L 31878-66

ACC NR: AT6013557

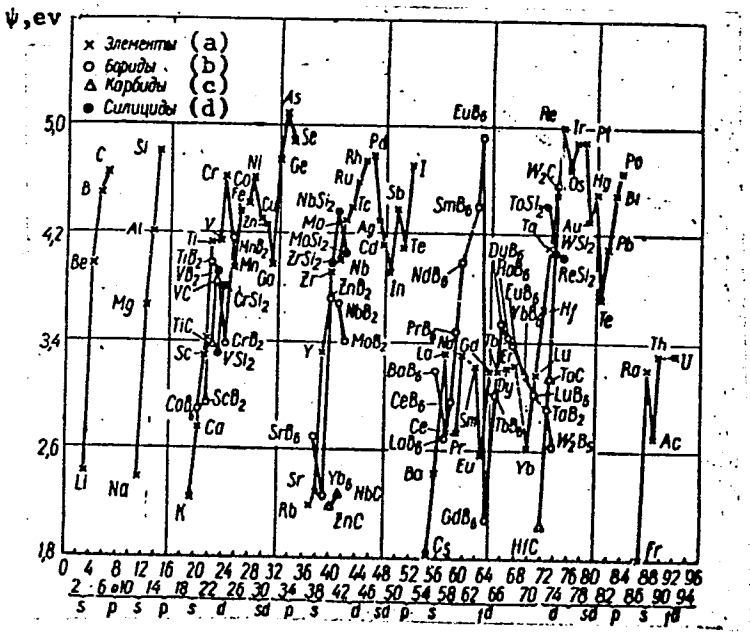

Fig. 1. a--elements; b--borides; c--carbides; d--silicides

Card 3/4

L 31877-66 EWI(l)/EWI(m)/ETC(f)/EWP(e)/EWP(t)/ETI IJP(c) WW/JD/JG/GD/AT/WH
ACC NR: AT6013558 (A) SOURCE CODE: UR/0000/65/000/000/0199/0204

61
B+1

AUTHOR: Paderno, Yu. B.; Barantseva, I. G.; Yupko, V. L.

ORG: Institute of Materials Science Problems, AN UkrSSR (Institut problem materialovedeniya AN UkrSSR)

TITLE: Determination of thermal conductivity and electrical resistance of ZrC, HfC, NbC, and TaC at high temperatures

SOURCE: AN UkrSSR. Institut problem materialovedeniya. Vysokotemperaturnyye neorganicheskiye soydeineniya (High temperature inorganic compounds). Kiev, Naukova dumka, 1965, 199-204

TOPIC TAGS: zirconium, hafnium, niobium, tantalum, carbide

ABSTRACT: The thermal conductivity and the electrical resistance of ZrC, HfC, NbC, and TaC were determined in the 1370°-3270°K range. The measurements were made with an apparatus shown in figure 1. The samples were 8 mm in diameter and 15-18 mm in length. The hole depths were 3.5-3.7 and 1.8-2.0 ohm, their diameter was 0.9 mm, the distance separating them was approximately 5 mm, and the distance between the potential zones was 7-7.5 mm. The coefficient of thermal conductivity (λ) was calculated from the formula

$$\lambda = \frac{IU}{4\pi\Delta T l} \cdot \frac{r_a^2 - r_b^2}{R^2},$$

Card 1/2

L 32675-66 EWT(l)/EWT(m)/EWP(t)/ETI IJP(c) JD/WW/JG/GD

ACC NR: AT6013567 (A) SOURCE CODE: UR/0000/65/000/000/0293/0296

AUTHOR: Paderno, Yu. B.; Dudnik, Ye. M.; Andreyeva, T. V.; Barantseva, I. G.; Yupko, V. L.

ORG: Institute of Material Science Problems, AN UkrSSR (Institut problem materialovedeniya AN UkrSSR)

TITLE: Measurement of the thermal expansion coefficients of ZrC, HfC, NbC, and TaC at high temperatures

SOURCE: AN UkrSSR. Institut problem materialovedeniya. Vysokotemperaturnyye neorganicheskiye soyedineniya (High temperature inorganic compounds). Kiev, Naukova dumka, 1965, 293-296

TOPIC TAGS: zirconium carbide, hafnium compound, tantalum compound, niobium compound, heat expansion, ~~[illegible]~~ CARBIDE

ABSTRACT: The thermal expansion of zirconium, hafnium, niobium, and tantalum carbides was studied in the 1370°-3170°K range. The object of the work was to fill a gap in the literature. The thermal expansion was measured in a vacuum chamber (10^{-2} mm Hg) in which carbide samples (8 mm in diameter and 15-18 mm in length) were heated electrically. The carbide samples were prepared by hot-pressing technique and the temperature was measured with an OPM-19 micropyrometer. The individual carbide samples had the

Card 1/2

L 32675-66

ACC NR: AT6013567 0

following porosities: ZrC--19 to 24%, HfC--22 to 28%, NbC--13 to 18%, and TaC--27%. The dependence of the relative thermal expansion ($\Delta l/l$) of the carbide samples upon temperature is graphed. A table gives the average values of the thermal expansion coefficients (α) for various carbides. Orig. art. has: 2 figures, 2 tables.

SUB CODE: 07,11/ SUBM DATE: 03Jul65/ OTH REF: 003

Card 2/2 BU

L 7928-66 EWT(m)/ETC/EWG(m)/EWP(t)/EWP(b) IJP(c) RDW/JD/JG

ACC NR: AP5027936 SOURCE CODE: UR/0363/65/001/010/1791/1802

AUTHOR: Lashkarev, G. V.; Paderno, Yu. B.

ORG: Institute of Materials Science Problems, Academy of Sciences, UkrSSR, Kiev (Institut problem materialovedeniya Akademii nauk UkrSSR)

TITLE: Physical properties and chemical bonding of rare earth chalcogenides

SOURCE: AN SSSR. Izvestiya. Neorganicheskiye materialy, v. 1, no. 10, 1965, 1791-1802

TOPIC TAGS: rare earth metal, selenide, telluride, sulfide, semiconducting material

ABSTRACT: Available data on the crystal structure and the magnetic, electric, thermal, and galvanomagnetic properties of rare earth chalcogenides are systematized. The forbidden gap widths of sesquiselenides from lanthanum to samarium and of Sm_2S_3 are determined. Coefficients of thermal expansion of these compounds and of Pr, Nd, and Sm oxytellurides and also the thermal conductivity coefficients of La, Ce, and Nd sesquiselenides are measured. The interatomic distances M-M, M-X, and X-X in mono- and sesquichalcogenides and ditellurides of rare earths are calculated. An attempt is made to account for the fact that the conduction band in rare earth chalcogenides is the 5d band of rare earth metals. The energy gap between $4f^6$, $4f^7$, and $4f^{14}$ levels of rare earth ions

Card 1/2 UDC: 546.65'221+546.65'231+546.65'241

Card 2/2

L 7928-66

ACC NR: AP5027936

can be measured by studying their depth in Sm, Eu, and Yb chalcogenides. A change in composition from $LaSe_{1.5}$ to $LaSe_{1.43}$ changes the electrical resistance by 13 orders of magnitude. The semiconducting properties of Sm, Eu, and Yb chalcogenides of the composition M_2X_3-M_3X_4 and of oxychalcogenides M_2O_2Te were predicted, and experimentally confirmed for M_2O_2Te. Authors express their sincere appreciation to G. V. Samsonov, corresponding member of AN UkrSSR, for his unflagging interest in the work and helpful comments. Orig. art. has: 4 figures and 4 tables.

SUB CODE: IC, SS / SUBM DATE: 05Jul65 / ORIG REF: 011 / OTH REF: 029

Card 2/2

ACCESSION NR. AP5002800

AUTHOR: Vaynshteyn, E. Ye.; Blokhin, S. M.; Bril', M. N.; Staryy, I. B.; Paderno, Yu. B.

TITLE: X-ray spectral investigation of the valency state of rare earth element atoms in the hexaborides

SOURCE: Zhurnal neorganicheskoy [illegible]

TOPIC TAGS: [illegible] earth hexaboride, rare earth element [illegible] termination [illegible]

[illegible]

Differences in the short wave [illegible] structure of the oxides and hexa[illegible] the absorption edge toward the [illegible]

Card 1/2

L 34497-65
ACCESSION NR: AP5002800

oxides indicated the valency was less than 3. The spectra of Sm in SmB_6 were interpreted to indicate the presence of 35-40% divalent Sm distributed among the trivalent Sm. The effect of temperature [illegible] on the [illegible] Sm is being studied. Orig. art. has: 5 figures and 1 table.

