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1ST AND 2ND ORDERS

PROCESSES AND PROPERTIES INDEX

3RD AND 4TH ORDERS

B-I-8

Be

(a) Use of magnesium chloride. Physicochemical principles of extraction and [illegible] of magnesium chloride. A. G. [illegible] and A. P. [illegible]. (b) Hydrolysis of magnesium chloride. A. G. [illegible], V. A. [illegible], and [illegible] [illegible], A. G. [illegible], A. I. [illegible], and A. P. [illegible]. (c) Properties of magnesium [illegible] obtained by hydrolysis of magnesium chloride. A. P. [illegible], M. N. [illegible], and V. I. [illegible]. (d) Hydration of magnesium oxide. V. A. [illegible]. (e) Ternary system: magnesium chloride-water-hydrogen chloride. A. P. [illegible] and V. P. [illegible]. (f) Hydrolytic study of the system $MgCl_2 + H_2O = HCl + MgO$. A. P. [illegible], M. N. [illegible], V. I. [illegible], and A. A. [illegible]. (g) Production of aluminium oxide by the magnesium chloride method. A. P. [illegible] and M. N. [illegible]. (h) Carbonization of dolomites. Production of magnesia alba from dolomites. N. A. [illegible] (Trans. State Inst. Appl. Chem. U.S.S.R., 1934, No. 25, 9—12, 20—30, 39—69, 68—78, 78—81, 81—84, 84—88, 91—92, 94—101).—(a, c) $MgCl_2$ is completely decomposed to MgO and HCl by heating a solid cement containing $MgCl_2$ with a little MgO for 1 hr. at [illegible] in a rotary furnace in a CO_2-H_2O vapour mixture.

(b) MgO formed from $MgCl_2$ at [illegible] meets the requirements for material formed by calcining magnesite (I). With rising temp. of hydrolysis the reactivity of the resulting MgO is decreased. The product at 1000° is suitable for refractory materials.

(c) Hydration of MgO formed by hydrolysis of $MgCl_2$ is slower than for that from (I).

(d) $MgCl_2,8H_2O$ may be salted out by saturating the solution with HCl.

(e) At [illegible] with low [HCl] the solid phase $Mg(OH)Cl$ is formed; this decomposes at >400° into MgO and HCl. With higher [HCl] solid solutions of variable composition are formed.

(f) A 92% yield of Al_2O_3 free from Si and Fe was obtained by mixing clay with 38% aq. $MgCl_2$ and evaporating to a solid mass. The latter is heated in a crucible at 800°, or in a tube in a steam current at [illegible], and the product leached with 10% NaOH. Na_2AlO_3 is decomposed with CO_2 and the $Al(OH)_3$ ignited.

(g) The dolomite is calcined to 21% loss in wt. Addition of Na_2CO_3 and aq. NH_3 in the process of carbonization gave no increased yields.

Ch. Abs. (a)

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BC

a-1

Equilibria in the systems (A) $MgCO_3$-Na_2CO_3-H_2O, (B) Na_3PO_4-NaCl-H_2O. A. P. Obuchov (J. Appl. Chem. Russ., 1935, 8, 1143—1148, 1149—1151).—(A) [with E. I. Gordon]. The double salt Na_2CO_3,$MgCO_3$ crystallises from an aq. solution of Na_2CO_3 which has been saturated with $MgCO_3$ at 35°.

(B) [with M. N. Michailova]. Equilibrium data are recorded for the systems at 25° and 105°. The solubility of Na_3PO_4 falls rapidly with increasing [NaCl]. R. T.

ASM-SLA METALLURGICAL LITERATURE CLASSIFICATION

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PROCESSES AND PROPERTIES INDEX

Magnesia. A. P. Obukhov. Russ. 45,921, Feb. 29, 1936. Magnesite or dolomite is treated with CO_2 to give $MgHCO_3$; this is electrolyzed and the $Mg(OH)_2$ obtained is calcined to MgO.

ASM SLA METALLURGICAL LITERATURE CLASSIFICATION

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4

Electrochemical preparation of the iron wire net for the production of reinforced glass. V. P. Mashovets and A. P. Otakhov (V. I. Ul'yanov Technol. Inst., Leningrad). *J. Applied Chem.* (U.S.S.R.) 20, 219-24(1947) (in Russian).—The stumbling block in the manuf. is the H_2 gas occluded in the Fe wire. Conventional methods of degreasing and of pickling fail to eliminate it and pickling in acid results in occlusion of more H_2. Heating to 240-260° for 40 min. in air, in N_2 and under 5-6 mm. Hg resulted in increased occlusion of gas. Complete outgassing is achieved only by high-frequency heating to 1400° in a high vacuum of the order of 10^{-4} mm. Hg; only then is the reinforced glass entirely free from gas bubbles. This method, however, is obviously inacceptable on an industrial scale. Partial outgassing was achieved by anodic treatment in 15-20% NaOH, c.d. 1-3 amp./sq.dm., 10-20 min., 20-84°, followed by cathodic pickling in 20-25% H_2SO_4, c.d. 0.5-1.5 amp./sq.dm., 5-20 min., 20-58°. Fully satisfactory outgassing is attained if these two operations are followed by an "anodic outgassing" in 20% NaOH, c.d. 0.5-1.2 amp./sq.dm., 5-15 min., 70-82°. A satisfactory accelerated procedure involves: preliminary rough degreasing in boiling soap-alkali soln.; anodic treatment in 20% NaOH at 75-80°, c.d. 10-30 amp./sq.dm., 30-120 sec.; cathodic treatment in 20% H_2SO_4 at 50-73°, c.d. 10-30, 15-60 sec.; anodic treatment in 20% NaOH at 74-84°, 10-20 amp./sq.dm., 45-180 sec.

N. Thon

ASM-SLA METALLURGICAL LITERATURE CLASSIFICATION

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2

CA

Binary alloys of thallium with sulfur, selenium, and tellurium. A. F. Okunkov and N. S. Bubyreva (Phys.-Tech. Inst., Acad. Sci. U.S.S.R., Leningrad). *Izvest. Sektora Fiz.-Khim. Anal., Inst. Obshchei i Neorg. Khim., Akad. Nauk S.S.S.R.* 19, 276-81(1949).—The 3 systems were subjected to thermal analysis and to microstructure study. The existence of the following compds. was ascertained: Tl_2S-Tl_2S, Tl_2Se-Tl_2Se-Tl_2Se, and Tl_2Te-Tl_2Te. The diagrams of state of the 3 systems are given. M. Hoch

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OBUKHOV, A. P.

USSR/Electricity - Conductivity Jul 51

"Electric Properties of Thin Layers Containing Gray Tin," N. A. Goryunova, I. D. Konozenko, A. P. Obukhov, Leningrad Physicotech Inst, Acad Sci USSR

"Zhur Tekh Fiz" Vol XXI, No 7, 814-817

Method of obtaining thin layers of tin on cooled lining with priming of gray tin described. Such layers, consisting of mixt of 2 modifications, possess properties very different from layers of white tin of same thickness. Their sp resistance fluctuates within limits 10^3 - 10^4 ohm cm. Such layers have neg thermal coeff of resistance of order 3 - 5% per 1°C. Submitted 10 Sep 50.

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"APPROVED FOR RELEASE: 06/15/2000 CIA-RDP86-00513R001237720013-5

USSR/Physics - Semiconductors, Tin Mar/Apr 52

"Gray Tin - Electron Semiconductor," N.A. Goryunova, A.P. Obukhov

"Iz Ak Nauk, Ser Fiz" Vol XVI, No 2, p 154

Abbreviated text of report published in "Dok Ak Nauk SSSR" Vol LXXV, No 1, 3, 1950; "Zhur Tekh Fiz" Vol XXI, No 7, 1951. Samples of gray tin were tested for cond, Hall's const and thermoelectromotive force. Alpha-Sn proved to be a semiconductor, in agreement with A. I. Ioffe's theoretical conceptions, with

220T87

predominating metallic properties. Stable films contg alpha-Sn of high thermal resistance were obtained by sublimation in vacuum.

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OBUKHOV, A. P.

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OBUKHOV, A.P.

PHASE I BOOK EXPLOITATION SOV/3559

Akademiya nauk SSSR. Institut metallurgii. Nauchnyy sovet po probleme zharoprochnykh splavov

Issledovaniya po zharoprochnym splavam, t. 5 (Investigations of Heat-Resistant Alloys, Vol 5) Moscow, Izd-vo AN SSSR, 1959. 423 p. Errata slip inserted. 2,000 copies printed.

Ed. of Publishing House: V.A. Klimov; Tech. Ed.: I.F. Kuz'min; Editorial Board: I.P. Bardin, Academician, G.V. Kurdyumov, Academician, E.V. Ageyev, Corresponding Member, USSR Academy of Sciences (Resp. Ed.), I.A. Oding, I.M. Pavlov, and I.F. Zudin, Candidate of Technical Sciences.

PURPOSE: This book is intended for metallurgical engineers, research workers in metallurgy, and may also be of interest to students of advanced courses in metallurgy.

COVERAGE: This book, consisting of a number of papers, deals with the properties of heat-resisting metals and alloys. Each of the papers is devoted to the study of the factors which affect the properties and behavior of metals. The effects of various elements such as Cr, Mo, and W on the heat-resisting properties of various alloys are studied. Deformability and workability of certain metals as related to the thermal conditions are the object of another study described. The problems of hydrogen embrittlement, diffusion and the deposition of ceramic coatings on metal surfaces by means of electrophoresis are examined. One paper describes the apparatus and methods used for growing monocrystals of metals. Boron-base metals are critically examined and evaluated. Results are given of studies of interatomic bonds and the behavior of atoms in metal. Tests of turbine and compressor blades are described. No personalities are mentioned. References accompany most of the articles.

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Legrand, S.V. Method of Elongation by Forging With the Use of Back Pressure 358

Kuznetsov, V.D. Basic Problems in Mechanical Properties of Heat-Resistant Alloys 361

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5-18-60

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"APPROVED FOR RELEASE: 06/15/2000 CIA-RDP86-00513R001237720013-5

5(4), 18(6)

AUTHORS: Bubyreva, N. S., Obukhov, A. P. SOV/78-4-1-25/45

TITLE: Physico-Chemical Examination of the Ternary System Thallium-Selenium-Tellurium (Fiziko-khimicheskoye issledovaniye troynoy sistemy talliy-selen-tellur)

PERIODICAL: Zhurnal neorganicheskoy khimii, 1959, Vol 4, Nr 1, pp 132-137 (USSR)

ABSTRACT: The ternary system thallium-selenium-tellurium was investigated by measuring the specific conductivity, by investigating the microstructure and by the aid of the thermal analysis. The microstructure was investigated by a metal microscope MIM-5. The synthesis of the samples was carried out by melting the chemically pure metals in evacuated vessels. For the surface construction of the liquid 94 alloys were examined and the phase diagram was plotted. The system has no ternary eutectics nor ternary compounds. Five crystalline zones are formed. In the first crystallization zone primary separation of tellurium and selenium takes place. In the second zone solid solutions between TlSe and TlTe are formed. Solid solutions between Tl_2Se and Tl_5Te_3 form in the third zone.

