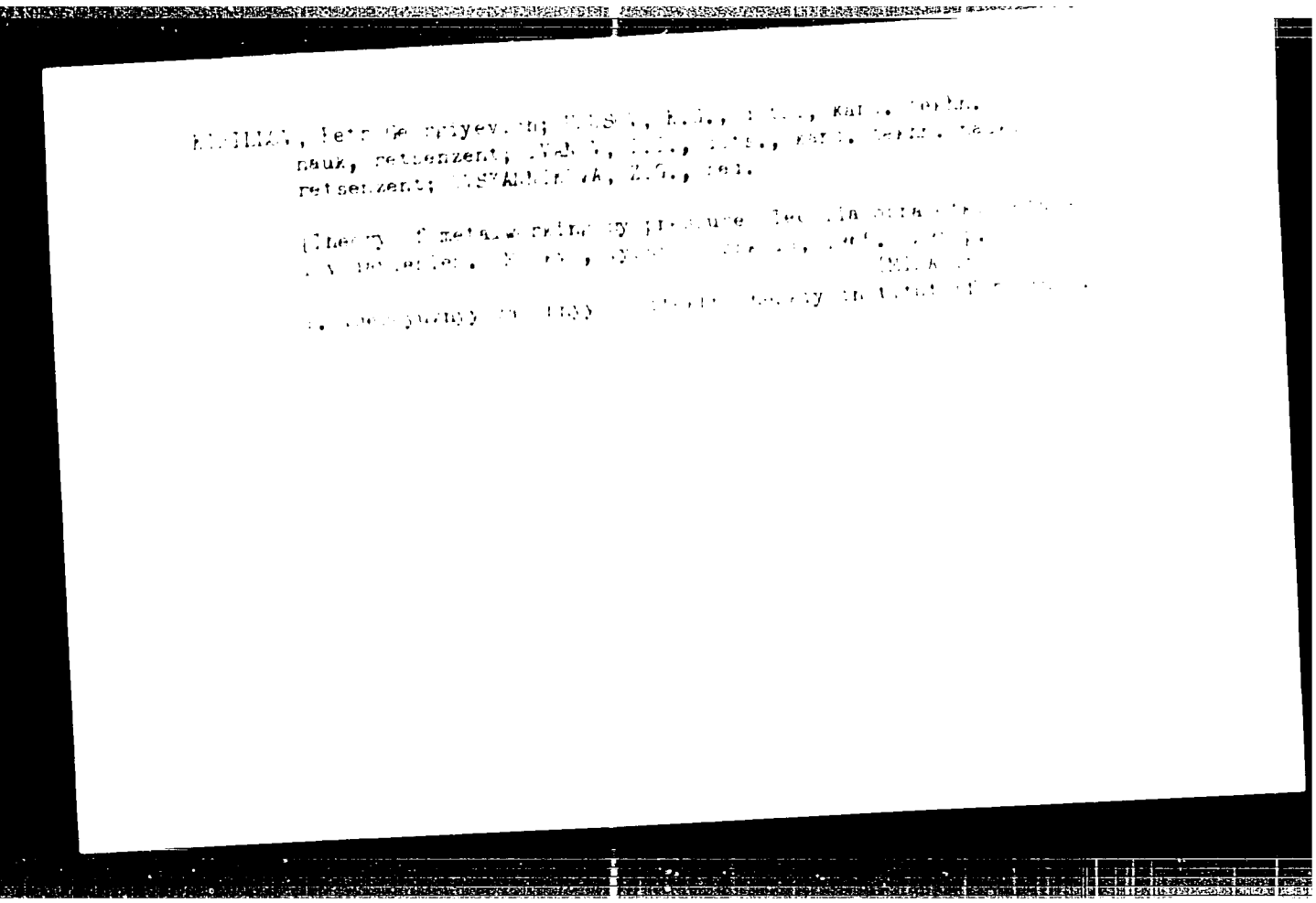

YABLONSKIY, Aleksandr Aleksandrovich; OVSYANNIKOVA, Z.G., red.

[Course of theoretical mechanics] Kurs teoreticheskoi mekhaniki. Moskva, Vysshaia shkola. Pt.2. [Dynamics] Dinamika. Izd.2., perer. 1971. 374 p. (MIRA [illegible])

VOSTROKNUTOV, Nikolay Nikolayevich; DOROGUNTSEV, Viktor Gavrilovich; MARANCHAK, Vadiliy Makarovich; OVCHARENKO, Nikolay Il'ich; SIROTINSKIY, Yevgeniy Leonidovich; FABRIKANT, Veniamin L'vovich; IVANOV, V.I., prof., retsenzent; GIZIL, Ye.P., dots., retsenzent; SIROTKO, V.K., kand. tekhn. nauk, retsenzent; SOLOV'YEV, I.I., prof., red.; FEDOSEYEV, A.M., prof., red.; OVSYANNIKOVA, Z.G., red.; GORKHOVA, S.S., tekhn.red.