ASSOCIATION: Institut neorganicheskoy khimii Sibirskogo otdeleniya AN SSSR
Institute of Inorganic Chemistry, Siberian Branch, AN SSSR

Institute

SUBMITTED: 11Jun63 ENCL: 00 SUB CODE: IC, GC

NR REF SOV: 007 OTHER: 001

Card 2/2

L 32053-66 EWP(e)/EWT(m)/EWP(t)/ETI IJP(c) JD/JG/AT/WH

ACC NR: AP6013341 (A) SOURCE CODE: UR/0363/66/002/004/0626/0629

48
B

AUTHOR: Paderno, Yu. B.; Yupko, V.L.; Rud', B.M.; Makarenko, G.N.

ORG: Institute of Materials Science Problems, Academy of Sciences UkrSSR (Institut problem materialovedeniya Akademii nauk Ukr SSR)

TITLE: Physical properties of certain rare earth dicarbides

SOURCE: AN SSSR. Izvestiya. Neorganicheskiy materialy, v. 2, no. 4, 1966, 626-629

TOPIC TAGS: rare earth metal, carbide, electric property, Hall constant, thermoelectromotive force

ABSTRACT: The temperature dependence of the electrical resistance in the 20 — 1300C temperature range, the coefficient of absolute thermoemf, the Hall coefficient at room temperature, and the melting point were measured on the same samples of Y, La, Ce, Pr, and Nd dicarbides. From these measurements, the charge carrier concentrations and mobilities were calculated. An anomalous temperature dependence of the electrical resistance was observed around 1000C. The high effective carrier concentration in CeC_2 as compared to the other dicarbides studied is explained on the basis of the electronic

Card 1/2 UDC: 546.65'261

L 45915-66 EWT(1)/EWT(m)/EW[illegible]/T/EWP(t)/ETI IJP(c) JD/JG/AT

ACC NR: AP6028618 SOURCE CODE: UR/0057/66/036/008/1435/1448

AUTHOR: Samsonov,G.V.; Paderno, Yu.B.; Fomenko,V.S.

ORG: Refractory Materials Section, Institute of Problems in the Study of Materials, AN UkrSSR, Kiev (Sektor tugoplavkikh materialov Instituta problem materialovedeniya AN UkrSSR)

TITLE: Concerning the thermionic emission characteristics of the transition metals and their compounds

SOURCE: Zhurnal tekhnicheskoy fiziki, v. 36, no. 8, 1966, 1435-1448

TOPIC TAGS: work function, thermionic emission, electron structure, transition element

ABSTRACT: From considerations of elementary logic and a correct philosophical position concerning the relation of base to superstructure, the authors conclude that the main factor that determines the work function of a thermionic emitter is the electronic structure in the body of the material, and not merely the structure of the surface layers, to which, they say, the majority of investigators in the field have erroneously confined their attention. This paper is an extensive defense of that thesis. The work functions of elements from all parts of the periodic table are compared with the corresponding electronic structures, and the conclusion emerges that a high statistical weight of the stable electron configuration and a low statistical weight of the

Card 1/2

UDC: 537.581

L 06482-67 EWT(m)/EWP(e)/EWP(t)/ETI IJP(c) WH/JD

ACC NR: AP6028294 SOURCE CODE: UR/0363/66/002/006/0980/0983

AUTHOR: Dudnik, Ye. M.; Lashkarev, G. V.; Paderno, Yu. B.; Obolonchik, V. A. 41 37 13

ORG: Institute of Materials Science Problems, Academy of Sciences, UkrSSR (Institut problem materialovedeniya Akademii nauk UkrSSR)

TITLE: Thermal expansion of rare earth chalcogenides 15 27

SOURCE: AN SSSR. Izvestiya. Neorganicheskiye materialy, v. 2, no. 6, 1966, 980-983

TOPIC TAGS: thermal expansion, selenide, telluride, rare earth compound

ABSTRACT: The temperature dependence of the relative elongation of EuS, EuSe, La_2Se_3, Ce_2Se_3, Pr_2Se_3, Nd_2Se_3, Nd_2Se_3, Sm_2Se_3, Sm_2S_3, Pr_2O_2Te and Sm_2O_2Te was studied in the range from room temperature to 800°K. The measurements were made with a quartz dilatometer. In passing from the rare earth metals to their compounds with an ionic-covalent bond character, the thermal expansion coefficient α increases (with the exception of europium), apparently because of an increased anharmonicity of the thermal vibrations of the crystal lattice. The value of α of the chalcogenides increases in the rare earth series and in passing from sulfides to selenides; this is also due to increased anharmonicity. The α values of oxytellurides are intermediate between those of oxides and sesquisulfides. From the α values, the Debye temperatures θ of the compounds were calculated and found to decrease with increasing atomic number of the rare earth metal (except in the case of samarium). The melting points of the sesquisele-

Card 1/2 UDC: 546.651/659'851:536.413

L 06182-67
ACC NR: AP6028294

nides were also estimated from the α values. Authors express their appreciation to T. M. Mikhlina and V. G. Dem'yanchuk for assistance in the preparation of the compact samples and for performing chemical analyses of the rare earth chalcogenides, and also to S. V. Radzikovskaya and Ye. D. Leonova for carrying out the chemical analysis of pyrite and for assistance in the preparation of Sm_2S_3 and EuS samples. Orig. art. has: 4 tables and 3 formulas.

SUB CODE: 07,20/ SUBM DATE: 29Jun65/ ORIG REF: 017/ OTH REF: 005

Card 2/2 mRE

L 3355-66 EWT(1)/EWT(m)/EWP(w)/ETC/EWG(m)/T/EWP(t)/EWP(b)/EWA(h) IJP(c) RDW/JD/
ACCESSION NR: AP5013479 JG/AT UR/0185/65/010/005/0566/0568

AUTHOR: Lashkar'ov, H. V.; Paderno, Yu. B.

TITLE: The electrical properties of Pr_2Se_3 and Nd_2Se_3

SOURCE: Ukrayins'kyy fizychnyy zhurnal, v. 10, no. 5, 1965, 566-568

TOPIC TAGS: semiconducting material, selenide, rare earth, forbidden zone width

ABSTRACT: The authors ran tests to supply information on the little-known electrical properties of Pr_2Se_3 and Nd_2Se_3, and to support their earlier thesis that the sesquiselenides of the rare earths should be semiconductors. The functions lg ρ and T and $\alpha = f(10^3/T)$ for Pr_2Se_3 are typical of semiconductors. (See fig. 1 of the Enclosure). The mean value of the forbidden zone width ΔE_0 for two samples was found to be 1.81 + ev; that for Nd_2Se_3 was 1.60. The function $\lg \rho T = f(10^3/T)$ for Nd_2Se_3 (fig. 2 of the enclosure) also indicated the semiconductor nature of this substance. The value of b was less than unity for both substances. Orig. art. has: 2 figures, 1 table.

ASSOCIATION: Instytut problem materiatoznavstva AN URSR, Kiev (Institute for Materials Problems, AN URSR)

SUBMITTED: 12Jan64 ENCL: 02 SUB CODE: IC, EM
NO REF SOV: 003 OTHER: 002

Card 1/3

L 3355-66

ACCESSION NR: AP5013479

ENCLOSURE: 01

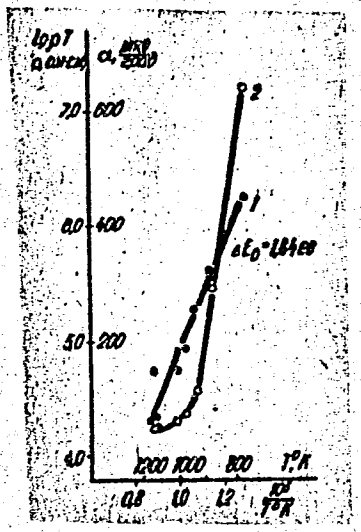

Fig. 1. Electrical data for Pr_2Se_3. $lg\rho T = f(10^3/T)$ (curve 1) and $\alpha = f(10^3/T)$, as functions of temperature. ρ is computed in ohm-cm, α in $\mu v/deg$ on the Y-axis. Temperature is plotted in °K and $10^3/T$°K on the X-axis.