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The fourth crystallization zone has no solid solutions. The fifth zone probably has the compound Tl_2Se_3. The compounds in the second crystallization zone, TlSe and TlTe, have analogous chemical properties and similar crystalline structures as has been proved by X-ray analysis. The composition of the phases I, II, and III corresponds to solid solutions. The alloys of the system possess semiconductor properties. The specific electric conductivity of the alloys depends considerably on the composition and it changes from $1 \cdot 10^2$ to $1 \cdot 10^{-5}$ ohm^{-1} cm^{-1}. The maximum conductivity of $1 \cdot 10^2$ is at the limit of metallic conductivity because these alloys contain admixtures of metallic thallium. There are 6 figures, 4 tables, and 13 references, 10 of which are Soviet

ASSOCIATION: Leningradskiy fiziko-tekhnicheskiy institut Akademii nauk SSSR (Leningrad Physico-Technical Institute of the Academy of Sciences, USSR)

SUBMITTED: September 13, 1957

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"APPROVED FOR RELEASE: 06/15/2000 CIA-RDP86-00513R001237720013-5

MAKASHEVA, I.Ye.; MASLOV, I.A.; OBUKHOV, A.P.

Radioactivation analysis of semiconducting silicon by means of a multi-channel γ-spectrometer. Zhur.anal.khim. 15 no.3:329-333 My-Je '60. (MIRA 13:7)

1. Institute of Technical Physics, Academy of Sciences, U.S.S.R., Leningrad.

(Silicon--Analysis)

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"APPROVED FOR RELEASE: 06/15/2000 CIA-RDP86-00513R001237720013-5

S/137/61/000/010/054/056
A006/A101

AUTHOR: Obukhov A.P.

TITLE: Methods of detecting low admixtures in metals

PERIODICAL: Referativnyy zhurnal.Metallurgiya, no.10, 1961, 8, abstract 10K43 ("Tr. In-ta fiz. metallov, AN SSSR", 1960, no.23, 175 - 186)

TEXT: This is a review. A comparison is made of the sensitivity and the possibility of employing different physical and chemical methods for determining low admixtures in various materials. It is shown that for the majority of elements investigated, the mass-spectrometric and the radioactivation methods (10^{-5}-10^{-9}%) are the most sensitive. However, their use, is difficult because of a number of objective causes. More practicable are the spectral and, in particular, the spectrophemical method, using super-pure coals and particularly pure acids; they are however, less sensitive (10^{-4} - 10^{-5}%). The calorimetric and electrochemical methods are less sensitive but fully practicable for ordinary chemical laboratories.

Yu. Bykovskaya

[Abstracter's note: Complete translation]

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S/032/60/026/07/15/055
B015/B068

55230

AUTHORS: Yerokhina, K. I., Lenberg, I. Kh., Nakashova, I. Ye., Maslov, V. A., Obukhov, A. P.

TITLE: Determination of Microimpurities in Silicon From the γ-Spectra of Their Radioactive Isotopes

PERIODICAL: Zavodskaya laboratoriya, 1960, Vol. 26, No. 7, pp. 821-827

TEXT: A method of radioactivation analysis is described, with γ-radiation of the impurities in silicon applied in the production of semiconductors being studied. The sample is activated in the neutron flux of a reactor. Work was performed in a flux of thermal neutrons with $9 \cdot 10^{12}$ neutrons·cm^{-2}·sec^{-1}. As the sample in the reactor is exposed to the action of fast neutrons in addition to slow ones, these nuclear transformations have also to be considered (Table 1). Since the major part of isotopes formed from Si is short-lived, only γ-radiation of Si^{31} must be considered in measurements. From the remaining neutron-activated elements,

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Determination of Microimpurities in Silicon From the γ-Spectra of Their Radioactive Isotopes S/032/60/026/07/15/055
B015/B068

about 50 isotopes with measurable γ-radiation form. In the present case, 17 elements (Table 2) were simultaneously determined with a scintillation gamma-spectrometer (with an ФЭУ-6 (FEU-5) photoelectron multiplier) provided with a NaI (Tl) crystal. The unit was calibrated against known γ-spectral lines. The results obtained by analysis of two silicon samples are given in Table 3. Maximum sensitivity is (Table 4) 10^{-11} g for Au, 10^{-10} g for Ni, Mn, Cu, As, and Sb, and $5 \cdot 10^{-6}$ g for Sn. There are 2 figures, 4 tables, and 6 references: 2 Soviet, 3 American, and 1 British.

ASSOCIATION: Fiziko-tekhnicheskiy institut Akademii nauk SSSR (Institute of Physics and Technology of the Academy of Sciences USSR)

Card 2/2

Obukhov A.P.

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25233

5.1310
9.2110 (1385, 1482, 1159)

S/080/61/034/008/017/018
D204/D305

AUTHORS: Gurin, V.N. and Obukhov, A.P.

TITLE: An electrolytic method of applying tantalum to aluminum foil

PERIODICAL: Zhurnal prikladnoy khimii, v. 34, no. 8, 1961, 1891-1892

TEXT: In view of the need for fine, homogeneous sources of β-rays which adhere well to their backing, the authors developed a method of preparing β-ray sources of tantalum by means of its electrolytic deposition on an aluminum foil with a thickness of 8μ. The experimental procedure comprises the following stages: the preparation of $TaCl_5$ by chlorinating metallic tantalum at 400 - 600°. The solution of $TaCl_5$ in dehydrated and twice-distilled ethyl alcohol, followed by its double filtration under conditions precluding any contamination by atmospheric moisture; and the electrolysis of the solution in a closed vessel with a platinum anode and an aluminum-foil cathode. A UIP-1 apparatus is used as the current source during

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An electrolytic method...

electrolysis, with an electrode voltage of 580 V and a current density of 11.2 mA/cm^2. The duration of the electrolysis depends on the amount of tantalum that is required. The resulting deposit, whose weight of 0.08 - 1.34 mg/cm^2 corresponds to a coating thickness of 0.1 - 0.8 μ, is firmly retained by the aluminum backing even at a temperature of 260 - 300°. Experiments on the electrodeposition of tantalum from solutions of nonyl alcohol and dimethylsulfate were also undertaken by the authors; the solubility of $TaCl_5$ in these solvents at room temperature is 13.5 and 2.4 g/l respectively, compared with 28 g/l for ethyl alcohol. However, the results of the electrolysis of these solutions are not completely satisfactory, and the use of a solution of $TaCl_5$ in ethyl alcohol is recommended till such time as the expediency of employing other solvents has been substantiated by further research. There are 5 references: 3 Soviet-bloc and 2 non-Soviet-bloc. The references to the English-language publications read as follows: β - and γ-ray spectroscopy, ed. K. Siegbahn, North Holland publishing company, Amsterdam, II. H Slätis, 259 (1955); Analytical chemistry of Manhattan Project, Ed.-

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D204/D305

An electrolytic method . .

in chief C. I. Rodden, N.-Y. - Toronto - London, McGraw, Hill Book Co., 523 (1950).

ASSOCIATION: Leningradskiy fiziko-tekhnicheskiy institut AN SSSR (Leningrad Physico-Technical Institute, AS USSR)

SUBMITTED: September 5, 1960

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"APPROVED FOR RELEASE: 06/15/2000 CIA-RDP86-00513R001237720013-5

S/186/62/004/003/015/022
E071/E433

AUTHORS: Isayeva, Ye.A., Makasheva, I.Ye., Maslov, I.A., Obukhov, A.P.

TITLE: Chemical identification of phosphorus and thallium in the quantitative neutron activation analysis

PERIODICAL: Radiokhimiya, v.4, no.3, 1962, 345-350

TEXT: The determination of admixtures by the activation analysis is usually associated with their radiometric identification for which the separation and purification to "radiometric purity" is necessary. The authors attempted to improve the method of chemical separation of phosphorus and thallium (the knowledge of the content of which in some materials such as semiconductor silicon and germanium, luminophors, etc is necessary) so as to exclude the necessity for radiometric identification. The method of separation of P^{32} and Tl^{204} in the form of $Tl_2Cr_2O_4$ and ammonium phosphormolybdate was developed and checked on artificial mixtures containing Fe^{59}, Zn^{65}, Ag^{110m}, In^{114m}, Sb^{124}, Ta^{182} and Bi^{210} and by imitating the separation of phosphorus and thallium from irradiated specimens in which the amount of individual

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E071/E433

Chemical identification of ...

admixtures corresponded to 10^{-4}%. The analytical procedure is described in detail. The method was applied for the determination of phosphorus and thallium in SiO_2, Si, NaI (Tl) and $LiCl \cdot H_2O$. From 4×10^{-7} to 0.17% of phosphorus and from 4×10^{-6} to 0.1% of thallium was determined in the above substances. It is concluded that the method of purification is sufficiently accurate so that labour consuming radiometric identification of these two elements is unnecessary. There are 3 tables.

SUBMITTED: March 24, 1961

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"APPROVED FOR RELEASE: 06/15/2000 CIA-RDP86-00513R001237720013-5

S/032/62/028/007/006/011
B104/B102

AUTHORS: Maslov, I. A., Obukhov, A. P., and Terent'yeva, Z. P.

TITLE: Investigation into the reproducibility of a method for quickly determining unbound silicon in refractory materials

PERIODICAL: Zavodskaya laboratoriya, v. 28, no. 7, 1962, 841 - 842

TEXT: In this method, which was proposed by T. Ya. Kosolapova and Ye. Ye. Kotlyar (Zavodskaya laboratoriya, XXIV, 12, 1442 (1958)), a sample of powdered refractory material weighing 0.2 - 1.0 g, with a grain size 5 - 200μ, is dissolved in 60 - 80 ml of a 1, 2, or 3% alkali solution at about 100°C and then filtered. The solution is neutralized and the Si is determined by gravimetry. The reproducibility of the method was determined from the mean square error of a series of measurements:

$$S_x^2 = \frac{\sum_{i=1}^{m}\sum_{j=1}^{n_i} x_{ij}^2 - \sum_{i=1}^{m}\frac{X_i^2}{n_i}}{\sum_{i=1}^{m} n_i - m}. \qquad (1)$$

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where S_x^2 = mean square error, m = number of analyses, n_i = number of parallel determinations, x_{ij} = results of the analyses, $X_i = \sum_{j=1}^{n_i} x_{ij}$. The error in reproducibility varies from 0.23% for 0.4% unbound Si to 0.63% for 80% unbound Si. The refractory material used here contained Si, SiO_2, SiC, and C. There are 1 figure and 1 table.

