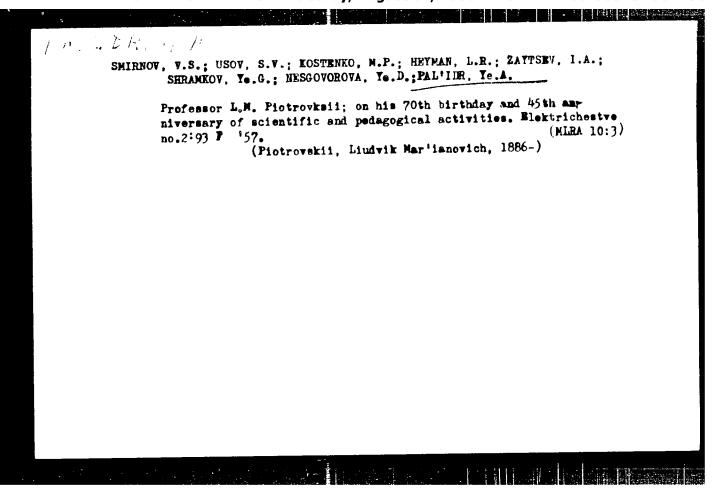
SO: Monthly Index of East European Accession (EEAI) LC, Vol. 7, No. 5, May 1058

JELINEK, Petr; PALICKA, Jan

Binding CT mixture with thin water glass for molding in jolt molding machines. Slevarenstvi ll no.4:153-155 Ap '63.

1. Vitkovicke zelezarny Klementa Gottwalda, Ostrava - Vitkovice.





THE RESIDENCE OF THE PARTY OF T

USSR / Cultivated Plants. Potatoes, Vegotables, Melons. M-2

: Ref Zhur - Biologiya, No 2, 1959, No. 6266 Abs Jour

: Palienko, T. S.; Merzhvinskaya, I. M.; Author

Korbut, G. A.

: Not given Inst

: The Effect of Various Methods of Applying Title

Manure and Minoral Fertilizers on the Yield

of Potatoes

: Udobreniye i urozhay, 1958, No 5, 19-21 Orig Pub

: The application of N30P45K60 kg/ha in holes Abstract

during the course of potato sowing in experiments carried out in 1955-1956 increased the yield of tubers by 2.2 and 3.5 t/ha, respectively, in comparison with broadcasting the same fertilizers. The addition to N30P45K50 kg/ha of 5 t/ha of manure during the same

Card 1/3

40

APPROVED FOR RELEASE1 aTruesday August, 01/e2000 oles CIA-RDP86-00513R001238

: Ref Zhur - Biologiya, No 2, 1959, No. 6266 Abs Jour

> experiments and of 3 and 6 t/ha in the experiment conducted in 1954, when localized fertilization was practiced, had no effect on the yield. The addition of 20 t/ha of manure to the mixture N₃₀P₄₅K₆₀, placed by broadcasting increased the yield by 20%. The addition of 3 - 6 t/ha or manure had no effect on the yield. Hole placement of the VASKhNIL mixture (All-Union Agricultural Institute im. Lenin) during sowing (3 t of manure, 3 cwt of P_c and 3 cwt of lime) and of a mixture enriched with Ko produced an increase in the yield of potatoes of 2.9 and 11.9 cwt/ha, respectively (control: 158.6 cwt/ha). Mineral fertilizers somewhat diminished the starch content in the tubers. The experiments were carried out on

Card 2/3

L 36869-66 EWP(e)/EWP(k)/T/EWP(t)/ETI IJP(c) DS.'JD/HW

ACC NR: AP6018256 (A) SOURCE CODE: PO/0014/65/044/012/0679/0680

AUTHOR: Przyluski, J.; Palige, J.

ORG: Inorganic Chemistry Department, Warsaw Yolytechnic School (Katedra Chemil algororganicznej Politechniki Warszawskiej)

TITLE: On the possibility of using Ni powder obtained electrolytically for fuel cell gas electrodes

SOURCE: Przemysl chemiczny, v. 44, no. 12, 1965, 679-680

TOPIC TAGS: powder metal sintering, nickel, fuel cell, electrode

ABSTRACT: The object of the study was to determine the properties of fuel cell electrodes prepared by mixing powdered nickel (obtained electrolytically) with various amounts of all bowdered Mi-All alloy (containing 50 wt. % Ni and 50 wt. % Al), pressing, and sintering in hydrogen at 670 °C. The electrodes obtained were then treated with 5 N KCH to dissolve the Al present in the electrode. The electrochemical activity of the electrodes, evaluated from the current density at a given polarization, was studied as a function of the electrode composition. The optimum ratio of Ni-Al alloy to Ni was found to be 1:2, and this was used in all subsequent investigations. A decrease in the grain size of the starting materials was found to raise the electrochemical activity of the electrodes. The optimum sintering temperature was 650-700 °C. It is concluded that carbonyl nickel used thus far for hydrogen gas electrodes can be

Card 1/2

successfully replaced by electrolytic nickel, and that the technological conditions developed for producing electrodes from producing electrodes from electrolytic nickel. Orig. art. has: 4 figures.	
SUB CODE: 07, 11/ SUBM DATE: 30Jun65/ ORIG REF: 001/ OTH REF: 004/ SOV REF: OOL	
Card 2/2/11CF	

ANDREYEV, L.A.; PALIGE, Ya.

Change in the electron work function during cold deformation of molybdenum and tantalum under superhigh vacuum. Dokl. AN SSSR 152 no.5:1086-1088 0 '63. (MIRA 16:12)

1. Moskovskiy institut stali i splavov. Predstavleno akademikom G.V.Kurdyumovym.

ANDREYEV, L.A.; PALIGE, Ya.

Effect of deformations on the work function of single-crystal

molybdenum whiskers. Fiz.tver.tela 3 no.10:2076-2082 0 '61. (MIRA 14:10)

1. Moskovskiy institut stali imeni I.V.Stalina. (Deformations (Mechanics)) (Mol Dedenum crystals) (Work function: (Physics))

DOBRILOVIC, Lj.; BEK-UZAROV, D.; GRADOJEVIC, V.; PALICORIC, D.

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