Card 2/3

L 3355-66

ACCESSION NR: AP5013479

ENCLOSURE: 02

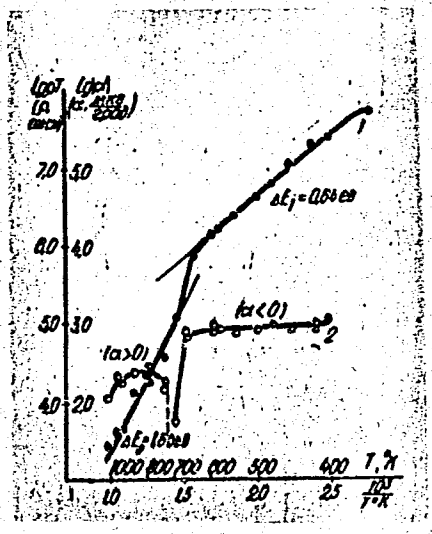

Fig. 2. Data for Nd_2Se_3, similar to that given in Fig. 1. lg $\alpha = f(10^3/T)$ is plotted on the right-hand portion of the Y-axis.

Card 3/3

L 3357-66 EWT(1)/EWP(e)/EWT(m)/EWP(w)/EWP(i)/ETC/EWG(m)/T/EWP(t)/EWP(b)/EWA(h)
IJP(c) JD/JG/AT/WH
ACCESSION NR: AP5013473 UR/0185/65/010/005/0520/0524

AUTHOR: Lashkar'ov, H. V. (Lashkarev, G. V.); Paderno, Yu. B.; Radzikivs'ka, S. V. (Radzikovskaya, S. V.); Fedorchenko, V. P.

TITLE: Electric properties of Sm_2S_3

SOURCE: Ukrayins'kyy fizychnyy zhurnal, v. 10, no. 5, 1965, 520-524

TOPIC TAGS: samarium compound, lanthanide series, refractory compound, semiconducting material, electric conductivity, semiconductor band structure, sulfide

ABSTRACT: A method is described for producing compact specimens of samarium sesquisulfide and for measuring their thermoelectric power and electrical conductivity. These parameters were studied in the 300-1300°K temperature range. It is shown that Sm_2S_3 is a refractory semiconductor in which the forbidden band has a width of 2.96 ev. The lengths of the Me-Me, Me-S and S-S bonds are calculated in known sesquisulfides (Me_2S_3) of lanthanides with a Th_3P_4 structure, and in SmS, on the basis of ionic crystal radii. A comparison of these data shows that the covalent S-S bonds are strengthened at the expense of a reduction in the strength of the ionic Me-S bonds, which indicates that the chemical bonds in lanthanide sesqui-

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L 3357-66

ACCESSION NR: AP5013473

sulfides are ionic-covalent. Interatomic spacing and the physical properties of SmS and Sm_2S_3 are compared. It is found that there is no quasi-extrinsic 4f level in Sm_2S_3 and that the forbidden band in this compound is narrower than that of SmS. Orig. art. has: 4 figures, 2 tables.

ASSOCIATION: Instytut problem materialoznavstva AN URSR, Kiev (Institute of Problems in the Study of Materials, AN URSR)

SUBMITTED: 27Oct64 ENCL: 00 SUB CODE: SS, EM

NO REF SOV: 007 OTHER: 005

Card 2/2

L 4988-66 EWT(1)/EWP(e)/EWT(m)/EWP(i)/ETC/EPF(n)-2/EWG(m)/EPA(w)-2/T/EWP(t)/EWP(b)

ACC NR: AP5025901 IJP(c) JD/JG/AT/WH SOURCE CODE: UR/0057/65/035/010/1860/1862

AUTHOR: Paderno, Yu. B.; Fomenko, V. S.; Podchernyayeva, I. A.; Makarenko, G. N.

ORG: Institute for the Study of Problems of Material Sciences, AN SSSR, Kiev (Institut problem materialovedeniya AN SSSR)

TITLE: Thermionic emission from CeC_2

SOURCE: Zhurnal tekhnicheskoy fiziki, v. 35, no. 10, 1965, 1860-1862

TOPIC TAGS: thermionic emission, rare earth metal, cerium carbide, carbide, cathode, cerium bicarbide

ABSTRACT: The thermal emission properties of CeC_2, whose electronic structure resembles that of ThC_2 (which is known to be a good emitter) have been investigated in the temperature range of 1200—1770K, in view of the possible use of the material for the production of efficient cathodes. The methods and instrumental setup used for the experiments were described in an earlier work (Samsanov, G. V., V. S. Fomenko, V. N. Paderno, and B. M. Rud'. Teplofizika vysokikh temperatur, 2, 730, 1964). Suspended in absolute alcohol, the carbide was deposited onto a tantalum substrate upon which it formed a 0.2—0.3-mm-thick layer. To prevent oxidation, the deposition did not last more than three

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L 4988-66
ACC NR: AP5025901

minutes. The measurements of the work function taken during the activation process showed a minimum of 2.49 ev at 1380K, which value remained unchanged until 1520K, when an insignificant increase could be observed. At any given fixed temperature, the stationary value of the work function was attained rapidly when the cathode temperature was high. The good emission properties of CeC_2 are indicated by its fast activation, with the work function changing from 3.20 to 2.49 ev in the temperature range of 1220—1380K. The maximum current density actually measured was 3 amp/cm^2 at a cathode temperature of 1700K, but a rough extrapolation leads to a value of 17 amp/cm^2 at 2300K. The authors hope that studies of other rare-earth metal carbides may help to explain the influence of the electronic structure on the emission properties of materials. Orig. art. has: 2 figures. [ZL]

SUB CODE: EM,IC/ SUBM DATE: 05Feb65/ ORIG REF: 004/ OTH REF: 004

ATD PRESS: 4131

Card 2/2

L 57105-65 EWP(e)/EWT(m)/EWP(i)/EPF(n)-2/EWG(m)/EPR/EWP(t)/EWP(b) Ps-4/
Pi-4 EWP(c) JD/JG/AT/WH
ACCESSION NR: AP5015438 UR/0185/65/010/006/0622/0629

AUTHOR: Samsonov, H. V. (Samsonov, G. V.); Paderno, Yu. B.; Fomenko, V. S.

TITLE: Thermal emission characteristics of transition metals and their compounds

SOURCE: Ukrayins'kyy fizychnyy zhurnal, v. 10, no. 6, 1965, 622-629

TOPIC TAGS: work function, thermionic emission, transition emission, transition metal, refractory compound, electron configuration, boride structure, nitride structure, silicide structure, carbide structure

ABSTRACT: The purpose of this article was to bring together some of the data collected to date on the thermal emission properties of various transition metals. The authors discuss the relationship between the electronic structure of transition metals, their alloys and compounds with boron, carbon, silicon and nitrogen, and the characteristics of their thermal emission. The article shows the work function of different transition metals and their carbides, borides, nitrides, and silicides as a function of their atomic numbers (Figure 1 of the Enclosure). The effects of the electron configurations in alloys of transition metals containing d-electrons, transition metals with other metals containing the outer s- and p-electrons, and transition metals with boron, carbon silicon, and nitrogen are considered with respect to their work function. It is shown that the electronic work

Card 1/3

L 57105-65

ACCESSION NR: AP5015438

[illegible] significantly on the nature of filling of the f- and d-electron shells of the [illegible] of refractory compounds is [illegible] by the degree of [illegible]

[illegible] electrons [illegible]

result [illegible]

property, [illegible]

for the production of efficient therm[illegible]

and 1 table.

ASSOCIATION: Instytut problem materialoznavstva AN URSR, Kiev (Institute for Material Research Problems, AN URSR)

SUBMITTED: 27Mar64 ENCL: 01 SUB CODE: TD, MM

NO REF SOV: 018 OTHER: 001 ATD PRESS: 4036

Card 2/3

L 57105-65

ACCESSION NR: AP5015438

ENCLOSURE: 01

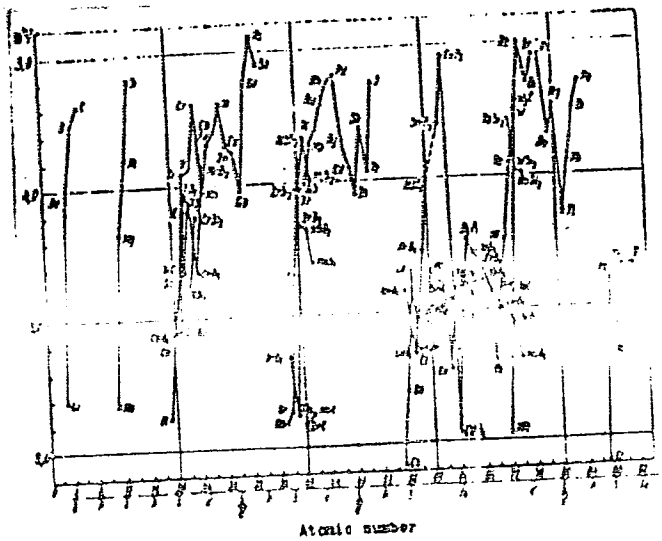

Fig. 1. Work function of elements and compounds as related to their position in the periodic table

x - Element; 0 - borides; ä - carbides; o - silicides.