[Use of transistors in relay protection and system automation]Primenenie poluprovodnikov v ustroistvakh releinoi zashchity i sistemnoi avtomatiki. Moskva, Vysshaia shkola, 1962. 282 p. (MIRA 16:3)
(Electric protection) (Electric relays)
(Transistor circuits)

BUTENIN, Nikolay Vasil'yevich; OVSYANNIKOVA, Z.G., red.; VORONINA, R.K., tekhn. red.

[Theory of vibrations] Teoriia kolebanii. Moskva, Vysshaia shkola, 1963. 183 p. (MIRA 16:6)
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ANTOVIL', Aleksandr Maksimovich; OVSYANNIKOVA, Z.G., red.; YEZHOVA, L.L., tekhn. red.

[Theory of mechanisms and machinery] Teoriia mekhanizmov i mashin; kratkii kurs. Moskva, Gos. izd-vo "Vysshaia shkola," 1961. 253 p. (MIRA 15:2)
(Mechanical movements) (Mechanical engineering)

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Study of antibiotic-resistant staphylococci isolated during pneumonias in infants. Zhur. mikrobiol., epid. i immun. 32 n.8: 58-63 Ag '61. (MIRA 15:7)

1. Iz kafedry mikrobiologii i kliniki detskikh bolezney I Moskovskogo ordena Lenina meditsinskogo instituta imeni Sechenova.

(STAPHYLOCOCCUS) (PNEUMONIA)

YABLONSKIY, Aleksandr Aleksandrovich; OVSYANNIKOVA, Z.G., red.; GOROKHOVA, S.S., tekhn. red.

[Theoretical mechanics course]Kurs teoreticheskoi mekhaniki. Moskva, Gos.izd-vo "Vysshaia shkola." Pt.2. [Dynamics]Dinamika. 1962. 371 p. (MIRA 16:3)
(Dynamics--Study and teaching)

ARKHAROV, Aleksey Mikhaylovich; OVSYANNIKOVA, Z.G., red.; MURASHOVA, V.A., tekhn. red.

[The thermodynamic method and some problems in low-temperature technology] Termodinamicheskii metod i nekotorye zadachi tekhniki nizkikh temperatur. Moskva, Gos.izd-vo "Vysshaia shkola," 1962. 181 p. (MIRA 15:7)
(Thermodynamics) (Low temperature research)

YABLONSKIY, Aleksandr Aleksandrovich; NIKIFOROVA, Valentina Mikhaylovna; AYZENBERG, T.B., nauchnyy red.; OVSYANNIKOVA, Z.G., red.; GOROKHOVA, S.S., tekhn. red.

[Course in theoretical mechanics]Kurs teoreticheskoi mekhaniki. Moskva, Vysshaia shkola. Pt.1.[Statics, kinematics]Statika, kinematika. 1962. 430 p. (MIRA 16:2)
(Mechanics, Analytic)

NETUSHIL, Anatoliy Vladimirovich; ZHUKHOVITSKIY, Boris Yakovlevich; KUDIN, Vsevolod Nikolayevich; BABAT, G.I., prof., retsenzent; OVSYANNIKOVA, Z.G., red.; GARINA, T.D., tekhn. red.

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(Dielectric heating)

PLOTKIN, Moisey Ruvimovich; OVSYANNIKOVA, [illegible], [illegible]

[Principles of industrial production] Osnovy [illegible] nogo proizvodstva. [illegible], Vysshaia shkola, 19[illegible]. [illegible]
(MIRA [illegible])

ALEKSA[illegible] V, Mikhail Pavlovich; OVSYANNIK VA, L. I., red.

(Hoisting and surveying machinery. Pod"emno-transportnye mashiny. Moskva, Vysshaia shk. la, 1[illegible]. 333 p.
(MIRA 18:8)

OVSYANOV, N. (Makushino, Kurganskaya oblast').

We are waiting for help. Radio no.12:10 D '56. (MLRA 10:2)

(Makushino--Radio clubs)

OVSYANOV, N.I., aspirant.

Synthomycin therapy for paratyphoid fever in pigs. Veterinariia 30 no.7:51-52 Jy '53. (MLRA 6:7)

1. Vsesoyuznyy institut eksperimental'noy veterinarii.

OVSYANOV, N.I., kandidat veterinarnykh nauk.

Bcmonovocillin-1 in diseases of farm animals. Veterinariia 33 no.7: 78-79 Jl '56. (MLRA 9:9)

1.Sibirskiy zonal'nyy nauchno-issledovatel'skiy veterinarnyy institut.
(Antibiotics) (Veterinary medicine)

GLADILIN, Anatoliy Nikolayevich, kand. tekhn. nauk [illegible],
SYROVEGIN, Aleksandr Aleksandrovich, kand. tekhn. nauk, dots.; POPOV, Viktor Mikhaylovich, [illegible] prepod.;
OVSYANNIKOVA, Z.S., red.