ASSOCIATION: Fiziko-tekhnicheskiy institut im. A. F. Ioffe Akademii nauk SSSR (Physicotechnical Institute imeni A. F. Ioffe of the Academy of Sciences USSR)

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L 18280-63 EWP(q)/EWT(m)/BDS AFFTC/ASD JD/JG
ACCESSION NR: AP3004945 S/0075/63/018/008/0979/0983

AUTHOR: Isayeva, Ye. A.; Makasheva, I. Ye.; Obukhov, A. P.

71
65

TITLE: Analysis of pure silicon carbide by neutron activation 19

SOURCE: Zhurnal analiticheskoy khimii, v. 18, no. 8, 1963, 979-983

TOPIC TAGS: silicon carbide, trace analysis, neutron activation, activation analysis, neutron activation analysis, zinc, copper, arsenic, antimony, phosphorus, impurity, copper 64, zinc 69m, arsenic 76, antimony 122, phosphorus 32, thermal neutron, Gamma-activity, Beta-activity, nuclear reactor, Gamma-spectrometer, end-window Beta-counter, radiochemical separation, chlorination, neutron cross section, Gamma-radiation energy

ABSTRACT: Trace amounts of impurities — zinc, copper, arsenic, antimony, and phosphorus — have been determined in silicon carbide crystals by measuring the γ-activity of Zn^{69m}, Cu^{64}, As^{76}, and Sb^{122} isotopes with a multichannel γ-spectrometer and the β-activity of the P^{32} isotope with an end-window β-counter. The isotopes were produced by irradiating encapsulated SiC samples for 1—3 days with $n \cdot 10^{13}$ thermal neutrons/$cm^2 \cdot sec$ in a nuclear reactor. To the irradiated sample were added 5—10 mg of Zn, Cu, As, Sb, and P, as carriers for the

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ACCESSION NR: AP3004945

6

impurities; radiochemical separation of the elements was then carried out. It was shown experimentally that chlorination is preferable as a method of separation if volatile impurities (As, Sb, In) are to be determined, since the losses of these impurities are greater on alkaline fusion than on chlorination at 1250C. The volatile chlorides formed on chlorination were collected in HCl solution. The solution was chemically treated to isolate each impurity; samples of the impurities for counting were then prepared by a method previously described (Makasheva, I. Ye., Maslov, I. A., Obukhov, A. P., Zh. analit. khimii, 15, 329 (1960)). The standard samples for each element were prepared in the same manner after irradiation simultaneously with the unknown sample and carrier addition. Absorption spectra of γ-radiation from the radioisotopes produced were used to calculate the activity of the unknowns and of the standards, making it possible to determine the amount of each element in the sample. The neutron cross section σ_{at} for each radioisotope and the energy of γ-radiation used in measuring the activity are given. The sensitivity of the determinations was in the 10^{-8}—10^{-7}% range. "In conclusion, the authors express their gratitude to I. A. Maslov and A. D. Kozlov, who performed the measurements." Orig. art. has: 2 tables and 1 figure.

ASSOCIATION: Fiziko-tekhnicheskiy institut im. A. F. Ioffe AN SSSR, Leningrad (Physicotechnical Institute, AN SSSR)

Card 2/3

5 (2/86)

APPROVED FOR RELEASE: 06/15/2000 CIA-RDP86-00513R001237720013-5"

"APPROVED FOR RELEASE: 06/15/2000 CIA-RDP86-00513R001237720013-5

L 52630-65 EWT(m)/EWP(t)/EWP(b)/EWA(h) Peb DIAAP/IJP(c) JD/GS

ACCESSION NR: AT5012702 UR/0000/64/000/000/0028/0032

AUTHOR: Maslov, I.A.; Obukhov, A.P.

TITLE: Some possibilities offered by a model of the radioactivation analysis of high-purity substances

SOURCE: Vsesoyuznoye koordinatsionnoye soveshchaniye po aktivatsionnomu analizu. 1st, Tashkent, 1962. Trudy. Tashkent, Izd-vo Nauka UzSSR, 1964, 28-32

TOPIC TAGS: activation analysis, neutron bombardment, mathematical model, gamma ray measurement, gamma spectroscopy, silicon analysis

ABSTRACT: The development of highly sensitive methods (10^{-6}-10^{-10}%) of determining impurities by means of neutron activation encounters considerable difficulties in evaluating the sensitivity and accuracy of the analytical method employed. The authors therefore simulated the process of radioactivation analysis of high-purity substances. In their statistical treatement of the problem, the authors make use of the fact that the relative error of reproducibility of the analysis is independent of the purity of the sample and of the kind of element being determined. A physical model of radioactivation analysis was obtained for materials of high purity such as silicon, quartz glass, water,

Card 1/2

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L 52630-65

ACCESSION NR: AT5012702

4

carbon, sulfur, etc., weakly activated by neutrons or producing mainly isotopes of γ emitters after irradiation. Results of a study of direct gamma-spectroscopic activation analysis of high-purity silicon by means of the method of models are given." I. Ye. Makasheva and Ye. A. Isayeva took part in working out the models of the analyses." Orig. art. has: 1 figure and 3 formulas.

ASSOCIATION: Fiziko-tekhnicheskiy institut im. A.F. Ioffe AN SSSR (Physics and Engineering Institute, AN SSSR)

SUBMITTED: 02Dec64 ENCL: 00 SUB CODE: IC, NP

NO REF SOV: 003 OTHER: 000

Card 2/2

APPROVED FOR RELEASE: 06/15/2000 CIA-RDP86-00513R001237720013-5"

"APPROVED FOR RELEASE: 06/15/2000 CIA-RDP86-00513R001237720013-5

L 52638-65 EWT(1)/EWT(m)/EPF(n)-2/EWG(m)/EPA(w)-2/T/EWP(t)/EWP(b)/EWA(h)

Pz-6/Pab-10/Peb/Pu-4 DIAAP/IJP(c) JD/WW/JG/AT/GS

ACCESSION NR: AT5012703 UR/0000/64/000/000/0033/0039

52
50
B+1

AUTHOR: Maslov, I.A.; Obukhov, A.P.

TITLE: Measurement of the rate of evaporation of zirconium from a ZrC thermionic cathode by means of radioactivation analysis

21 19

SOURCE: Vsesoyuznoye koordinatsionnoye soveshchaniye po aktivatsionnomu analizu. 1st, Tashkent, 1962. Trudy. Tashkent, Izd-vo Nauka UzSSR, 1964, 33-39

TOPIC TAGS: proton neutron diagram, zirconium determination, activation analysis, zirconium evaporation, zirconium carbide, thermionic cathode, neutron bombardment, gamma spectroscopy

ABSTRACT: The thermionic cathodes studied were made of tungsten ribbon coated with a layer of ZrC about 100μ thick. The cathodes were bombarded with a flux of 10^{13}-10^{14} neutrons/cm^2·sec. for 3-4 days. The long-lived isotope Zr^{95} was chosen for identification. A theoretical calculation of the dependence of the intensity of the 750 Kev γ line (produced by Zr^{95}, Nb^{95m} and Nb^{95}) on the irradiation time and standing time was carried out; the increase in the activity of the γ radiation for a long period of time after irradiation permitted the use of the method of direct γ spectroscopy for the determination of zirconium. Possible reactions which might interfere with the main

Card 1/2

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L 52638-65

ACCESSION NR: AT5012703

2

reaction $Zr^{94}(n,\gamma)Zr^{95}$ were taken into account by using a graphic method based on the representation of the table of isotopes of zirconium and 8 neighboring elements in the form of a proton-neutron diagram, on which various paths of the activation reactions and the process of radioactive decay can be represented (see Fig. 1 of the Enclosure). The interference of molybdenum, ruthenium, and uranium was taken into account by determining their content from the γ spectra of Mo^{99}, Ru^{103}, and La^{140}, respectively. The evaporation rate of zirconium carbide at 2000C was found to be $(1-2)\cdot 10^{-9}$ g/cm^2·sec. "The vacuum and electronic part of the work was performed by N.M. Karnaukhova." Orig. art. has: 6 figures and 1 table.

ASSOCIATION: Fiziko-tekhnicheskiy institut A.F. Ioffe AN SSSR (Physics and Engineering Institute AN SSSR)

SUBMITTED: 02Dec64 ENCL: 01 SUB CODE: IC, NP

NO REF SOV: 009 OTHER: 005

Card 2/3

APPROVED FOR RELEASE: 06/15/2000 CIA-RDP86-00513R001237720013-5"

"APPROVED FOR RELEASE: 06/15/2000 CIA-RDP86-00513R001237720013-5

L 1651-66 EWP(e)/EWT(m)/EWP(i)/ETC/EPF(n)-2/EWG(m)/EWP(t)/EWP(b) IJP(c)
JD/WW/JG/AT/WH

ACCESSION NR: AP5021548 UR/0286/65/000/013/0012/0012
661.888.685.002.2

62

AUTHOR: Gurin, V. N.; Obukhov, A. P.; Terent'yeva, Z. P.; Bashinskaya, I. N. B

TITLE: Method of synthesizing metal disilicides. Class 12, No. 172285

SOURCE: Byulleten' izobreteniy i tovarnykh znakov, no. 13, 1965, 12

TOPIC TAGS: metal disilicide, vanadium disilicide, niobium disilicide, tantalum disilicide, disilicide synthesis

ABSTRACT: This Author Certificate introduces a method of synthesizing vanadium, niobium and tantalum disilicides by a reaction between metal and silicon taking place in a molten metal. In order to decrease the temperature of reaction, zinc is used as the molten metal and the process is conducted at the boiling point of zinc. Reaction products are subsequently separated from the molten metal. [AZ]

ASSOCIATION: Fiziko-tekhnicheskiy institut im. A. F. Ioffe AN SSSR (Physicotechnical Institute, AN SSSR)

SUBMITTED: 03Jul64 ENCL: 00 SUB CODE: IC, MM
NO REF SOV: 000 OTHER: 000 ATD PRESS: 4093
Card 1/1

APPROVED FOR RELEASE: 06/15/2000 CIA-RDP86-00513R001237720013-5"

"APPROVED FOR RELEASE: 06/15/2000 CIA-RDP86-00513R001237720013-5

ACC NR: AP6036448 SOURCE CODE: UR/0370/66/000/006/0142/0145

AUTHORS: Gurin, V. N. (Leningrad); Obukhov, A. P. (Leningrad); Terent'yeva, Z. P. (Leningrad); Bashinskaya, I. R. (Leningrad)

ORG: none

TITLE: The existence of intermetallic compounds in the system Nb-Zn

SOURCE: AN SSSR. Izvestiya. Metally, no. 6, 1966, 142-145

TOPIC TAGS: niobium, zinc, intermetallic compound, x ray analysis, crystal lattice parameter

ABSTRACT: A new intermetallic compound of Nb and Zn was synthesized. The chemical composition, solubility in acids and bases at room temperature and elevated temperatures, and the lattice parameter of the compound were determined. The experimental results are summarized in graphs and tables (see Fig. 1). It was found that the compound had a stoichiometric composition of $NbZn_{2.0-2.7}$ and a copper type structure. The lattice parameter of the face-centered cubic lattice was a = 3.9325 Å.