Card 3/3

AUTHOR: Paderno, Yu. B.; Romanyuk, L. I.; Fomenko, V. S.

TITLE: Utilization of lanthanum hexaboride as the cathode of an ion source

SOURCE: Ukrayins'kyy fizychnyy zhurnal, v. 8, no.6, 1963, 707-708

TOPIC TAGS: lanthanum hexaboride cathode, ion source

ABSTRACT: The suitability of lanthanum hexaboride as a cathode of an ion source with electron oscillations in a magnetic field was investigated.

polished. The porosity of the tablets

discharge experiments,

Card 1/2

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ACCESSION NR: AP3002130

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were 200 v, 1.5 amp, and 900 e, respectively. The density of discharge
[illegible] the cathode was 5.3 amp/cm sub 2. The density of ion current at
[illegible]
to 10 hr.

ASSOCIATION: Instytut fizyky AN URSR (Physics Institut AN URSR);
[illegible]
Metallurgy and Special Alloys AN URSR)

SUBMITTED: 21Dec62 ENCL: 00 SUB CODE: NP,IC

NO REF SOV: 002 OTHER: 001 ATD PRESS: 2027

Card 2/2

L 42965-65 EWP(e)/EWT(m)/T/EWP(t)/EWP(b)/EWA(c) IJP(c) JD/JG
ACCESSION NR: AP5009426 S/0239/64/000/003/0078/0084

AUTHOR: Samsonov, G.V.; Paderno, Yu. B.; Vaynshteyn, E. Ye.

TITLE: Chemical bonding in rare earth hexaborides

SOURCE: AN SSSR. Sibirskoye otdeleniye. Izvestiya. Seriya khimicheskikh nauk, no. 3, 1964, 78-84

TOPIC TAGS: rare earth, rare earth hexaboride, hexaboride structure, hexaboride electromagnetic property, hexaboride physical property

ABSTRACT: The authors discuss the bonding of rare earth hexaborides in terms of the work reported in the literature and their own contributions. The analysis of the structures and properties of the hexaborides reveals their dual nature. On the one hand, their crystal lattice may be regarded as a simple cubic lattice of metal atoms with its center occupied by an octahedron of boron atoms which distort it to some extent; on the other hand, it may be regarded as a simple cubic lattice made up of a group of boron atoms, at the center of which the atoms of the metal are freely distributed. Accordingly, the electric and magnetic properties of the hexaborides [illegible] i.e., the properties related to the energy levels of the electrons, are determined [illegible] the metal forming the

Card 1/2

hexaboride, and may change substantially from one hexaboride to another. However, the properties due to the normal vibrations of the atomic groups of the lattice (melting point, hardness, etc.) are determined by the rigid structural skeleton consisting of boron atoms and is relatively independent of the particular properties of the metal forming the hexaboride. Orig. art. has: 2 figures and 2 tables.

ASSOCIATION: Institut neorganicheskoy khimii Sibirskogo otdeleniya AN SSSR, Novosibirsk (Institute of Inorganic Chemistry, Siberian Branch, Academy of Sciences of the SSSR; Institut metallokeramiki i spetsial'nykh splavov AN UkrSSR, Kiev (Institute of Powder Metallurgy and Special Alloys, Academy of Sciences of the Ukrainian SSR)

SUBMITTED: 10Jul63 ENCL: 00 SUB CODE: IC

NO REF SOV: 013 OTHER: 012

ACCESSION NR: AP4015271 S/0226/64/000/001/0113/0114

AUTHOR: Paderno, Yu. B.

TITLE: All-Union inter-institutional conference

SOURCE: Poroshkovaya metallurgiya, no. 1, 1964, 113-114

TOPIC TAGS: powder metallurgy, cermet, heat resistant metal, heat resistant alloy, refractory metal manufacture, refractory metal physical property, refractory metal chemical property, refractory metal structure, Soviet science

ABSTRACT: The author reports on a conference organized by the Institut metallokeramiki

L 8875-65
ACCESSION NR: AP4015271

19 8

physical and mechanical properties of refractory compounds, and especially with their properties at high temperatures, several new laboratory techniques were [illegible] V, Nb and the silicides, germanides, carbides and aluminides of the [illegible]

ASSOCIATION: None

SUBMITTED: 00 ENCL: 00 SUB CODE: MM

NO REF SOV: 000 OTHER: 000

Card 2/2

L 12445-65 EWA(k)/EWT(l)/EWT(m)/EPF(n)-2/EPR/EEC(t)/EPA(bb)-2/EWP(b)/EWP(e) Ps-4/
Pu-4 AFWL APGC(d) BSD/ASD(a)-5/AS(mp)-2/ESD(gs)/ESD(t) JD/JG/AT/WH
ACCESSION NR: AP4046596 S/0181/64/006/010/2909/2912

AUTHOR: Vaynshteyn, E. Ye.; Blokhin, S. M.; Paderno, Yu. B.

TITLE: X-ray spectral investigation of samarium hexaboride

SOURCE: Fizika tverdogo tela, v. 6, no. 10, 1964, 2909-2912

TOPIC TAGS: samarium compound, x ray spectrum, absorption spectrum, europium compound, ytterbium compound, fine structure

ABSTRACT: The samarium hexaboride was obtained by a vacuum-thermal method (G. V. Samsonov and Yu. B. Paderno, Boridy* redkozemel'ny*kh metallov [Borides of Rare Earth Metals], AN UkrSSR, Kiev, 1961). For comparison and to facilitate the interpretation of the data, x-ray L_{III} absorption spectra were obtained for europium, ytterbium oxide, and hexaboride, using the same experimental conditions. The absorption spectra were obtained with a DRS-3 long-wave x-ray spectrograph in the first order of reflection from the (1340) plane

Card 1/3

L 12445-65

ACCESSION NR: AP4046596

of a quartz crystal. The spectra were recorded photographically. The $L_{\alpha 2}$ and $L_{\alpha 3}$ lines of europium were used as the comparison lines. The structure of the L_{III} absorption edges of samarium in SmB_6 was investigated in the interval from -120 to +400C. An analysis of the fine structure indicates that the samarium atoms exist in SmB_6 in two different valence states, which are statistically distributed in crystallographically equivalent positions of the lattice of the compound. The absorption spectrum of samarium in SmB_6 has several features distinguishing it from hexaborides of other rare-earth metals. Chief among these features is the presence of an additional absorption band whose maximum is shifted by about 7 eV towards the longer wavelengths compared with the principal maximum. This hypothesis is confirmed by plotting the theoretical absorption curves corresponding to the different relative contents of the divalent and trivalent samarium and a corresponding analysis. It is estimated that the divalent samarium may amount to $\sim(35 \pm 5)\%$ of the total number of samarium atoms. Orig. art. has: 3 figures.

Card 2/3

L 12445-65
ACCESSION NR: AP4046596

ASSOCIATION: Institut neorganicheskoy khimii SO AN SSSR (Institute of Inorganic Chemistry, SO AN SSSR); Institut spetssplavov i metallokeramiki AN UkrSSR (Institute of Special Alloys and Metal Ceramics, AN UkrSSR)

SUBMITTED: 17Feb64 ATD PRESS: 3121 ENCL: 00

SUB CODE: SS, IC NO REF SOV: 008 OTHER: 008

Card 3/3

L 13762-65 EWP(e)/EWT(m)/EPF(n)-2/EPR/EWP(b) Pc-4/Pu-4 ASD(d)/ASD(m)-3 ID/
ACCESSION NR: AP4045190 S/0080/64/037/009/1872/1878

AUTHOR: Samsonov, G. V.; Obolonchik, V. A.; Paderno, Yu. B.; Serbina, R. V.; Fomenko, V. S.; Ogorodnikov, V. V.

TITLE: Synthesis and some physical and chemical properties of the binary lanthanum-sodium boride

SOURCE: Zhurnal prikladnoy khimii, v. 37, no. 9, 1964, 1872-1878

TOPIC TAGS: boride, lanthanum boride, lanthanum sodium boride, lanthanum sodium boride synthesis, boride synthesis, lanthanum sodium boride property

ABSTRACT: The binary lanthanum-sodium boride was obtained by electrolysis of a fused salt electrolyte consisting of 100 g borax, 30 g sodium fluoride, and 15 g lanthanum oxide. The electrolysis was performed at 900—950C with a current density of 0.5 amp/cm². The cathode deposits obtained under the above conditions contained 86.9% lanthanum, 6.8% sodium, 36.8% boron, 0.4% free carbon, and no free boron. The composition could be varied by changing the amount of

Card 1/2

L 13762-65
ACCESSION NR: AP4045190

borax in the electrolyte. X-ray diffraction patterns of three binary borides of different compositions contained only the lanthanum hexaboride lines. The increase of the lattice constant with increasing sodium content indicates that sodium atoms first replace lanthanum atoms in the lanthanum hexaboride lattice and then [illegible]

[illegible]

ASSOCIATION: none

SUBMITTED: 07Jan63 ATD PRESS: 3132 ENCL: 00

SUB CODE: IC, GC NO REF SOV: 005 OTHER: 005

Card 2/2

ACC NR: AP7004402 SOURCE CODE: UR/0226/67/000/001/0081/0084

AUTHOR: Rud', B. M.; Paderno, Yu. B.