[Course of industrial training in [illegible] for mechanical engineering] Kurs proizvodstvennogo obucheniya v mashinostroitel'nykh tekhnikumakh. [illegible] Moskva, Vysshaya shkola [illegible]
Pt.2. 196[illegible]. 304 p. [illegible]

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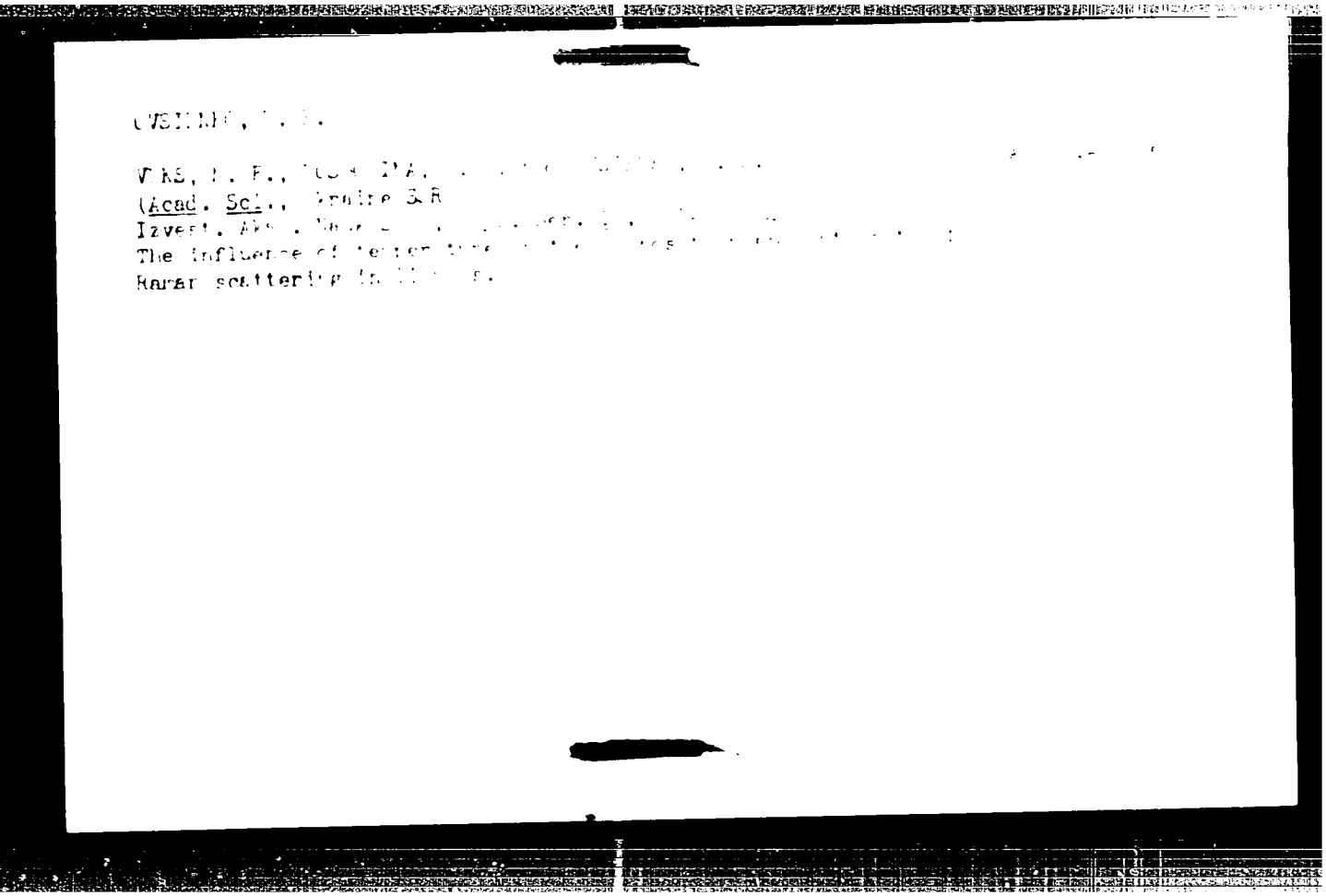
(Veterinary medicine)



OVSIYENKO, D. YE.

USSR/Chemistry - Rayleigh Radiation
Chemistry - Spectra, Band

Sep Oct 48

"Effect of Temperature on the Condition and Intensity of Rayleigh's Dispersion in Liquids," M. F. Vuks, G. P. Roshchina, D. Ye. Ovsiyenko, 6½ pp