UDC: 546.882'47:541.123.24

Card 1/2

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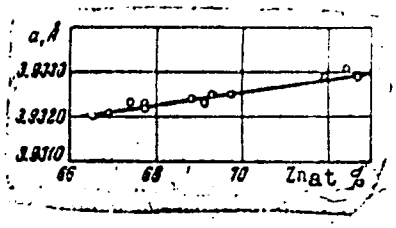
"APPROVED FOR RELEASE: 06/15/2000 CIA-RDP86-00513R001237720013-5

ACC NR: AP6036448

Fig. 1. Dependence of the lattice parameter of compound $NbZn_{2.0-2.7}$ on the zinc content of the latter



Orig. art. has: 3 tables and 2 graphs.

SUB CODE: 11/ SUBM DATE: 13Sep64/ ORIG REF: 002/ OTH REF: 004

Card 2/2

APPROVED FOR RELEASE: 06/15/2000 CIA-RDP86-00513R001237720013-5"

"APPROVED FOR RELEASE: 06/15/2000 CIA-RDP86-00513R001237720013-5

KOLOTOV, O.S.; LOBANOV, Yu.N.; OBUKHOV, A.S.; POLEV, N.M.

Short pulse generator. Prib. i tekh. eksp. no.3:73-76 My-Je '60. (MIRA 14:10)

1. Nauchno-issledovatel'skiy institut yadernoy fiziki Moskovskogo gosudarstvennogo universiteta.
(Oscillators, Electron-tube)

APPROVED FOR RELEASE: 06/15/2000 CIA-RDP86-00513R001237720013-5"

"APPROVED FOR RELEASE: 06/15/2000 CIA-RDP86-00513R001237720013-5

MAKHOV, A.F.; OBUKHOV, A.S.; GIMBERG, S.V.; ROGACHEVA, O.I.

Trap-product refining. Nefteper. i neftekhim. no.2:18-22 '63. (MIRA 17:1)

1. Novo-Ufimskiy neftepererabatyvayushchiy zavod.

APPROVED FOR RELEASE: 06/15/2000 CIA-RDP86-00513R001237720013-5"

"APPROVED FOR RELEASE: 06/15/2000 CIA-RDP86-00513R001237720013-5

OBUKHOV, A.S.

Operating an electric desalter in the Novo-Ufimskiy petroleum refining plant. Nefteper. i neftekhim. no.12:42-43 '63. (MIRA 17:4)

1. Novo-Ufimskiy neftepererabatyvayushchiy zavod.

APPROVED FOR RELEASE: 06/15/2000 CIA-RDP86-00513R001237720013-5"

"APPROVED FOR RELEASE: 06/15/2000 CIA-RDP86-00513R001237720013-5

PROCESSES AND PROPERTIES INDEX

B

7

Investigation of Single-Pass Automatic Butt Welding of Type 8X12 Steel Under Flux. (In Russian.) A. V. Obukhov and M. M. Kraichik. *Avtogennoe Delo* (Welding), Apr. 1949, p. 9-15.

Above type of steel contains 0.16% C, 0.63% Mn, 0.35% Si, 0.72% Cr, 0.47% Ni, 0.45% Cu, 0.05% Mo, 0.003% S, and 0.02% P. Mechanical properties of welds obtained by above method were tested in bending, under Izod notch impact, and to rupture. Beneficial effect of annealing after welding and optimum conditions for this treatment are indicated. Results are tabulated and charted.

TsNIIMPS

ASM-SLA METALLURGICAL LITERATURE CLASSIFICATION

APPROVED FOR RELEASE: 06/15/2000 CIA-RDP86-00513R001237720013-5"

"APPROVED FOR RELEASE: 06/15/2000 CIA-RDP86-00513R001237720013-5

1ST AND 2ND ORDERS

PROCESSES AND PROPERTIES INDEX

3RD AND 4TH ORDERS

7

8

Possible Defects of Automatically Riveted Joints and Methods for Their Prevention. (In Russian.) M. M. Kraichik and A. V. Obukhov. *Avtogennoe Delo* (Welding), Jan. 1950, p. 12-16.

Describes and illustrates equipment and procedure for joining sheet metal by riveting followed by electric welding of the rivets to the sheet. Defects in the above were studied for low-carbon steel. Principal types of defects were pores, circumferential lack of fusion, and hot cracks. Methods of detecting defects were studied and X-rays shown to be most applicable. Experimental data are tabulated. Includes macrographs.

COMMON ELEMENTS

COMMON VARIABLES INDEX

MATERIALS INDEX

ASM-SLA METALLURGICAL LITERATURE CLASSIFICATION

APPROVED FOR RELEASE: 06/15/2000 CIA-RDP86-00513R001237720013-5"

"APPROVED FOR RELEASE: 06/15/2000 CIA-RDP86-00513R001237720013-5

OBUKHOV, A. V., Engr

USSR/Metals - Welding, Testing

Oct 50

"Investigation of the Influence of Individual Defects on the Mechanical Properties of Joints With Electric Rivets," Engineers M. M. Kraychik, A. V. Obukhov, Gen Sci Res Inst, Min of Transp

"Avtogen Delo" No 10, pp 24-26

Tested defective and good-quality electric rivets for static shear, impact shear, and repeated shear. Hot cracks in joints with electric rivets always dangerous and rejectable defects. Lack of circular penetration had no bad effect on strength of joint but not acceptable because of destructive effect on joint under operational conditions.

PA 167T97

[redacted]

APPROVED FOR RELEASE: 06/15/2000 CIA-RDP86-00513R001237720013-5"

"APPROVED FOR RELEASE: 06/15/2000 CIA-RDP86-00513R001237720013-5

OBUKHOV, A.V.

RABINOVICH, A.Ya.; DIMOV, L.V.; SHAROV, I.F.; GURAL'NIK, Ye.L.; OBUKHOV, A.V., inzhener, retsenzent; ZHEREBIN, M.I., inzhener, retsenzent; ZELEVICH, P.M., inzhener, redaktor; KHITROV, P.A., tekhnicheskiy redaktor.

[Welding and weld deposition of parts of the upper track structure] Svarka i naplavka detalei verkhnego stroeniia puti. Moskva, Gos. transportnoe zheleznodorozhnoe izd-vo, 1951. 206 p. (MLRA 8:1)
(Railroads--Track) (Electric welding)

APPROVED FOR RELEASE: 06/15/2000 CIA-RDP86-00513R001237720013-5"

"APPROVED FOR RELEASE: 06/15/2000 CIA-RDP86-00513R001237720013-5

KRAYCHIK, M. M.; OBUKHOV, A. V. Engrs.

The study of the effect of individual factors upon the resistance of spot welded joints.

Vest Mash p. 15, Oct 51

APPROVED FOR RELEASE: 06/15/2000 CIA-RDP86-00513R001237720013-5"

"APPROVED FOR RELEASE: 06/15/2000 CIA-RDP86-00513R001237720013-5

KRAYCHIK, M.M., OBUKHOV, A. V.

Electric Welding

Effects of different elements in the strength of spot welds. Vest. mash. 31 no. 10, 1951.

9. Monthly List of Russian Accessions, Library of Congress, September, 1952 1953. Unclassified.

APPROVED FOR RELEASE: 06/15/2000 CIA-RDP86-00513R001237720013-5"

"APPROVED FOR RELEASE: 06/15/2000 CIA-RDP86-00513R001237720013-5

231T50

USSR/Metallurgy - Welding, Methods Oct 52

"Strength of Spots and Electric Rivets in Welding NL-2 and St 3 Steels," A. V. Obukhov, Engr, M. M. Kraychik, Cand Tech Sci, Ye. A. Greyl', Engr, TsNIIMPS (Cen Sci Res Railroad Inst, Min of Transp)

"Avtogen Delo" No 10, pp 7-10

Compares 2 methods of welding: elec resistance spot welding and elec arc welding under flux with elec rivets. Steels used in expts were: NL-2 -0.12% C, 0.50% Mn, 0.41% Si, 0.44% Cu, 0.52% Cr, 0.51% Ni, and St 3 carbon

231T50

steel. Establishes that welding with elec rivet, giving practically similar strength indexes, shows considerably lower tendency to hardening of weld core and adjacent zone of thermal influence and therefore does not require any subsequent tempering, which is obligatory for majority of alloy steels and carbon steels with higher than 0.2% C after resistance spot welding.

231T50

OBUKHOV, A. V.

APPROVED FOR RELEASE: 06/15/2000 CIA-RDP86-00513R001237720013-5"

"APPROVED FOR RELEASE: 06/15/2000 CIA-RDP86-00513R001237720013-5

OBUKHOV, A.V.

B. T. R.
Vol. 3 No. 4
Apr. 1954
Welding and Joining

4

(2)

[illegible] Multi-Electrode Automatic Welding and Building Up Under a Flux. (Russian.) N. P. Emel'yanov, A. V. Obukhov, and D. A. Dul'chevskii. Vestnik Mashinostroeniia, v. 33, no. 9, Sept. 1953, p. 73-78.

Describes increased productivity of method. Diagrams, photographs, tables.

APPROVED FOR RELEASE: 06/15/2000 CIA-RDP86-00513R001237720013-5"

"APPROVED FOR RELEASE: 06/15/2000 CIA-RDP86-00513R001237720013-5

OBUKHOV, A.V., inzhener; KRAYCHIK, M.M., kandidat tekhnicheskikh nauk; [redacted], Ye.A., inzhener.