ORG: Institute of Problems in Science of Materials, AN UkrSSR (Institut problem materialovedeniya AN UkrSSR)

TITLE: Physical properties of lanthanum disilicide in the region of homogeneity

SOURCE: Poroshkovaya metallurgiya, no. 1, 1967, 81-84

TOPIC TAGS: physical property, lanthanum disilicide, homogeneity, solid solution

ABSTRACT: The existence of a continuous transition between structures of α-$ThSi_2$ and α-$GdSi_2$ in the region of homogeneity of lanthanum disilicide, detected by the x-ray structural analysis method, has been confirmed. A decrease in the statistical weight of sp^3-hybridization of Si electrons causes rhombic distortion of the structure. With an increase in the deficit of Si atoms in lanthanum disilicides, there is an increase in the specific electric resistivity and Hall's coefficient due to filling of the 3p-band of silicon. The authors express their gratitude to G. V. Samsonov and Ye. I. Gladyshevskiy for valuable comments. Orig. art. has: 3 figures. [Authors' abstract] [AM]

SUB CODE: 11/SUBM DATE: 10Aug66/ORIG REF: 008/OTH REF: 001/

Card 1/1

ACC NR: AP7004406

conductivity of $NdGaSe_3$ is explained on the basis of the electron structure of isolated atoms and their ionization potential. An hypothesis is advanced as to the nature of the chemical bonding in chalcogenides of rare-earth metals. Orig. art. has: 1 figure and 3 tables. [Authors' abstract] [NT]

SUB CODE: 11/SUBM DATE: 10Aug66/ORIG REF: 011/OTH REF: 004/

Card 2/2

ACC NR: AP7008531 SOURCE CODE: UR/0363/67/003/002/0395/0397

AUTHOR: Paderno, Yu. B.; Yupko, V. L.; Rud', B. M.; Kvas, O. F.; Makarenko, G. N.

ORG: Institute of Material Science Problems, AN UkrSSR (Institute problem materialovedeniye AN UkrSSR)

TITLE: Electrophysical properties of Gd, Tb, Dy, Er, Tu dicarbides

SOURCE: AN SSSR. Izvestiya. Neorganicheskiye materialy, v. 3, no. 2, 1967, 395-397

TOPIC TAGS: gadolinium [redacted], terbium [redacted], dysprosium [redacted], erbium [redacted], thulium [redacted], dicarbide [redacted], carbide, resistivity, Hall effect, carrier density

ABSTRACT: The results are presented of an experimental determination of the electrophysical properties of Gd, Tb, Dy, Er, and Tu dicarbides. Initial powder carbides were obtained by the reduction of metal oxides with carbon in vacuum at 1800°C for 25-60 min. The carbide powders were compacted and sintered in argon at 1700—1800°C for 15 min under a pressure of 100 kg/cm^2; the porosity of sintered compacts was 5—13%; finished specimens were annealed at 1650°C for 8 hr. It was found that carbide resistivity changed from 30 μohm.c. for GdC_2 to 515 μohm.cm for

Card 1/2 UDC: 546.65'261:541.12.03

ACC NR: AP7008531

TuC_2; the coefficient of emf from -5.95 μv/°C for ErC_2 to -7.75 μ v/°C for TbC_2; Hall effect from -2.55 cm^3/coul for TbC_2 to +136 cm^3/coul for TuC_2; effective carrier concentration from 0.018 el/atom M for TuC_2 to 1.04 el/atom M for TbC_2; and mobility from 6.75 cm^2/v. sec for ErC_2 to 19.6 cm^2/ v. sec for TuC_2. Melting points ranged from 2180°C for TuC_2 to 2280°C for ErC_2. Orig. art. has: 1 figure and 2 tables. [TD]

SUB CODE: 11/ SUBM DATE: 13Jan66/ ORIG REF: 009/ OTH REF: 008

Card 2/2

ACC NR: AP7008532

hexaborides is also discussed. Orig. art. has: 1 figure and 2 tables.

Fig. 1

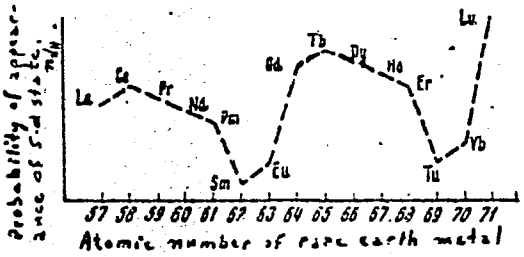


Table 1. Effective carrier concentration n* and parameter $\delta = R/e^2$ of rare earth dicarbides

Phase	LaC_2	CeC_2	PrC_2	NdC_2	GdC_2	TbC_2	DyC_2	ErC_2	TuC_2
n^*, el/at M	0,63	1,08	0,55	0,68	0,89	1,04	0,86	0,79	$1,8 \cdot 10^{-3}$
$\delta \cdot 10^{-23}$, $cm/V^2 sec^2$	−15,5	−4,9	−22,1	−13,9	−23,0	−12,3	−18,4	−14,4	+1,8

SUB CODE: 07/ SUBM DATE: 13Jan66/ ORIG REF: 010/ OTH REF: 007

Card 2/2

PHASE I BOOK EXPLOITATION SOV/5758

Samsonov, Grigoriy Valentinovich, and Yuriy Borisovich Paderno

Boridy redkozemel'nykh metallov (Borides of Rare-Earth Metals) Kiyev, Izd-vo AN UkrsSSR, 1961. 92 p. 1500 copies printed.

Sponsoring Agency: Akademiya nauk Ukrainskoy SSR. Institut metallokeramiki i spetsial'nykh splavov.

Resp. Ed.: I. N. Frantsevich, Corresponding Member, Academy of Sciences UkrSSR; Ed. of Publishing House: I. V. Kisina; Tech. Ed.: T. R. Liberman.

PURPOSE: This booklet is intended for scientific workers and engineers concerned with cathode electronics, high-power electronic devices, and the synthesis of refractory compounds.

Card [redacted]

SHTEYNBERG, L.D.; PADEROVA, N.M.

So-called ambulatory forms of rheumatism in children. Pediatriia, Moskva No.4:10-17 July-Aug 51. (CIML 21:4)

1. Of the Department of Faculty Pediatrics, Voronezh Medical Institute (Head of Department--Prof. L.D. Shteynberg), and of the Antirheumatic Room ofthe Specialized Children's Polyclinic (Head of Polyclinic--K.M. Laptina).

HRDEK, M, D

621.314.21 : 66.047

5046. Drying of transformers in a vacuum drying chamber. V. HRBEK, V. ZITA AND B. PADERTA. *Elektrotech. Obzor*, 44, No. 5, 266-72 (1955) In Czech. EE

Vacuum drying methods in the[mselves] cannot achieve the desired results unless the[y a]re correctly controlled, and may even waste precious time in production. If, however, the essentials of thermal diffusion processes are well understood and considered, the efficiency of this drying method can be raised to practically 100% and the time required reduced to ⅓. The theory and practical execution of the improved processes are considered.

ELECTRICAL RESEARCH ASSOCIATION

(2)

Paderta, B.

"The charging process in a Marx surge-generator circuit while the d. c. powder supply is being progressively increased.

p. 143 (Prace, Vol. 6, 1956 (Published 1957) Praha, Czechoslovakia)

Monthly Index of East European Accessions (EEAI) LC, Vol. 7, No. 6, June 1958

PADERTA, B.

PADERTA, B.

Choking coils for filters.

P. 151 (Automobil) Vol. 1, No. 5, 1956 (Published 1957) Czechoslovakia

SO: MONTHLY INDEX OF EAST EUROPEAN ACCESSIONS (EEAI) LC. - VOL. 7, NO. 1, JAN. 1958

PADERTA, B.