"Iz Ak Nauk SSSR, Ser Fiz" Vol XII, No 5

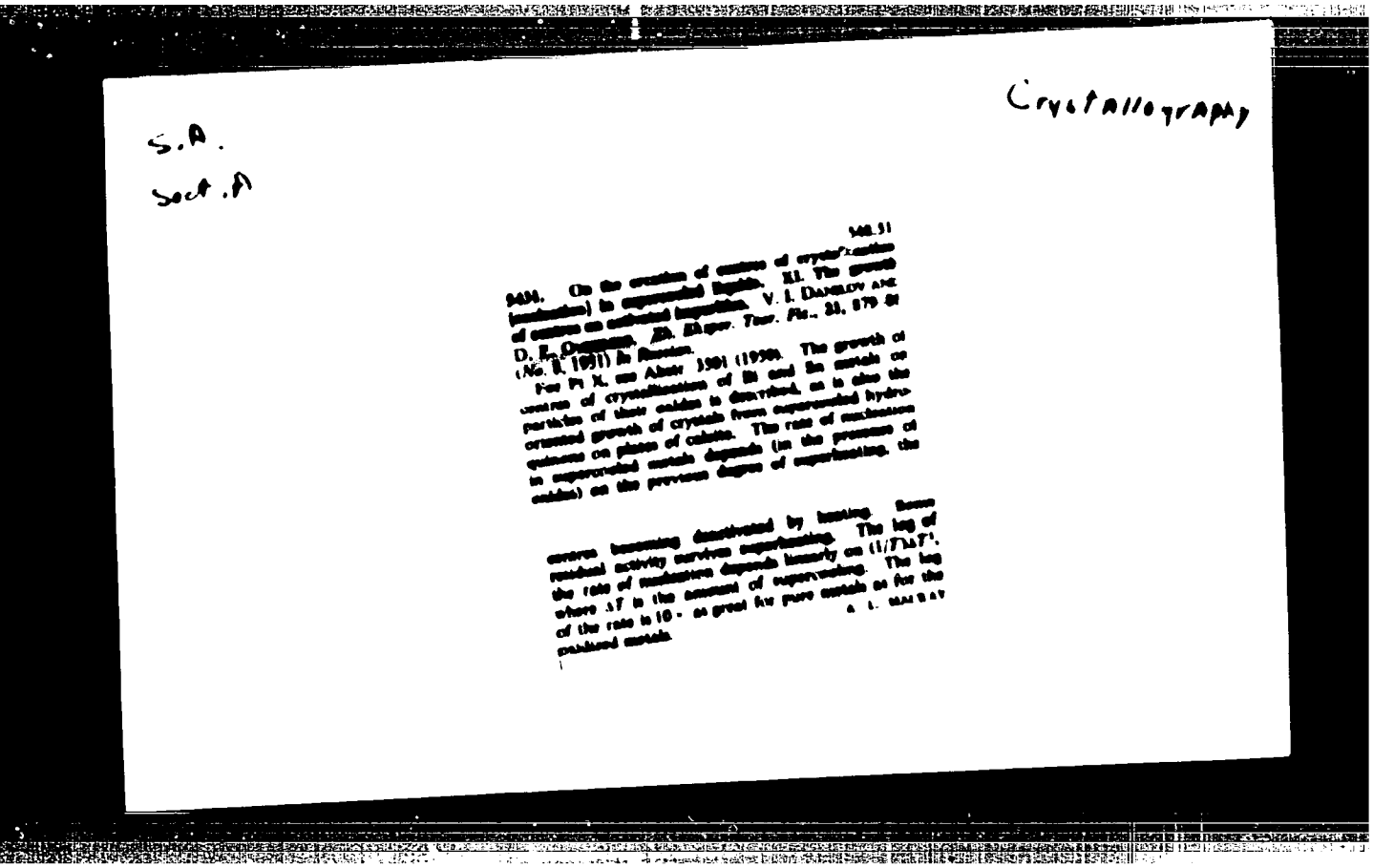
Presents results of investigations of intensity distribution in central part of continuous band at various temperatures. Experiments were undertaken to check accuracy of M. A. Leontovich's theory ("Jour of Phys" 4, 499, 1941). Substances used were benzene, nitrobenzene and salol. Plots and discusses results.

PA 19/49T10

C

Crystallization of hydroquinone on single crystals of calcite. V. I. Danilov and D. E. Ovsienko. *Dopovidi Akad. Nauk Ukrain. R.S.R.* 1950, 205-8; cf. C.A. 37, 2980.—Hydroquinone (I, m. 170.6°), which can be supercooled 15-20°, was supercooled 3-4° in the presence of calcite. When the crystals of I were exposed to calcite for 25 days, supercooling was only 1.8-2.0°; on heating 40-50° above the m. p., supercooling of 3-4° was again attained.

Murray Senkus



S.A.
Sect. A

Crystallography

OVSIYENKO, D. Ye.

The emergence of crystallization centers in supercooled liquids. XI. The emergence of centers on active admixtures. V. I. Danilov and D. E. Ovsienko. *Zhur. Eksptl. i Teor. Fiz.* 21, 879-80(1951); cf. *C.A.* 44, 10783d.—The emergence of crystn. centers for Bi and Pb on their oxides was studied. First the pure metals were studied and then the metals contg. some of the metal oxide. The presence of the oxides decreases the limit of the metastability.

J. Rovtar Leach

OVSIYENKO, D.Ye.