Fatigue resistance of multiple-projection welded joints made of low-carbon steel and possibilities for increasing the resistance. Vest.mash. 33 no.11: 81-84 N '53. (MLRA 6:12)

1. Vsesoyuznyy tsentral'nyy nauchno-issledovatel'skiy institut Ministerstva putey sootbshcheniya. (Metals--Fatigue)

APPROVED FOR RELEASE: 06/15/2000 CIA-RDP86-00513R001237720013-5"

"APPROVED FOR RELEASE: 06/15/2000 CIA-RDP86-00513R001237720013-5

OBUKHOV, A. V.

5778. Naplavka iznoshennykh vysokomarganteovistykh krestovin. M., transzheldorizdat, 1954. 18s. s ill. 22 sm. (Vsesoyuz. nauch.-issled. in-t. transporta. inform. P. s'mo. No. 318.) 1500 ekz bespl. na obl. avt. ne ukazany. (54-15332H)
625.151: 621.791.92+621.791.92

SO: Knizhnaya, Letopis, Vol. 1, 1955

APPROVED FOR RELEASE: 06/15/2000 CIA-RDP86-00513R001237720013-5"

"APPROVED FOR RELEASE: 06/15/2000 CIA-RDP86-00513R001237720013-5

OBUKHOV, A. V.

USSR/Engineering - Contact welding

Card : 1/1 Pub. 128 - 15/32

Authors : Obukhov, A. V. and Shlyapin, V. B.

Title : Electrical contact welding of locomotive drive shafts

Periodical : Vest. mash. 34/7, 52 - 54, July 1954

Abstract : General information is given on electrical contact welding of locomotive drive shafts, conducted by "Shevchenko" locomotive repairing factory, and a maintenance train #13. A description is given of welding procedures, and attempts are made to determine the influence of welding on steel characteristics. Illustrations; graphs.

Institution : ...

Submitted : ...

APPROVED FOR RELEASE: 06/15/2000 CIA-RDP86-00513R001237720013-5"

"APPROVED FOR RELEASE: 06/15/2000 CIA-RDP86-00513R001237720013-5

OBUKHOV, A. V.

KRAYCHIK, M.M., kandidat tekhnicheskikh nauk; OBUKHOV, A.V., inzhener

The strength of spot welded joints used in railroad car construction. Trudy TSNII MPS no.95:84-131 '54. (MLRA 8:6)
(Railroads--Cars--Welding)

APPROVED FOR RELEASE: 06/15/2000 CIA-RDP86-00513R001237720013-5"

"APPROVED FOR RELEASE: 06/15/2000 CIA-RDP86-00513R001237720013-5

OBUKHOV, [illegible]

NAZAROV, Aleksey Georgieyevich; OBUKHOV, Aleksandr Vasil'yevich; VEL'MIN, Aleksay Alekseyevich; BRAYLOVSKIY, N.G., inzhener, redaktor; YUDZON, D.M., tekhnicheskiy redaktor.

[Cold welding of cast-iron with an electrode bundle] Kholodnaia svarka chuguna konbinirovannym puchkom elektrodov. Izd.3-e, perer. i dop. Moskva. Gos.transp.zhel-dor. izd-vo, 1955. 123 p. (Cast-iron--Welding)

APPROVED FOR RELEASE: 06/15/2000 CIA-RDP86-00513R001237720013-5"

"APPROVED FOR RELEASE: 06/15/2000 CIA-RDP86-00513R001237720013-5

OBUKHOV, A.V.; KHRYASHCHEVA, N.K.; KOMAROVSKIY, I.I.; VERINA, G.P., tekhnicheskiy redaktor.

[Welding and building up railroad rails] Svarka i naplavka zheleznodorozhnykh rel'sov. (Moscow. Vsesoiuznyi nauchno-issledovatel'skii institut zheleznodorozhnogo transporta. Trudy no.110) 1955 219 p.
(Railroads--Rails--Welding)

APPROVED FOR RELEASE: 06/15/2000 CIA-RDP86-00513R001237720013-5"

"APPROVED FOR RELEASE: 06/15/2000 CIA-RDP86-00513R001237720013-5

Obukhov, A.V.

OBUKHOV, A.V., inzhener; GREYL', Ye.A., inzhener

A.G.Nazarov's method of brazing cast iron without preheating. Vest. mash.35 no.7:41-43 Jl'55. (MLRA 8:10)
(Cast iron--Welding) (Brazing)

APPROVED FOR RELEASE: 06/15/2000 CIA-RDP86-00513R001237720013-5"

"APPROVED FOR RELEASE: 06/15/2000 CIA-RDP86-00513R001237720013-5

OBUKHOV, A.V.

AID P - 5415

Subject : USSR/Engineering

Card 1/1 Pub. 11 - 5/13

Authors : Obukhov, A. V., and V. B. Shlyapin

Title : Mechanical and heat treatments of resistance-welded butts.

Periodical : Avtom. svar., 5, 31-36, My 1956

Abstract : The authors describe their method of tempering and normalizing resistance welded joints of large specimens like I-beams, rails, etc., which improves mechanical properties. Four charts and 2 micro-pictures.

Institution : Central Scientific Research Institute of the Ministry of Railways (TsNII MPS).

Submitted : 16 Mr 1956

APPROVED FOR RELEASE: 06/15/2000 CIA-RDP86-00513R001237720013-5"

"APPROVED FOR RELEASE: 06/15/2000 CIA-RDP86-00513R001237720013-5

ZHARKOV, A.F., inzhener; OBUKHOV, A.V., inzhener.

Electric contact welding of rails for narrow-gauge railroads. Torf.prom.33 no.3:20-22 '56. (MIRA 9:7)

1.Tsentral'nyy nauchno-issledovatel'skiy institut Ministerstva putey sooshcheniya (for Zharkov, Obukhov).2.Glavtorf Ministerstva elektrostantsii (for Zuyev).
(Electric welding) (Railroads--Rails)

APPROVED FOR RELEASE: 06/15/2000 CIA-RDP86-00513R001237720013-5"

"APPROVED FOR RELEASE: 06/15/2000 CIA-RDP86-00513R001237720013-5

ZHARKOV, Aleksandr Fedorovich; ZUYEV, Mikhail Georgiyevich; OBUKHOV, Aleksandr Vasiliyevich; KHRYASHCHEVA, Nina Kuz'minichna; KOLOTUSHKIN, V.I., redaktor; MEDVEDEV, L.Ya., tekhnicheskiy redaktor

[Electric spark welding of R-18 rails in great lengths for peat enterprises] Elektrokontaktnaia svarka rel'sov R-18 v dlinnye pleti na torfopredpriiatiiakh. Moskva, Gos.energ.izd-vo, 1957. 69 p. (MIRA 10:11)

(Railroads--Rails)
(Electric cutting machinery)

APPROVED FOR RELEASE: 06/15/2000 CIA-RDP86-00513R001237720013-5"

"APPROVED FOR RELEASE: 06/15/2000 CIA-RDP86-00513R001237720013-5

137-58-4-8112

Translation from: Referativnyy zhurnal, Metallurgiya, 1958, Nr 4, p 250 (USSR)

AUTHORS: Shchapov, N. P., Obukhov, A. V.

TITLE: Progress in Railway Metallography During the 40 Years of Soviet Regime (Uspekhi metallovedeniya zheleznodorozhnogo transporta za 40 let sovetskogo stroya)

PERIODICAL: Vestn. Vses. n.-i. in-ta zh.-d. transp., 1957, Nr 6, pp 21-27

ABSTRACT: Bibliographic entry

1. Railways--Metals--Bibliography

Card 1/1

APPROVED FOR RELEASE: 06/15/2000 CIA-RDP86-00513R001237720013-5"

"APPROVED FOR RELEASE: 06/15/2000 CIA-RDP86-00513R001237720013-5

OBUKHOV, A.V., inzh.; KHRYASHCHEVA, N.K.

Mechanical characteristics of rail joints welded by the electric contact method depending on the chemical composition and the method of producing the rail steel. Trudy TSNII MPS no.154:312-335 '58. (MIRA 12:1)

(Railroads--Rails)

APPROVED FOR RELEASE: 06/15/2000 CIA-RDP86-00513R001237720013-5"

"APPROVED FOR RELEASE: 06/15/2000 CIA-RDP86-00513R001237720013-5

SHEPELEV, Vasiliy Nikolayevich; OBUKHOV, Aleksandr Vasil'yevich; BERESTOVOV, Ye.I., insh., retsenzent; ABRAGAM, S.R., insh., red.; BOBROVA, Ye.N., tekhn.red.

[Welding and building-up of rails and railroad frogs] Svarka i naplavka rel'sov i krestovin. Moskva, Gos.transp.zhel-dor. izd-vo, 1959. 179 p. (MIRA 13:2)
(Railroads--Rails--Welding)
(Railroads--Maintenance and repair)

APPROVED FOR RELEASE: 06/15/2000 CIA-RDP86-00513R001237720013-5"

"APPROVED FOR RELEASE: 06/15/2000 CIA-RDP86-00513R001237720013-5

OBUKHOV, A.V.

Suspended sweeper attachments of tractors used in the turning and ridging of milled peat. Torf. prom. 36 no.5:34 '59.
(MIRA 13:1)

1.Glavnyy mekhanik torfopredpriyatiya Nasiya.
(Leningrad Province--Peat machinery)

APPROVED FOR RELEASE: 06/15/2000 CIA-RDP86-00513R001237720013-5"

"APPROVED FOR RELEASE: 06/15/2000 CIA-RDP86-00513R001237720013-5

OBUKHOV, A.V., inzh.; GORSTKO, L.G., inzh.

Automatic machinery for the building up of rails on the track.
Put' i put.khoz. 5 no.10:17 O '61. (MIRA 14:10)
(Railroads--Rails)

APPROVED FOR RELEASE: 06/15/2000 CIA-RDP86-00513R001237720013-5"

"APPROVED FOR RELEASE: 06/15/2000 CIA-RDP86-00513R001237720013-5

GORSTKO, L.G., inzh.; OBUKHOV, A.V.

Electric resistance welding of the rail lengths of continuous tracks. Trudy TSNII MPS no.224:173-193 '62. (MIRA 16:6)
(Railroads--Rails--Welding)

APPROVED FOR RELEASE: 06/15/2000 CIA-RDP86-00513R001237720013-5"

"APPROVED FOR RELEASE: 06/15/2000 CIA-RDP86-00513R001237720013-5

LEBEDEV, A.M., kand.tekhn.nauk; OBUKHOV, A.V., inzh.