Third harmonic voltage in the generator-transformer with direct grounding of the neutral point. p.151.
(Elektrotechnik, Vol. 12, No. 5, May 1957, Praha, Czechoslovakia)

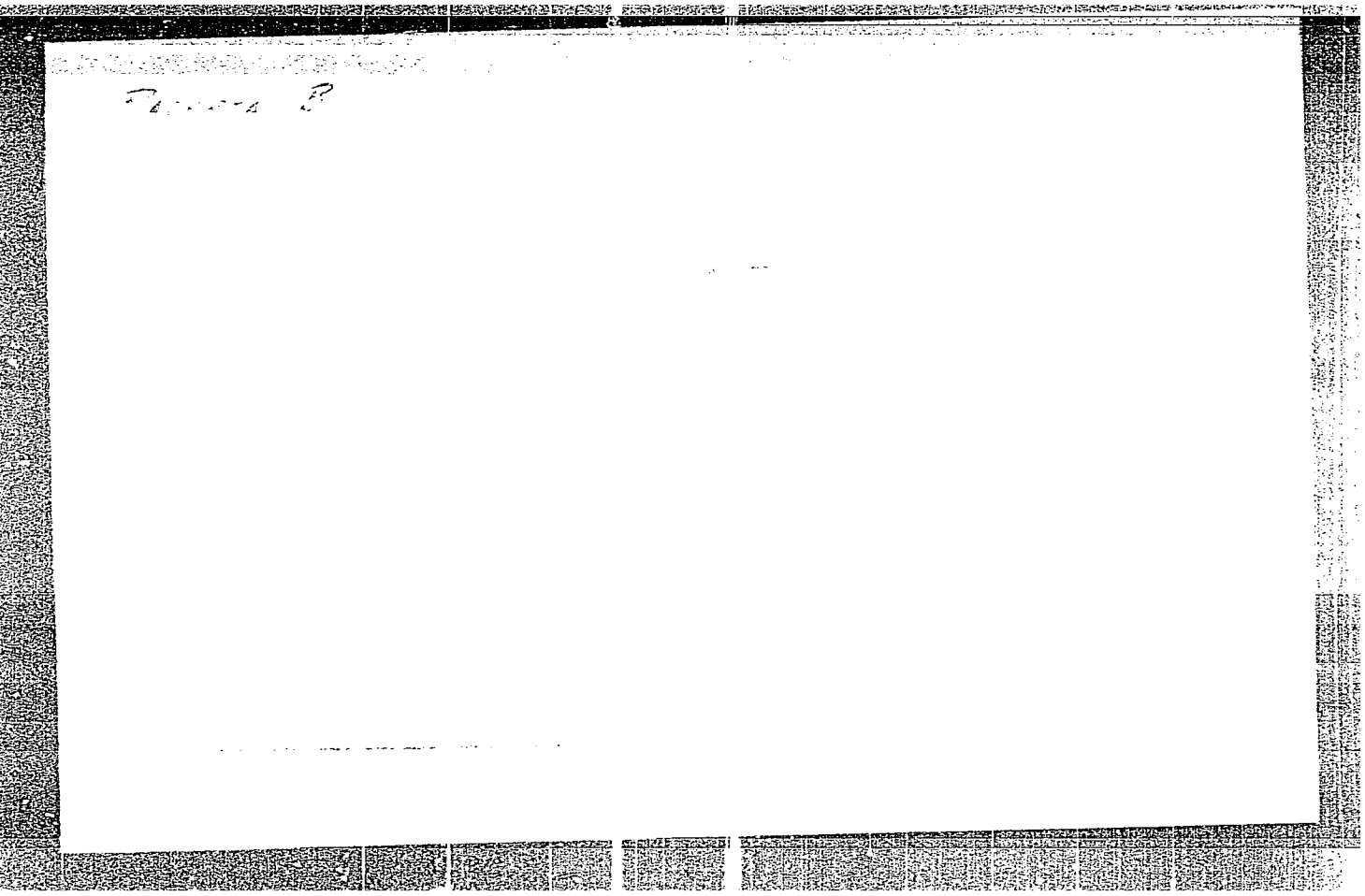
SO: Monthly List of East European Accessions (EEAL) LC. Vol. 6, No. 9, Sept. 1957. Uncl.

PADERTA, B.

Some defects of regulating transformers with an impedance choke.

p. 282 (Elektrotechnik) Vol. 12, no. 9, Sept. 1957, Praha, Czechoslovakia

SO: MONTHLY INDEX OF EAST EUROPEAN ACCESSIONS (EEAI) LC, VOL. 7, NO. 1, Jan. 1958



PADERTA, B.

3

PADERTA, B.

TECHNOLOGY

Periodical ACTA TECHNICA. VOL. 3, no. 6, 1958

PADERTA, V. HELLER, B.: Internal overvoltages in transformers due to no-load switching. In german. p. 399.

Monthly List if East European Accessions (EEAI) LC, Vol. 8, no. 3, March, 1959. Uncl.

PADERTA, B.

4

PHASE I BOOK EXPLOITATION · CZECH/4388

Bašta, Jan, Professor, Engineer, Doctor, Vojtěch Kulda, Engineer, Zdeněk Zoubek, Engineer, Jan Kopeček, Engineer, Zbyněk Vlášek, Engineer, Bedřich Paderta, Engineer, Miroslav Kondr, Engineer, Miloš Frydl, and Jiří Kulda, Engineer

Měření na elektrických strojích. [sv.] 2: Měření na transformátorech (Measurements of Electric Machines. v.2: Measurements of Transformers) Prague, SNTL, 1959. 247 p. 2,700 copies printed.

Reviewer: Vladimír Hrbek, Engineer; Resp. Ed.: Ladislav Ženíšek, Engineer; Chief Ed.: František Kašpar, Engineer, Doctor; Tech. Ed.: Marie Králová.

PURPOSE: This book is intended for electrical engineers concerned with transformer problems.

COVERAGE: The book constitutes the second part of a collective work on measurements of electrical machines. It contains a list of preliminary operations in testing transformers and on measuring individual quantities: mechanical,

Card 1/15

electric, magnetic, and thermal. Testing procedures for special transformers, transducers, reactors, and choke coils are also treated. The equipment used in test rooms, the testing methods, and the preparation of the results of measurements are described. Engineer Vojtěch Kulda wrote most of Chapters I, III, XVII, XIX, XXI, cooperated in writing Chapters II, VII, VIII, IX, XI, XII, XIV, XX, XXIV, and contributed to Chapters IV, V, VI, XV, and XVI. Engineer Zdeněk Zoubek wrote most of Chapters IV, V, VI, VII, IX, X, XXIII, cooperated in writing Chapters II, VIII, XI, XII, XXIV, and contributed to Chapters I and XVI. Professor Engineer Doctor Jan Bašta wrote most of Chapters XIII, XVI, XXII, cooperated in writing Chapters VIII, XII, XIV, XVII, and contributed to Chapters XV, XVIII and XX. Engineer Jan Kopeček wrote most of Chapters XV and XX, cooperated in writing Chapters VIII, XII, XIV and XVII, and contributed to Chapters I and XVI. Engineer Bedřich Paderta cooperated in writing Chapter I and contributed to Chapters II, III, IV, VI, VII, VIII, XI, XII, XV, XVI, XIX and XX. Engineer Zbyněk Vlášek cooperated in writing Chapters I, XVII and XXIV, and contributed to Chapters IV, VIII and XII. Engineer Miroslav Kondr cooperated in writing Chapters XIV and XV. Miloš Frydl wrote Chapter XVIII. Engineer Jiří Kulda cooperated in writing Chapter XIV and contributed to Chapter IV. The editors thank Engineer Doctor Jiří Lammeraner, Corresponding Member of the Czechoslovak Academy of Sciences and Engineer V. Hrbek. References follow each chapter.

Card 2/15

PADERTA, B.

"Surge tests of electric transformers. Technicka."

Elektrotechnicky Obzor. Praha, Czechoslovakia. Vol. 48, no. 2, Feb. 1959.

Monthly list of East European Accessions (EEAI), LC, Vol. 8, No. 6, Jun 59, Unclas

PADERTA, Bedrich, inz. CSc.

Determining the distribution curve of the breakdown cumulative rate by two measurements. El tech cas 16 no.3:165-171 '65.

1. Institute of Electrical Engineering of the Czechoslovak Academy of Sciences, Prague, Vaclavske namesti 55. Submitted July 2, 1964.

PADERTA, Bedrich, inz. CSc.

Experimental determination of the input capacitance of transformers. El tech obzor 53 no.4:216-218 Ap '64.

1. Czechoslovak Academy of Sciences.

PADERTA, Bedrich, inz. CSc.

Winding with an increased interthread capacity. El tech obzor 53 no. 3: 181,183 Mr '64.

PADERTA, Bedrich, inz., kandidat technickych ved

Influence of the magnetic circuit and internal resistance of winding on the damping of surge processes. El tech obzor 52 no.7:348-354 Jl '63.