3

The kinetics of crystallization of aqueous solutions of sodium chloride and sodium bromide on a galena surface. D. E. Ovsiyenko. *Voprosy Fiz. Metal. i Metalloved., Akad. Nauk Ukrain. S.S.R.* 1953, No. 4, 85–89.—After filtering through a glass filter (Schott No. 4), solns. of NaCl and of NaBr can attain a supersatd. state up to $\ln(c/c_\infty) = 0.19$ in the case of NaCl, and 0.047 in the case of NaBr; deposition of crystals begins only at higher supersatn. On adding crystals of galena to the solns. the limit of metastability drops to lower values; for NaCl-PbS, ln $(c/c_\infty) = 0.06$ and for NaBr-PbS to $^1/_{10}$ its value before galena addn. The size of the unit cell of the cubic lattice of NaBr, 5.93 A., is almost identical with the value of the unit for galena monocrystal, 5.95 A., and hence the alignment of the NaBr crystals deposited on galena is almost perfectly oriented, whereas in the case of NaCl, for which the unit cell is 5.63 A., the deposited crystals are aligned but in such a way that the max. possible no. of nodes of the 2 cubic lattices coincide. The log of the probability W is plotted against $1/T^2$ ln $(c/c_\infty)^2$ for the 2 systems, NaCl-PbS and NaBr-PbS; the graphs are straight lines except for the deviations to be expected of a fluctuating statistical process such as the generation of crystn. centers. Similar results as regards metastability and orientation were found for melts of hydroquinone on various isomorphous minerals. V. N. Gottschalk

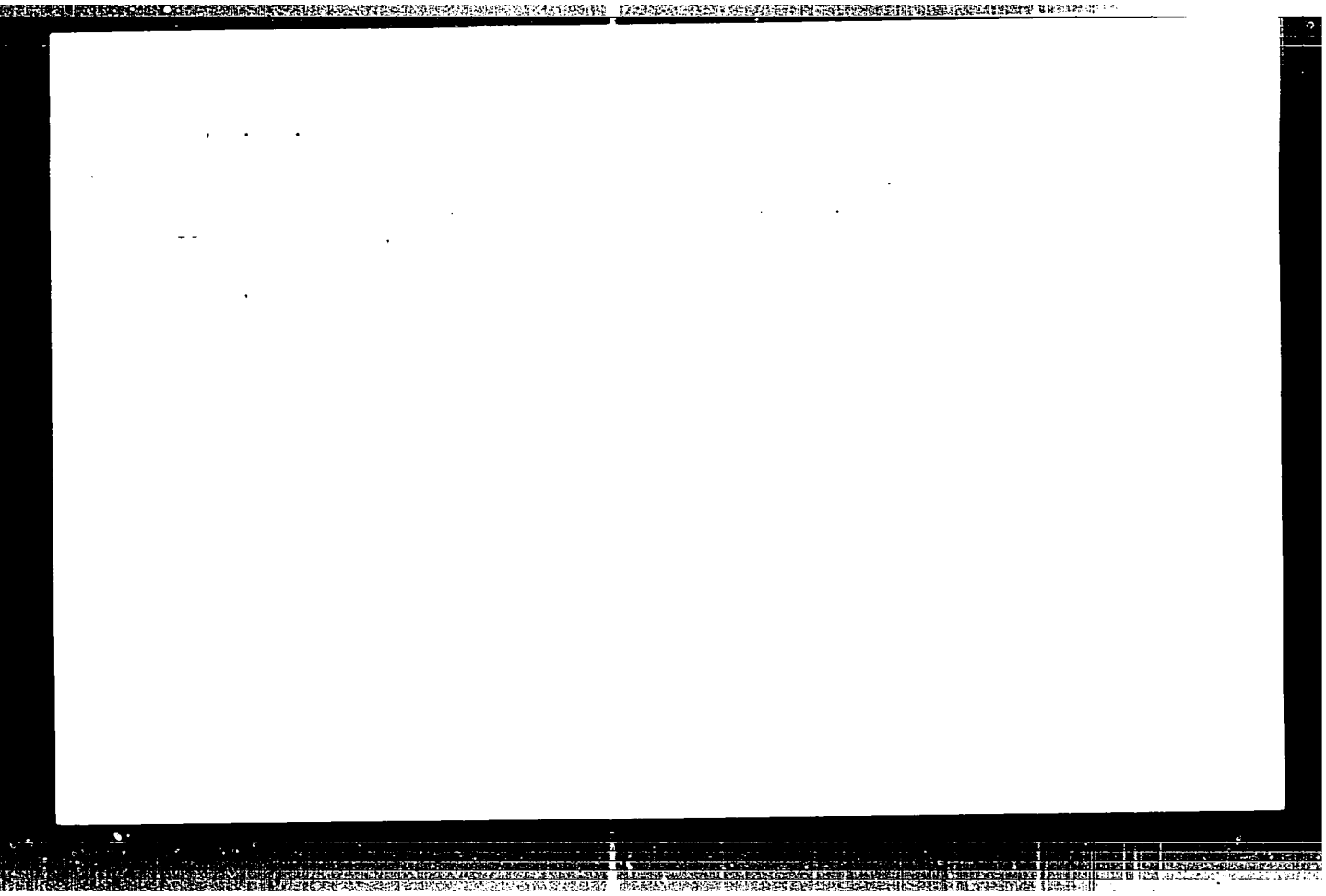
OVSIYENKO, D.Ye.

Kinetics of crystallization of aqueous solutions of NaCl and NaBr on the surface of galenite. Sbor. nauch. rab. Lab. metallofiz. no.4:55-69 '53. (MLRA 9:2)
(Crystallization)

OVSIYENKO, D. Ye.