Testing of overhead machines for the electric resistance welding of rails on the track. Trudy TSNII MPS no.224:194-214 '62. (MIRA 16:6)

(Railroads--Rails--Welding)

APPROVED FOR RELEASE: 06/15/2000 CIA-RDP86-00513R001237720013-5"

"APPROVED FOR RELEASE: 06/15/2000 CIA-RDP86-00513R001237720013-5

[illegible], [illegible] N. [illegible]

AVTOMATIZATS [illegible] LA; [illegible] (AVTOMATIZATSI [illegible] ESS [illegible]; [illegible] [illegible] [illegible] [illegible] S [illegible], [illegible] [illegible]

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APPROVED FOR RELEASE: 06/15/2000 CIA-RDP86-00513R001237720013-5"

"APPROVED FOR RELEASE: 06/15/2000 CIA-RDP86-00513R001237720013-5

USSR / Human and Animal Physiology. Digestion, Pancreas. T

Abs Jour : Ref Zhur - Biol., No 15, 1958, No. 70280

Author : Kurilov, N. V.; Obukhov, B. M.
Inst : Moscow Veterinary Academy
Title : Pancreatic Secretion and Bile Secretion in the Horse

Orig Pub : Tr. Mosk. Vet. Akad., 1957, Vol 20, 154-158

Abstract : Description is given of a method of placing a chronic fistula of the pancreatic duct and the bile duct in the horse. For this purpose, a part of the duodenum (D) was isolated, containing the ostia of both ducts. To prevent loss of the pancreatic secretion (PS) and of bile, the isolated portion of the intestine was joined to the remaining intestine by an external anastomosis. Secretion of the PS and of bile in the horse proved to be continuous and increased during feeding. Maximum secretion of the PS was induced by the feeding of wheat bran. Introduction

Card 1/2

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"APPROVED FOR RELEASE: 06/15/2000 CIA-RDP86-00513R001237720013-5

R

USSR / Diseases of Farm Animals. General Problems.

Abs Jour : Ref Zhur - Biologiya, No 2 1959, No. 7417

Author : Laktionov, A. M.; Obukhov, B. M.
Inst : Not given
Title : Chen-chiu Therapy (Acupuncture)

Orig Pub : Veterinariya, 1958, No 3, 42-51

Abstract : The history of the development of acupuncture (i.e., inserting special metal needles into dots of "life" which are penetrated at various depths or into sections of the skin in patients with various diseases) is presented, as well as descriptions of treatments by cauterization of certain skin sections with lighted cigaret-sticks made from dry ground wormwood. Chinese doctors-acupuncturists count 720 such "life" dots in man, 80 in horses, but most frequently 100 are utilized in man and 40 dots in

Card 1/4

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"APPROVED FOR RELEASE: 06/15/2000 CIA-RDP86-00513R001237720013-5

USSR / Diseases of Farm Animals. General Problems. R

Abs Jour : Ref Zhur - Biologiya, No 2, 1959, No. 7417

horses (many more in cattle). Some drawings are presented in the article which show the location of the "life" dots in horses; it is pointed out for which diseases the dots are used and the methods of puncturing and of cauterization are described. The Chinese researchers explain the obtained therapeutic results by the fact that the needles or the heat stimulate certain skin receptor groups which leads to the reorganization of nerve impulses, inhibition of already formed pathological foci of stimulation in the cerebral cortex and to normalization of the entire organism's reaction to the disease, thus creating a basis for the removal of the latter. However, the road which the healing reflex takes from the point at which stimulation has taken place and which leads to the pathological focus, as well

Card 2/4

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"APPROVED FOR RELEASE: 06/15/2000 CIA-RDP86-00513R001237720013-5

USSR / Diseases of Farm Animals. General Problems. R

Abs Jour : Ref Zhur - Biologiya, No 2, 1959, No. 7417

as the principle in selecting the points, in applying and in dosaging the stimulation remain undetermined. Fol'bort and Podshibyakin (USSR) showed that it is possible to find "active dots" of the skin according to their electric potentials which, just as the dots' sensitivity, are correlated to the state of definite organs; as soon as this relation is disrupted by severing of the nerve branch leading to the dot, for instance, the dot too loses its "activity". As "life" dots were studied in horses, it was shown that many of them coincide with the anatomical location of the entrance of vasonsural bundles into the skin or into the muscles, or else they are situated along the projection of large nerve trunks, i.e., they may concur with the location of "active" dots according to Fol'bort-Podshibyakin. No explanation

Card 3/4

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"APPROVED FOR RELEASE: 06/15/2000 CIA-RDP86-00513R001237720013-5

KURILOV, N.V., OBUKHOV, B.M.

Studies on pancreatic and bile secretion with the aid of chronic fistula in horses. Biul.eksp.biol. i med. 46 no.7:107-110 Je '58 (MIRA 11:7)

1. Iz kafedry fiziologii zhivotnykh (zav.-chlen-korrespondent Vsesoyuznoy akademii sel'skokhozyaystvennykh nauk im. V.I. Lenina N.F. Popov) Moskovskoy veterinarnoy akademii. Predstavlena chlenom-korrespondentom AMN SSSR V.N. Chernigovskim.

(PANCREATIC DUCTS, physiology
exam. through artif. fistula in horses (Rus))
(BILE DUCTS, physiology
same (Rus))

APPROVED FOR RELEASE: 06/15/2000 CIA-RDP86-00513R001237720013-5"

"APPROVED FOR RELEASE: 06/15/2000 CIA-RDP86-00513R001237720013-5

OBUKHOV, B.V.

84429

S/056/60/039/004/047/048
B006/B056

84.6900

AUTHORS: Balats, M. Ya., Kondrat'yev, L. N., Landsberg, L. G., Lebedev, P. I., Obukhov, B. V., Pontekorvo, S.

TITLE: The Intensity of Radiationless Transitions in μ-Mesic Atoms

PERIODICAL: Zhurnal eksperimental'noy i teoreticheskoy fiziki, 1960, Vol. 39, No. 4(10), pp. 1168 - 1170

TEXT: In an earlier paper (Ref. 1) the authors found that the intensity of mesic X-rays 2P - 1S in U^{238} normalized to one stopped muon is considerably less than in Pb. This fact indicates the existence of radiationless transitions in heavy mesic atoms, in which the energy of the 2P - 1S transition is not liberated in the form of an X-ray photon. It is assumed that the probability of radiationless transition (W_{rl}) in mesic lead is negligibly small in comparison to the probability ($W_{h\nu}$) of a transition with emission of one photon ($(W_{h\nu})_{Pb} = 1$) : $1 > (W_{rl})_{U^{238}}/(W_h)_{U^{238}} > 0.1$. Now, the authors investigated the 2P - 1S transition intensities in the

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mesic atoms of Pb, Bi, Th, U^{235}, and U^{238}, and give a report on this investigation. With the help of a scintillation spectrometer, the X-ray spectra in the energy ranges corresponding to the transitions were measured. Special attention was paid to determining the background level. Figs. 1 and 2 show examples of the spectra recorded. Fig. 1 shows the spectra of mesic X-ray photons from targets of Pb(4.46 g/cm^2), Bi(4.46 g/cm^2), and U^{238}(4.60 g/cm^2); as abscissa, the pulse height in volts, and as ordinate, the number of pulses in an interval of 5v is taken. Fig. 2 shows the same for Pb(5.56 g/cm^2) and U^{235}(5.59 g/cm^2). The intensities of mesic X-radiation (2P - 1S) normalized to one stopped μ^--meson (in relative units) are given in a table:

	Intensities	Fraction of radiationless 2P - 1S transitions
Pb	1	-
Bi	1 ± 0.06	0 ± 0.06
Th	0.85 ± 0.07	0.15 ± 0.07
U^{235}	0.71 ± 0.05	0.29 ± 0.05
U^{238}	0.77 ± 0.04	0.23 ± 0.04

Card 2/3

There are 2 figures, 1 table, and 1 Soviet reference.

ASSOCIATION: Ob"yedinennyy institut yadernykh issledovaniy (Joint Institute of Nuclear Research). Institut teoreticheskoy i eksperimental'noy fiziki AN SSSR (Institute of Theoretical and Experimental Physics AS USSR)

SUBMITTED: August 13, 1960

Card 3/3

APPROVED FOR RELEASE: 06/15/2000 CIA-RDP86-00513R001237720013-5"

"APPROVED FOR RELEASE: 06/15/2000 CIA-RDP86-00513R001237720013-5

OBUKHOV, D.

A mighty Communist method of training workers; the introduction of the radio into rural regions Moskva Moskovskii rabochii, 1950. 28 p. (50-56554)

LB1044.6.R802

APPROVED FOR RELEASE: 06/15/2000 CIA-RDP86-00513R001237720013-5"

"APPROVED FOR RELEASE: 06/15/2000 CIA-RDP86-00513R001237720013-5

VOLKOVSKIY, P.A., kand.tekhn.nauk; OBUKHOV, D.V.

Reclamation of the Yakhroma flood plain. Gidr. i mel. 12 no.10:3-15 O '60. (MIRA 13:11)

1. Direktor Kommunisticheskoy lugomeliorativnoy stantii (for Obukhov).
(Yakhroma Valley--Drainage)

APPROVED FOR RELEASE: 06/15/2000 CIA-RDP86-00513R001237720013-5"

"APPROVED FOR RELEASE: 06/15/2000 CIA-RDP86-00513R001237720013-5

SUMTSOV, Aleksandr Savvich, inzhener; OBUKHOV, F.V., redaktor; NOVOCHADOV, A.G., redaktor; KONYASHINA, A., tekhnicheskiy redaktor.

[Fire prevention in agriculture] Pozharnaia profilaktika v sel'skom khozisistve. Moskva, Izd-vo Ministerstva komunal'nogo khoziaistva RSFSR, 1955. 193 p. (MIRA 9:6)
(Fire prevention) (Agriculture--Safety measures)

APPROVED FOR RELEASE: 06/15/2000 CIA-RDP86-00513R001237720013-5"

"APPROVED FOR RELEASE: 06/15/2000 CIA-RDP86-00513R001237720013-5

OBUKHOV, F.

Directions for organization of operations of State Fire Protection. Pozh.delo 3 No.6:12 Je '57. (MLRA 10:7)
(Fire prevention)

APPROVED FOR RELEASE: 06/15/2000 CIA-RDP86-00513R001237720013-5"

"APPROVED FOR RELEASE: 06/15/2000 CIA-RDP86-00513R001237720013-5

OBUKHOV, F.