1. Ceskoslovenska akademie ved.

HELLER, Bedrich, akademik; PADERTA, Bedrich, inz., C.Sc.

Screening spacial harmonic magnetic fields and the method of mirror images. El tech cas 13 no.8:457-477 '62.

1. Ustav po elektrotechniku, Ceskoslovenska akademie ved, Praha 1-Nove Mesto, Vaclavske namesti 55.

PADERTA, Bedrich, inz., kandidat technickych ved; KUCERA, Jaroslav, inz., kandidat technickych ved.

Problems in surge tests of large transformers. El tech obzor 50 no.11:634-638 N '61.

1. Ustav pro elektrotechniku, Ceskoslovenska akademie ved (for Paderta). 2. Laborator velmi vysokeho napeti Energetickeho ustavu v Prze (for Kucera).

PADERTA, Bedrich, inz., kandidat technickych ved

Analysis of the stress of cylindrical transformer windings produced by a chopped wave. El tech obzor 50 no.11:626-634 N '61.

1. Ceskoslovenska akademie ved, Ustav pro elektrotechniku.

PADERTA, Bedrich, inz., C.Sc.

Determination of compensating currents in a winding with parallel branches of a transformer with n-layers. El tech cas 13 no.1:36-56 '62.

1. Vedecky pracovnik, Ustav pro elektrotechniku, Ceskoslovenska akademie ved, Vaclavske namesti 55, Praha 1 - Nove mesto.

PADERTA, Bedrich; VINAR, Frantisek

Detection of defects by impulse testing of transformers. Acta tech Cz 5 no.6:553-583 '60. (EEAI 10:4)

1. Institut fur Elektrotechnik der Tschecheslowakischen Akademie der Wissenschaften, Praha.
(Electric transformers)

HELLER, Bedrich, Akademik; PAUERTA, Berich, inz. CSc.; VINAR, Frantisek, inz. CSc.

Surge phenomena in combined transformer windings. Acta techn Cz 9 no.2:97-103 '64

HELLER, Bedrich, Ing.Dr, Doktor der techn. Wissenschaften; PADERTA, Bedrich

The effect of iron on surge phenomena in transformers. Acta techn Cz 5 no.1:1-18 '60. (EEAI 9:6)

1. Korrespondierendes Mitglied der Tschechoslowakischen Akademie der Wissenshaften, Praha (for Heller)
(Iron) (Electric transforfmers)

L 20229-66
ACC NR: AP6010322 SOURCE CODE: CZ/0042/65/000/003/0165/0171

AUTHOR: Paderta, Bedrich (Engineer; Candidate of sciences)

ORG: Institute of Electrical Engineering, CSAV, Prague (CSAV, Ustav pro elektrotechniku)

TITLE: Determination of the distribution curve of the cumulative rate of breakdown with two measurements

SOURCE: Elektrotechnicky casopis, no. 3, 1965, 165-171

TOPIC TAGS: pulse counting, voltage, distribution function

ABSTRACT: In measuring two different voltages mutually near probability of breakdown a large number of pulses must be used on both voltages even when no great emphasis is laid on the precision of the determination of the width of the breakdown distribution curve. The necessary number of pulses is derived considering the probability of placing the mean value in both limiting cases of the assumed binomial distribution. Thus as much as 95% reliability is achieved that no mean value of a subsequent series of measurements will be outside the determined precision. This paper was presented by J. Kucera. Orig. art. has: 4 figures and 18 formulas. [JPRS]

Card 1/1 SUB CODE: 09 / SUBM DATE: 02Jul64 / ORIG REF: 001 OTH REF: 001

PHASE I BOOK EXPLOITATION SOV/4408

Československá akademie věd. Sekce technická

Práce ústavu pro elektrotechniku ČSAV z r. 1957, VIII (Proceedings of the Institute For Electrical Engineering of the CSAV (Czechoslovak Academy of Sciences) for 1957, Nr 8) Prague, 1958. 146 p. 1,250 copies printed.

Scientific Ed.: Miloslav Tayerle, Engineer, Doctor; Chief Ed.: Bedřich Heller, Corresponding Member, Czechoslovak Academy of Sciences, Doctor, Engineer, State Prize Winner; Ed. of this issue: Marie Moravcová; Tech. Ed.: František Končický.

PURPOSE: This collection of articles is intended for specialists in the field of high-voltage technique.

COVERAGE: The collection contains 9 original papers devoted to high-voltage technique and to special problems of heavy-current engineering. The papers deal with calculation of magnetic fields and short-circuit stresses, with the finding of turn short circuits and thermal breakdowns, and with effects of semiconductor coatings on windings. The investigation of lightning

Card 1/ 4

Proceedings of the Institute (Cont.) SOV/4408

IX. Štafl, Miloš. Conducting Cylinder in a Magnetic Field 137
There are 8 references: 3 Soviet, 4 English, and 1 German.

AVAILABLE: Library of Congress

Card 4/4

JP/rsm/ec
12-1-60

PADERTA, Gustav

Packaging of the consumer goods industry products. Tech praca 17 no.4:255-257 Ap '65.

1. Ministry of Consumer Goods Industry, Prague.

PADESHNOV, A.I.

Calendar of noteworthy dates. Geog. v shkole 26 no.1:80-86 Ja-F '63. (MIRA 16:5)

(Anniversaries)

PADEV, R

"Protecting seeded fields from insects during winter", p 78 (KOOPERATIVNO ZEMEDELIE, Vol 6, #3, Mar. 1951, Bulgaria)

SO: Monthly List of RUSSIAN Accessions, East European Vol 2 #8 /Library of Congress, August 1953, Uncl.

PADEV, Radi, inzh., ml. nauch. sutr. (Sofiia)

Opening of the Research Institute of Ore Dressing at the German Academy of Sciences. Spisanie BAN no.4:102-104 '59. (EEAI 9:11)

1. Komisiia za izuchavanie na proizvoditelnite sili, Bulgarska akademiia na naukite.
(Germany, Eastern--Ores)

PADEVET, Karel

Festival of technical motion-picturesin Budapest. Tech praca 14 no.3:215-216 M '62.

1. Predseda odborne komise pro technicke filmy pri Statnim vyboru pro rozvoj techniky.

CZECHOSLOVAKIA / Microbiology - General Microbiology. F

Abs Jour: Ref Zhur-Biol., No 9, 1958, 38283.

Author : Kalina, C., Padevet, M.
Inst : Not given.
Title : New Method for Staining Microorganisms.

Orig Pub: Ceskosl. mikrobiol., 1956, 1, No 4, 183-188.

Abstract: The method consists of staining non-fixated bacteria with methylene blue and subsequent oxidation with potassium ferricyanide or hydrogen peroxide and counterstaining by basic fuchsin. In these cases, in some of the bacteria studied a double stain appears; actively metabolizing cells are stained green-blue or blue, and inactive ones are stained red. This phenomenon is not observed in other bacteria.

Card 1/2

[illegible]BRT, V.; ROTH, Z.; PADEVET, M.

On the question of the curariform action of neomycin. Physiol. Bohemoslov. 13 no.6:594-598 '64

1. Laboratory for Research on the Pathology, Therapy and Prevention of Infectious Diseases, Faculty of Paediatrics, Charles University, and Institute of Industrial Hygiene and Occupational Diseases, Prague.

SOBEK,V.; KARGEROVA, A.; PADEVET, M.

Effect of pyrocatechin on the detoxication of neomycin. Bratisl. lek. listy 45 no.3:142-146 15 F '65.

1. Laborator pro vyzkum pathologie, terapie a prevence infekcnich chorob; Faklulty detskeho lekarstvi Karlovy Univerzity v Praze (reditel: prof. MUDr. J. Prochazka, DrSc.).

BESTAKOVA, Zdenka; KALINA, Cestmir; PADEVET, Milos

Meningoencephalitis caused by Candida pseudotropicalis.
Cas. lek. cesk. 95 no.43:1185-1188 26 Oct 56.

1. Bakteriologicko-serologicke oddeleni (prednosta doc. MUDr. V. Wagner) a infekcni klinika (prednosta prof. MUDr. J. Pochazka) nemocnice na Bulovce, Praha 8, Z. B., Praha 8 - Bulovka.
(MENINGOENCEPHALITIS, etiol. & pathogen.
Monilia pseudotropicalis in chickenpox in child (Cz))
(CHICKENPOX, in inf. & child
with meningoencephalitis caused by Monilia pseudotropicalis (Cz))
(MONILIA, infect.
meningoencephalitis caused by Monilia pseudotropicalis in chickenpox in child (Cz))

PADEVET, MIROSLAV

LINK, Jiri, MUDr; PADEVET, Miroslav

Test for acetone in urine. Cas lek cs 93 no.18:492 Ap '54. (KEAL 3:7)

1. OUNZ na Kladne, interni oddeleni, biochem. laborator, prednosta prim. MUDr Fr.Jindrak.

(ACETONE, in urine, *determ.) (URINE, *acetone, determ.)