Effect of oxides on the formation of cast bismuth and lead structures. Sbor. nauch. rab. Lab. metallofiz. no.5 [illegible] '54. (MLRA 8:9)

(Bismuth) (Lead)



APPROVED FOR RELEASE: Wednesday, June 21, 2000 CIA-RDP86-00513R001238

Cvsikevich, D. Ye.

Distr: 4E4j

Effect of the oxides upon the formation of cast structure of bismuth and lead. D. E. Cvsikevich. *Sbornik Nauch. Rabot Lab. Metallofiz. Akad. Nauk Ukr. S.S.R.*, 1954, No. 5, 80-3; *Referat. Zhur., Met.* 1956, Abstr. No. 8161.— Bi and Pb purified by repeated distn. in vacuo were examd. for microstructure. The presence of oxides increases the number of grains 5-6 times over that of pure metals, and therefore decreases the limits of metal metastability.

A. N. Pestoff

OVSIYENKO, D. Ye.

18960* (Russian.) X-Ray Determination of the Dimensions of Block Structure in Cast, Single Crystals of Aluminum. **Rentgenograficheskoe opredelenie razmerov blokov v litykh monokristallakh alluminiia.** D. E. Ovsienko and E. I. Sosnina. *Fizika Metallov i Metallovedenie*, v. 3, no. 3, 1956, p. 516-526.

X-ray measurements of blocks 10^{-4}-10^{-5} cm. in size, having both primary and secondary extinction. Shows that as rate of growth increases, the size of the blocks decreases.

OVSIYENKO, D.Ye.; SOSNINA, Ye.I.

Effect of the growth rate of aluminum single crystals on their mosaic structure. Fiz. met. i metalloved. 3 no.2:374-382 '56. (MLRA 9:11)

1. Institut metallofiziki Akademii nauk USSR.
(Aluminum crystals)

DANILOV, Vitaliy Ivanovich, professor, doktor fiziko-matematicheskikh nauk, laureat Stalinskoy premii; KURDYUMOV, G.V., akademik, redaktor; DANILOVA, A.I., redaktor; ZUBKO, A.M., redaktor; KAMENETSKAYA, D.S., redaktor; LASHKO, A.S., redaktor; OVSIYENKO, D.Ye., redaktor; SKRYSHEVSKIY, A.F., redaktor; SPEKTOR, Ye.Z., redaktor; KAZANTSEV, B.A., redaktor izdatel'stva; RAKHLINA, N.P., tekhnicheskiy redaktor

[Structure and crystallization of liquids; selected articles] Stroenie i kristallizatsiia zhidkosti; izbrannye stat'i. Pod red. G.V.Kurdiumova. Kiev, Izd-vo Akademii nauk UkSSR, 1956. 566 p. (MLRA 9:10)

1. Deystvitel'nyy chlen AN USSR (for Danilov)
(Liquids) (Crystallization)

OVSIYENKO, D. Ye.

Effect of crystalline growth of aluminum on its mosaic structure. II. B. Ovsiyenko and E. I. Gorunova. *Fiz. Metal. i Metalloved., Akad. Nauk S.S.S.R.* 3, 874-82 (1956).—In a new method proposed a beam of scattered x-rays from a Mo cathode impinges on a rock salt crystal, and the reflected monochromatic beam impinges in its turn on the crystal under investigation. The first is rigidly mounted at its reflection angle, the sample is rotated by means of a micrometric screw. Reflections obtained on each 50-100-sec. rotation were photographed, the exposure being selected so that the reflection of a crystal held at the optimum angle would produce normal darkening of 0.7. On rotating the crystal in both directions from the optimum position, darkening of the reflections varied from zero to a max. Knowing the angular interval of crystal reflection permits detn. of the angle of its mosaicity as the difference between this interval and the spreading of the reflected beam. The latter was detd. with calcite as a standard, which reflects with an angular interval equal to the spreading of the impinging beam, the (100) plane of it reflecting at 7-8° as compared with 8.8° for the (111) plane of Al. The use of such a standard is intended for a max. exclusion from the diffraction picture of the portion of the latter not connected with the phys. state of the crystal under investigation. The dispersion found in case of calcite always remained within 40-50 sec. A curve of intensity maxima for calcite in different positions shows that the distribution of its intensities and those of the original monochromatic beam differ but little. A similar curve for Al has a smoother pattern, indicating a comparatively high block disorientation. A complete extinction was noted for it within 20 min., whereas calcite had it at 7-8 min. Curves so obtained can be rptd.

Ovsienko, O.E., Sosnina, E.I.

as explained in detail, for detg. the orientation of blocks, and this reasoning was applied to the study of 99.996% Al solidified in vacuum and in air at 0.1 to 6.0 mm./min. Although the values for individual crystals vary, the av. values of the angle increase with the solidification rate, being 23.5, 32.9, and 50.3 min. for the 0.1, 0.5, and 6.0 mm./min. rates, resp. The angle of mosaicity which was 24.3 min. for air-solidified Al became 32.0 when the same Al was solidified at the same rate in vacuum, which fact is attributed to gas evolution. I. D. Gat

2/2

OVSIYENKO, D. F.