Watching over the people's interests. Pozh.delo 3 no.11:18-19 N '57. (MIRA 10:11)

1. Nachal'nik otdela Glavnogo upravleniya pozharnoy okhrany.
(Fire prevention)

APPROVED FOR RELEASE: 06/15/2000 CIA-RDP86-00513R001237720013-5"

"APPROVED FOR RELEASE: 06/15/2000 CIA-RDP86-00513R001237720013-5

OBUKHOV, F.

Results of discussions. Pozh.delo 3 no.12:10 D '57. (MIRA 10:12)

1.Nachal'nik otdela Gosudarstvennogo pozharnogo nadzora Glavnogo upravleniya pozharnoy okhrany.
(Fire prevention--Inspection)

APPROVED FOR RELEASE: 06/15/2000 CIA-RDP86-00513R001237720013-5"

"APPROVED FOR RELEASE: 06/15/2000 CIA-RDP86-00513R001237720013-5

OBUKHOV, F.

Let us solve this important problem. Pozh. delo 4 no.7:1-2 Jl '58. (MIRA 11:8)

1. Nachal'nik otdela Glavnogo upravleniya pozharnoy okhrany.
(Fire prevention)

APPROVED FOR RELEASE: 06/15/2000 CIA-RDP86-00513R001237720013-5"

"APPROVED FOR RELEASE: 06/15/2000 CIA-RDP86-00513R001237720013-5

ALEKSEYEV, Mikhail Vasil'yevich; OBUKHOV, F.V., red.; RACHEVSKAYA, M.I., red.izd-va; SALAZKOV, N.P., tekhn. red.

[Prevention of fires caused by technological processes] Preduprezhdenie pozharov ot tekhnologicheskikh prichin. Moskva, Izd-vo M-va kommun.khoz.RSFSR, 1963. 194 p. (MIRA 17:2)

APPROVED FOR RELEASE: 06/15/2000 CIA-RDP86-00513R001237720013-5"

"APPROVED FOR RELEASE: 06/15/2000 CIA-RDP86-00513R001237720013-5

14-57-6-12283D

Translation from: Referativnyy zhurnal, Geografiya, 1957, Nr 6, p 82 (USSR)

AUTHOR: Obukhov, G. A.

TITLE: ~~Utilization and~~ Determination of River Flow for Small Hydroelectric Stations (Ispol'zovaniye rechnogo stoka na malykh GES i metodika yego ucheta)

ABSTRACT: Bibliographic entry on the author's dissertation for the degree of Candidate of Technical Sciences, presented to Vses. n.-i. in-t gidrotekhn. i melior. Ural'skaya opyt.-gidrotekhn. st. (Ural Experimental Hydrotechnical Station), Sverdlovsk, 1956

ASSOCIATION: Vses. n.-i. in-t gidrotekhn. i melior. Ural'skaya opyt.-gidrotekhn. st. (Ural Experimental Hydrotechnical Station)

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APPROVED FOR RELEASE: 06/15/2000 CIA-RDP86-00513R001237720013-5"

"APPROVED FOR RELEASE: 06/15/2000 CIA-RDP86-00513R001237720013-5

OBUKHOV, G. A.

Obukhov, G. A.

"The exploitation fo river flow in small hydroelectric power plants and methods of calculating it." All-Union Sci Res Inst of Hydraulic Engineering and oil Improvement. Ural Experimental Hydraulic-Engineering Station. Sverdlovs., 1956. (Dissertation For the Degree of Candidate in Technical Sciences).

Knizhnaya letopis'
No 34, 1956. Moscow.

APPROVED FOR RELEASE: 06/15/2000 CIA-RDP86-00513R001237720013-5"

"APPROVED FOR RELEASE: 06/15/2000 CIA-RDP86-00513R001237720013-5

[illegible], G.A.

"Clinical Variants of Pseudodementia." Cand Med Sci, Central Inst [illegible] Advanced Training of Physicians, Min Health USSR, Moscow, [illegible]. (KL, No 14, Apr 55)

SO: Sum.No. 704, 2 Nov 55 - Survey [illegible] Scientific [illegible] Technical Dissertations Defended at USSR Higher Educational Institutions (1[illegible]).

APPROVED FOR RELEASE: 06/15/2000 CIA-RDP86-00513R001237720013-5"

"APPROVED FOR RELEASE: 06/15/2000 CIA-RDP86-00513R001237720013-5

OBUKHOV, G.A. (Moskva)

Problems in the etiology and pathogenesis of schizophrenia; review of foreign literature published during 1955. Zhur.nevr. i psikh. 56 no.8:663-668 '56. (MIRA 9:11)

(SCHIZOPHRENIA, etiology and pathogenesis, review (Rus))

APPROVED FOR RELEASE: 06/15/2000 CIA-RDP86-00513R001237720013-5"

"APPROVED FOR RELEASE: 06/15/2000 CIA-RDP86-00513R001237720013-5

OBUKHOV, G.A. (Moskva)

Treatment of schizophrenia; review of foreign literature published during 1955. Zhur.nevr. i psikh. 56 no.11:897-909 N '56. (MLRA 10:2)
(SCHIZOPHRENIA, therapy, review (Rus))

APPROVED FOR RELEASE: 06/15/2000 CIA-RDP86-00513R001237720013-5"

"APPROVED FOR RELEASE: 06/15/2000 CIA-RDP86-00513R001237720013-5

OBUKHOV, G.A.

Psychosis caused by hexachloran. Zdravookhranenie 4 no. 1:60 Ja-F '61. (MIRA 14:2)

1. Iz Respublikanskoy psikhonevrologicheskoy bol'nitsy (glavnyy vrach - V.A. Morozov).
(MENTAL ILLNESS) (BENZENE HEXACHLORIDE--TOXICOLOGY)

APPROVED FOR RELEASE: 06/15/2000 CIA-RDP86-00513R001237720013-5"

"APPROVED FOR RELEASE: 06/15/2000 CIA-RDP86-00513R001237720013-5

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E201/E191

AUTHORS: Savarenskiy, Ye.F., and Obukhov, G.G.

TITLE: Reproducibility of the Earthquake Intensity Deduced from Surface Waves

PERIODICAL: Izvestiya Akademii nauk SSSR, Seriya geofizicheskaya, 1960, No. 9, pp.1346-1348

TEXT: The earthquake intensity M is defined as follows. The square of the ratio of the maximum amplitude to the period of earthquake tremors is taken to be proportional to the energy flux of surface waves (Ref.1). The quantity M seems to be sufficiently reproducible: it varies from station to station by 0.2-0.3. Since the M scale is logarithmic, the variations of ±0.3 imply errors of 100% in determination of the energy. This is because surface waves used to determine the energy suffer dispersion and consequently vibrations recorded by various stations may differ considerably. The present paper deals with propagation of earthquake tremors under conditions of velocity dispersion. Surface waves are assumed to be propagated in a plane-parallel layer. To make the M-scale more uniform the authors suggest using a theoretical curve of the type given by Eq.(10) instead of the

Card 1/2

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"APPROVED FOR RELEASE: 06/15/2000 CIA-RDP86-00513R001237720013-5

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E201/E191

Reproducibility of the Earthquake Intensity Deduced from Surface Waves

usual empirical calibration curve $(A/T)_{max} = f(\Delta)$, where A is the amplitude, T is the period and Δ is the distance from the earthquake epicentre. In this way an allowance can be made for spreading and absorption of surface waves. A correction for the dependence of the period of the strongest tremors on the distance, of the type $T = a\sqrt[3]{\Delta}$, reduces the scatter of M values by about 0.07-0.1.

There are 3 Soviet references.

ASSOCIATION: Akademii nauk SSSR, Institut fiziki zemli (Physics of the Earth Institute, AS USSR)

SUBMITTED: August 14, 1959

Card 2/2

APPROVED FOR RELEASE: 06/15/2000 CIA-RDP86-00513R001237720013-5"

"APPROVED FOR RELEASE: 06/15/2000 CIA-RDP86-00513R001237720013-5

S/169/63/000/001/056/062
D218/D307

AUTHOR: Obukhov, G.G.

TITLE: Magnetotelluric field in a nonuniform bed

PERIODICAL: Referativnyy zhurnal, Geofizika, no. 1, 1963, 30, abstract 1D163 (Geologiya i geofizika, 1961, no. 12, 116-124)

TEXT: A study was made of the magnetotelluric field above a nonconducting base with overlaying vertical beds whose conductivity varied along one of the horizontal coordinate axes. Expressions were obtained for the field in cases where the base was overlaid by two or three beds with oblique contact between two of them. [Abstracter's note: Complete translation]

Card 1/1

APPROVED FOR RELEASE: 06/15/2000 CIA-RDP86-00513R001237720013-5"

"APPROVED FOR RELEASE: 06/15/2000 CIA-RDP86-00513R001237720013-5

OBUKHOV, G.G.

Propagation of Love surface waves in the earth's crust in the case of periodic roughness of the diurnal boundary and the crust - mantle interface. Izv. AN SSSR. Ser. geofiz. no.11:1649-1657 N '63. (MIRA 16:12)

1. Institut fiziki Zemli AN SSSR.

APPROVED FOR RELEASE: 06/15/2000 CIA-RDP86-00513R001237720013-5"

"APPROVED FOR RELEASE: 06/15/2000 CIA-RDP86-00513R001237720013-5

L 13129-63 EWT(1)/BDS AFFTC/ESD-3 TF S/049/63/000/004/002/005

54
53

AUTHOR: Obukhov, G.G.

TITLE: Influence of the recurrent irregularities of topography on dispersion curves of surface seismic waves

PERIODICAL: Akademiya nauk SSSR. Izvestiya. Seriya geofizicheskaya, no. 4, 1963, 546-551

TEXT: Departing from the known method for studying the crust of the earth from surface seismic waves, which is based on the assumption about the horizontal position of the layers within the earth and the earth's boundary-air, theoretical development of a method which considers the influence of deflections on the character of the dispersion curves has been recently reported (1961-1962). The purpose of the present work is to examine the influence of irregularities of a loose boundary of the layer on the dispersion

Card 1/2

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"APPROVED FOR RELEASE: 06/15/2000 CIA-RDP86-00513R001237720013-5

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Influence of the recurrent...

curves for Love waves for a layer lying on an elastic half space. A method is proposed for the calculation of corrections, which are dependent on the influence of irregularities, for a classical dispersion equation. The applied method can be generalized readily for Rayleigh waves. The analysis and equations of the proposed method can give a criteria of accuracy for determination of the crust thickness by a method of surface waves and can make more precise the conception of the average crust thickness for a route of propagation. There are 2 figures and 5 references of which 4 are in the English language. The most recent English language reference is Mal, A.K., On the frequency equation for Love waves due to abrupt thickening of the Crustal Layer, Geofisica Pura e appl., 52, 1962.