NEJEDLY, Bedrich; KRISTAL, Antonin; PADEVET, Miroslav

New urine test. Cas. lek. cesk. 97 no.22:689-691 30 May 58.

1. Ustredni laborator OUNZ v Kladne, prednosta MUDr. Bedrich Nejedly.
B. N., Kladno, OUNZ.
(URINE
urinalysis, new technic (Cs))

PADEYSKAYA, Ye.N.

PERSHIN, G.N.; PADEYSKAYA, Ye.N.

Chemotherapeutic effect of syntomycin in local suppurative infections caused by B. coli, Proteus vulgaris and Pseudomonas. Zhur. mikrobiol.epid.i immun. no.3:88 Mr '54. (MLRA 7:4)

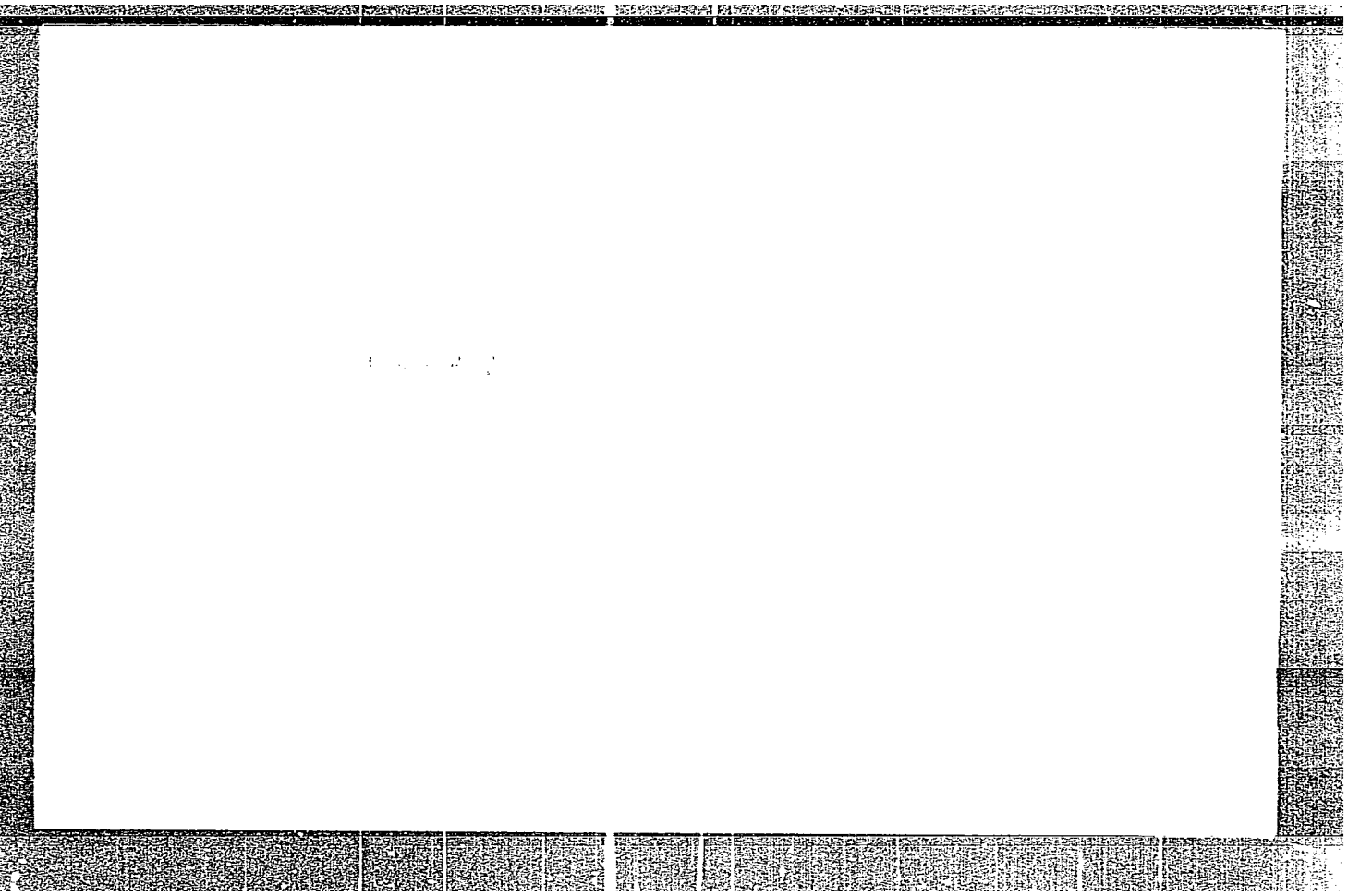
1. Iz Vsesoyuznogo khimiko-farmatsevticheskogo instituta im. Ordzhonikidze. (Chloramphenicol) (Suppuration)

PADEYSKAYA, YE. N.

PERSHIN, G.N.; PADEYSKAYA, Ye.N.

Chemotherapeutic effect of syntomycin in localized suppurative injuries caused by microbal associations. Zhur.mikrobiol.epid.i immun. no.4:78 Ap '54. (MLRA 7:5)

1. Iz Vsesoyuznogo khimiko-farmatsevticheskogo instituta im. Ordzhonikidze. (Suppuration) (Antibiotics)



ISAMUKHAMEDOV, I.; PADEYSKAYA, Ye. N.; POLUKHINA, L. M.; PERSHIN, G. N.

"The treatment of experimental pneumococcal meningitis with long-acting sulfonamides."

report presented at 4th Intl Cong, Hungarian Soc of Microbiologists, Budapest, 30 Sep-3 Oct 64.

All-Union Sci Res Chemico Pharmaceutical Inst im Ordzhonikidze, Moscow.

PADEYSKAYA, E.N.

USSR/Medicine - Antibiotics

Card 1/1 Pub. 86 - 18/37

Authors : Pershin, G. N., Prof.; and Padeyskaya, E. N.

Title : Local application of "synthomycin"

Periodical : Priroda 43/10, 97-98, Oct 1954

Abstract : "Synthomycin", a new Soviet preparation is described. It has been used in the treatment of dysentery, typhus and many other diseases. It is now found that an emulsion can be made with this preparation and applied locally to purulent wounds and skin afflictions and in some special cases of surgery.

Institution : ...

Submitted : ...

PERSHIN, G.N.; PADEYSKAYA, Ye.N.; YAKOVLEVA, A.I.; BELOZEROVA, K.A.

Model of infectious polyarthritis in white rats. Zhur.mikrobiol. epid. i immun. 30 no.2:119-125 F '59. (MIRA 12:3)

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(ARTHRITIS, RHEUMATOID, exper.
in white rats (Rus))

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1. Zamestitel' Ministra prosveshcheniya RSFSR.
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PADEZHNOV, I.

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1. Zamestitel' Ministra prosveshcheniya RSFSR.
(Schoolhouses)

PADEZHNOV, I.

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PADEZHNOV, I.

Expand the construction of adequate rural schools. Sel'.stroi.
14 no.8:3 Ag '59. (MIRA 12:12)

1. Zamestitel' Ministra prosveshcheniya RSFSR.
(Schoolhouses)

ACCESSION NR: AP4039264 S/0078/64/009/006/1397/1402

AUTHOR: Dritz, M. Ye.; Kadaner, E. S.; Padezhnova, Ye. M.; Bochvar, N. R.

TITLE: Determination of the boundaries of mutual solubility of manganese and cadmium in solid aluminum

SOURCE: Zhurnal neorganicheskoy khimii, v. 9, no. 6, 1964, 1397-1402

TOPIC TAGS: aluminum, cadmium, manganese, aluminum alloys, phase equilibria, electric properties, microstructure, solubility, mutual solubility

ABSTRACT: A small amount of cadmium in aluminum alloys has an extremely beneficial effect on the mechanical as well as the corrosion properties of the alloy. Consequently, in recent years cadmium is used as an alloying element in aluminum alloys which are used under deformation conditions, specifically in the refractory alloy of the system Al-Cu-Li-Mn-Cd. In order to determine the nature of the strengthening of cadmium containing aluminum alloys it is necessary to have data on the nature of the interaction of cadmium with aluminum and other alloying components. This work was concerned with the determination of the mutual solubility of cadmium and manganese in solid aluminum. In this investigation binary and ternary alloys

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