3 4E2L

X-Ray Determination of the Size of (Mosaic) Blocks in Cast Single Crystals of Aluminium / O. F. Ovsiyenko and E. I. Sonina (*Fizika Metallov i Metallovedenie*, 1956, 3, (3), 518–520).—(In Russian). The integrated X-ray intensities of certain reflections are calculated as a function of mosaic block size. Hence O. and S. describe a method of measuring block size in the range 1–100 μ. The method is applied to Al single crystals drawn from the melt. The faster the rate of growth, the smaller are the mosaic blocks, but the greater is their relative disorientation.—A. F. B.

RG

OVSIYENKO, D. Ye.

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7

18 18 18

The Influence of Small Additions of Copper and Zinc on the Mosaic Structure of Aluminium Crystals. E. I. Soenina and D. E. Ovsienko (*Fizika Metallov i Metallovedenie*, 1956, 3, (3), 527–530).—[In Russian]. Addn. of 0·05% Cu or 1·5% Zn to the Al used for growth of S. and O.'s single crystals (*ibid.*, p. 516; preceding abstract) results in a sharp decrease of the mosaic-block size but in an increase in the relative disorientation between them. In both cases the mean angle between blocks is practically doubled by the presence of the impurities. Addn. of 0·05% Cu reduces the block size by 100–500 times, and of 1·5% Zn by 10–100 times.—A. F. B.

R.G.

[illegible]enko, D. Ye.

4E2c

X-ray determinations of the dimensions of the blocks in aluminum monocrystals. D. E. Ovsienko and E. I. Sosnina. [illegible] *Dokl. Akad. Nauk S.S.S.R.* [illegible] (1960).—The existence of deviations from the ideal lattice structure has been assumed for some time, but even when such deviations are distributed in a pattern (mosaic structure), there is no agreement as to the exact nature and cause of such structure. The present paper proposes a method for measuring the dimensions of the mosaic structure of Al monocrystals, based on measurements of the integral intensity of x-ray reflections from the (111), (200), (222), and (400) faces of monocrystals of Al. The derivation of the formulas is given; one essential variable is η, the degree of de-orientation of the blocks = $2\Delta\theta/\tan\theta$, where θ is the Bragg angle and $2\Delta\theta = 4t/\sin\theta$, $t = 2.72 \times 10^{[illegible]}(z/A)p\lambda^{[illegible]}$, where A is at. wt. of the dispersed atoms, z is the no. of electrons in the atom, p is the area of the crystal, λ is the wave length of the x-ray beam ($\lambda = 0.71$ A.). When the rate of growth of the crystal is 0.5 mm./min., the size of the blocks is 10^{-4} cm., and when the rate of growth is 0 mm./min., the size of the blocks is $(1.0-1.25) \times 10^{-4}$ cm. V. H. Gottschalk

OVSIYENKO, D.Ye.

Effect of insoluble impurities on the structure of aluminum ingots. Sbor. nauch. rab. Inst. metallofiz. AN URSR no.8:153-162 '57. (MIRA 11:5)
(Aluminum--Metallography)

Translation from Referativnyy zhurnal Metallurgiya 1958, Nr 6 p 127 (USSR)

AUTHOR Ovsiyenko D Ye

TITLE The Effect of Insoluble Impurities on the Structure of Aluminum Ingots (Vliyaniye nerastvorimykh primesey na strukturu alyuminiyevogo slitka)

PERIODICAL Sb nauchn rabot In-ta metallofiz. AN UkrSSR 1957 Nr 5 pp 155-162

ABSTRACT The structure of an Al ingot was investigated as a function of the conditions of crystallization and the degree of purity of the metal. It is shown that by means of varying the casting temperature, the temperature of superheating of the metal, and the rate of its cooling in molds an Al ingot of the A00 grade (99.7% pure) may have either a fine or a coarse-grained structure. In the case of Al of the AV000 grade, the structure of the ingot is characterized by sharply defined columnar crystals and is not affected by the casting temperature or by preliminary superheating of the metal. Introduction of powdered calcite or galenite results in a considerable refinement of the grain of the ingot. Even smaller grains can be obtained

Card 1/2

137-[illegible]

The Effect of Insoluble Impurities on the Structure of Aluminum Ingots

with the aid of Ti which forms the chemical compound Al_3Ti in liquid Al. The impurities indicated preserve their activity at temperatures which exceed the melting point of Al by 60-80°C and in some instances (Al_3Ti ... as much as 400° or more.

U.S.S.R.