ASSOCIATION: Akademiya nauk SSSR, Institute fiziki Zemli (Academy of Sciences of USSR, Institute of Earth Physics)

SUBMITTED: May 11, 1962

Card 2/2

APPROVED FOR RELEASE: 06/15/2000 CIA-RDP86-00513R001237720013-5"

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ACCESSION NR: AP5017026

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550.342:534.2

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B

AUTHOR: Obukhov, G. G.

TITLE: Damping of Love waves in a layer having an uneven interface

SOURCE: AN SSSR. Izvestiya. Fizika zemli, no. 3, 1965, 22-30

TOPIC TAGS: seismic wave, interface, damping factor

ABSTRACT: A discussion is presented of the damping of Love waves propagated along an elastic layer lying on an elastic half space and having an uneven free surface as well as an uneven interface next to the half space. The analytical method used was that of L. M. Brekhovskiy, which may be readily generalized for Rayleigh waves in a layer overlying an elastic half space and for any arbitrary number of layers. Assuming propagation of Love waves along a sinusoidal interface, the damping factor was found to increase with decrease in wavelength. The damping factor shows a well-defined resonance character, the greatest damping occurring when scattered waves move into the half space at an obtuse angle relative to the propagation direction of the primary Love waves (scattered forward). For propagation along a cosinusoidal interface, a weak maximum is observed in the

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ACCESSION NR: AP5017026

vicinity of secondary waves scattered at an acute angle to the direction of primary Love waves. The maximum value of the damping factor on the irregular interface is lower than the maximum damping factor during scattering in an uneven free surface having the same geometric parameters. It is shown that the damping factor of Love waves for an uneven interface between the layer and the half space may be computed by removing the boundary conditions for continuity of displacement and stress to some average plane. On this plane the displacement and stress will show breaks proportional to the amplitude of the primary Love wave. Orig. art. has: 4 figures and 18 formulas.

ASSOCIATION: Akademiya nauk SSSR, Institut fiziki Zemli (Academy of Sciences SSSR, Institute of Physics of the Earth)

SUBMITTED: 10Jul63 ENCL: 00 SUB CODE: ES, ME

NO REF SOV: 003 OTHER: 002

Card 2/2

APPROVED FOR RELEASE: 06/15/2000 CIA-RDP86-00513R001237720013-5"

"APPROVED FOR RELEASE: 06/15/2000 CIA-RDP86-00513R001237720013-5

OBUKHOV, L.M., inzh.

Speed up the adoption of electric heating of switches. Put' i put. khoz. no.10:3-5 O '58. (MIRA 11:12)
(Railroads--Switches) (Electric heating)

APPROVED FOR RELEASE: 06/15/2000 CIA-RDP86-00513R001237720013-5"

"APPROVED FOR RELEASE: 06/15/2000 CIA-RDP86-00513R001237720013-5

OBUKHOV, L.M.

MEL'NIK, D.M., kand. tekhn. nauk; OBUKHOV, L.M., inzh.

Removal of snow from switch boxes. Zhel. dor. transp. 40 no.2:63-67 F '58. (MIRA 11:3)

(Railroads--Snow protection and removal)
(Railroads--Switches)

APPROVED FOR RELEASE: 06/15/2000 CIA-RDP86-00513R001237720013-5"

"APPROVED FOR RELEASE: 06/15/2000 CIA-RDP86-00513R001237720013-5

MEL'NIK, D.M.; KOMAROV, A.A.; ANTONOV, F.I.; OBUKHOV, L.M.; LYAKHOVICH, V.B.; POPOV, A.V., inzh., red.; BOBROVA, Ye.N., ~~tekhn.red.~~

[Mechanization of snow protection and removal on railroads] Mekhanizatsiia snegouborki i snegozashchita na zheleznykh dorogakh. Moskva, Gos.transp.zhel-dor.izd-vo. 1959. 112 p. (Moscow. Vsesoiuznyi nauchno-issledovatel'skii institut zheleznodorozhnogo transporta. Trudy, no.168) (MIRA 12:4)
(Railroads--Snow protection and removal)

APPROVED FOR RELEASE: 06/15/2000 CIA-RDP86-00513R001237720013-5"

"APPROVED FOR RELEASE: 06/15/2000 CIA-RDP86-00513R001237720013-5

ZAIGRAYKIN, M.I., inzh.; OBUKHOV, L.M., inzh.; TITKIN, N.M., starshiy dorozhnyy master

More about removal from switches. Put' i put.khoz. 4 no.11:16-19 N '60. (MIRA 13:12)

(Railroads—Snow protection and removal)

APPROVED FOR RELEASE: 06/15/2000 CIA-RDP86-00513R001237720013-5"

"APPROVED FOR RELEASE: 06/15/2000 CIA-RDP86-00513R001237720013-5

OBUKHOV, L.M.; RED'KIN, Yu.G.; FILIPPOVA, L.S., red.; GROMOV, Yu.V., tekhn. red.

[Snow removal from switches]Ochistka strelok ot snega. Moskva, Transzheldorizdat, 1962. 34 p. (MIRA 15:11)
(Railroads--Snow protection and removal)

APPROVED FOR RELEASE: 06/15/2000 CIA-RDP86-00513R001237720013-5"

"APPROVED FOR RELEASE: 06/15/2000 CIA-RDP86-00513R001237720013-5

OBUKHOV, M. M.

"The Distribution of Engery in the Spectrum of a Trubulent Stream," Izvestiya akademii nauk USSR, no 4, and 5, 1948.

APPROVED FOR RELEASE: 06/15/2000 CIA-RDP86-00513R001237720013-5"

"APPROVED FOR RELEASE: 06/15/2000 CIA-RDP86-00513R001237720013-5

GALITSINSKIY, Panteleymon Konstantinovich; DEMIDOV, Sergey Ivanovich; OBUKHOV, Mikhail Nikolayevich; SAMOYLOV, Andrey Yemel'yanovich; GRUSHKIN, A., red.; ABBASOV, T., tekhn. red.

[Cotton varieties in Uzbekistan; results of state variety testing for 1950-1959] Sorta khlopchatnika v Uzbekistane; itogi gosudarstvennogo sortoispytaniia za 1950-1959 gg. Tashketn, Gosizdat, UzSSR, 1962. 219 p. (MIRA 15:7)
(Uzbekistan—Cotton—Varieties)

APPROVED FOR RELEASE: 06/15/2000 CIA-RDP86-00513R001237720013-5"

"APPROVED FOR RELEASE: 06/15/2000 CIA-RDP86-00513R001237720013-5

DUBOVENKO, A., inzh.; FEDOROV, V., inzh.; TURCHANNIKOV, I., inzh.; KIRZHNER, Yu., inzh.; OBUKHOV, N., inzh.; ANTONOVA, G., inzh.; ANTIPENKO, I., inzh.

An-2M. Grazhd. av. 22 no.12:11-14 D '65. (MIRA 18:12)

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L 24808-66 EWT(d)/EWT(1)/EWT(m)/EWP(h) RO 2C

ACC NR: AP6013420 SOURCE CODE: UR/0084/65/000/012/0011/0014 36 B

AUTHOR: Dubovenko, A. (Engineer); Fedorov, V. (Engineer); Turchannikov, I. (Engineer); Kirzhner, Yu. (Engineer); Obukhov, N. (Engineer); Antonova, G. (Engineer); Antipenko, I. (Engineer)

ORG: none

TITLE: An-2M agricultural aircraft

SOURCE: Grazhdanskaya aviatsiya, no. 12, 1965, 11-14

TOPIC TAGS: agricultural machinery, aircraft/ An-2M aircraft

ABSTRACT: A comprehensive composite article dealing with the extensive modifications made on the An-2 aircraft to develop a new agricultural aircraft, the An-2M, leads off with a detailed discussion of internal power-takeoff capabilities (mechanical and electrical) and agricultural-chemical capacities and dispersion characteristics. Mention is made of increased wing area, new front-landing-gear placement, new instrumentation, improved electrical equipment, a new propeller, and many other changes. Original (An-2) and replacement (An-2M) equipment is discussed in detail, along with cockpit conditioning equipment and characteristics. Chemical spraying and dispersion equipment is described in detail. Orig. art. has: 6 figures and 1 table. [LB]

SUB CODE: 01/ SUBM DATE: none

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"APPROVED FOR RELEASE: 06/15/2000 CIA-RDP86-00513R001237720013-5

OBUKHOV, N. A.

"The use of varporization method during surgery under battle-field conditions," In symposium: Nauch.-Prakt. raboty voyen-vet. sluzhby, Moscow, 1948, p. 3-11

SO: U-3850, 16 June 53, (Letopis 'Zhurnal 'nykh Statey, No. 5, 1949).

APPROVED FOR RELEASE: 06/15/2000 CIA-RDP86-00513R001237720013-5"

"APPROVED FOR RELEASE: 06/15/2000 CIA-RDP86-00513R001237720013-5

OBUKHOV, N. A., Cand. Vet. Sci.
Omsk Veterinary Institute
"Stopping the flow of blood with hot compact bandages"
SO: Veterinariya 26 (3), 1949, p. 24

APPROVED FOR RELEASE: 06/15/2000 CIA-RDP86-00513R001237720013-5"

"APPROVED FOR RELEASE: 06/15/2000 CIA-RDP86-00513R001237720013-5

OBUKHOV, N.A.

Obukhov, N.A. Cand. Vet. Sci. (Omsk Vet. Inst)
"Use of Vaporization in Surgical Diseases,"

Vet: Vol 26, No 5, 1949.

APPROVED FOR RELEASE: 06/15/2000 CIA-RDP86-00513R001237720013-5"

"APPROVED FOR RELEASE: 06/15/2000 CIA-RDP86-00513R001237720013-5

OBUKHOV, N.A.

Obukhov, N.A. Cand. Vet. Sci. (Omsk Vet. Inst)
"Stoppage of Hemorrhage with Paraffin Bandages in Extirpation of Soft Cartilages,"

Vet: Vol 26, No 5, 1949.

APPROVED FOR RELEASE: 06/15/2000 CIA-RDP86-00513R001237720013-5"

"APPROVED FOR RELEASE: 06/15/2000 CIA-RDP86-00513R001237720013-5

OBUKHOV, N.A.

Dust collectors for preparation shop machinery in flax spinning factories. Tekst. prom. 15 no.2:48-50 F '55. (MLRA 8:3)
(Spinning machinery) (Dust—Removal)

APPROVED FOR RELEASE: 06/15/2000 CIA-RDP86-00513R001237720013-5"