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Card 2/2

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Investi[illegible] of [illegible]
Castin[illegible]

[illegible] different [illegible] will [illegible] extent [illegible] ities as the strength, the ductility, etc. I[illegible] paper an attempt is made to elucidate the [illegible] structure of various zones of an aluminium [illegible]. The [illegible] method of investigation was the X-ray [illegible]. Additionally, the [illegible] of [illegible] patterns [illegible]. As a starting [illegible] commercially pure aluminium was used ([illegible].7% aluminium, 0.13% Si, 0.14% Fe, 0.01% Cu). The aluminium casting weighing 200 [illegible] produced by pouring the liquid metal into a cold ingot mould and allowing it to cool in the air. The casting was then cut in the longitudinal and the perpendicular directions, ground [illegible] emery paper and electrolytically polished and, finally, [illegible] etched for the purpose of detecting the macro-structure (shown in Fig. 1). The process of electric polishing [illegible] continued until the deformed layer, c[illegible],

Card 2/5

V/1[illegible]

Investigation of the [illegible] Structure of [illegible] Casting

and been completely [illegible]. As [illegible] was [illegible] the central part [illegible] casting. The X-ray investigations of the [illegible] were [illegible] information [illegible] their [illegible] or the presence of Type II stresses [illegible] of various [illegible] casting [illegible]. For this purpose various X-ray methods were [illegible] and the [illegible] dimensions were determined. The results are entered in Tables 1-[illegible], Fig. [illegible]. Some of the [illegible] are reproduced in F[illegible]. On the basis of [illegible] results [illegible] conclusions were arrived at. The [illegible] casting represent [illegible] oriented crystal form [illegible] of fragments of the order of 10[illegible] which are apparently elements of [illegible] dendritic structure [illegible] in turn consist of [illegible] blocks of the order of 10[illegible]. The mutual [illegible] of the fragments [illegible] of the blocks. The degree of imperfection of [illegible]

Card 3/5

[illegible] V/1[illegible]

Investigation of [illegible] Structure of [illegible] Casting

more driven [illegible] central zone. This [illegible] the basis [illegible] of [illegible] of [illegible] the blocks of [illegible] structure of the [illegible] of the central zone.
There are [illegible] figures, [illegible] tables and 9 references, [illegible] which are Soviet.

ASSOCIATION: Institut [illegible] AN UkrSSR
(Institute of Metal Physics, Ac.Sc. Ukrainian SSR)

SUBMITTED: December [illegible], 1[illegible]

1. Aluminum castings--Structural analysis 2. Crystals--Growth
3. Aluminum castings--Crystallization 4. Crystals--Properties

Card 5/5

OVSIYENKO, D.Ye.; SOSNINA, Ye.I.

Investigating the intergranular structure of aluminum ingots.
Fiz. met. i metalloved. 6 no.3:433-443 '58. (MIRA 11:10)

1. Institut metallofiziki AN USSR.
(Aluminum--Metallography)

OVSIYENKO, D.Ye.; SOSNINA, Ye.I.

Effect of crystallization conditions on the mosaic structure of aluminum crystals. Sbor. nauch. rab. Inst. metallofiz. AN URSR no.9:195-197 '59. (MIRA 12:9)
(Aluminum crystals) (Metallography)

OVSIYENKO, D.Ye.; KOSTYUCHENKO, V.P.

Effect of oxides on the crystallization of iron and of some of its alloys. Sobr. nauch. rab. Inst. metallofiz. AN URSR no.10:130-143 '59. (MIRA 13:9)

(Iron—Metallography) (Crystallization)

85996

18 7500 (1146, 1145) 21 62[illegible] S/070/60/005/005/022/026/XX
E132/E160

AUTHOR: Ovsiyenko, D.Ye.

TITLE: The Influence of Gamma Rays on the Supercooling of Paradichlorobenzene

PERIODICAL: Kristallografiya, 1960, Vol 5, No.5, pp.779-782

TEXT: It has been shown that gamma rays produce an appreciable reduction in the degree of supercooling of paradichlorobenzene. An effect of this sort would be expected from the modes of operating of the Wison cloud chamber and the bubble chamber. Paradichlorobenzene was chosen because of its low m.p. (53 °C) and the large supercooling (25-30°) which may occur. Specimens were purified by redistillation in vacuo and still in vacuo were loaded into capillaries 40 mm long and 1.5 mm in diameter. Four specimens which showed the greatest supercooling were chosen for further work. They were cooled in a water bath from 80° at about 0.5-0.8 °/min. The supercooling obtainable was measured for each specimen 10-15 times. Although the specimens varied from one to another each specimen was fairly consistent.

Card 1/2

S/126/60/010/005/017/030
E021/E406

AUTHORS: Ovsiyenko, D.Ye. and Zasimchuk, I.K.

TITLE: The Effect of the Degree of Polygonization on the Diffusion of Zinc in an Aluminium Single Crystal

PERIODICAL: Fizika metallov i metallovedeniye, 1960, Vol.10, No.5, pp.743-749

TEXT: The investigations were carried out on flat single crystals of 99.995% aluminium, grown from the melt. Different degrees of mosaic structure were obtained by changes in the rate of movement of the furnace from 0.5 to 6 mm/min with a temperature gradient of 20°/cm. In all the samples the (200) plane was parallel to the surface. The dimensions of the crystallites and the maximum misorientation between them were determined by X-ray crystallography. Zinc was precipitated on an electropolished surface of the aluminium using a zinc sulphate / sulphuric acid / sodium fluoride bath with a current density of 0.05 A/cm^2 and a voltage of 4 V. The samples were heated at various temperatures in argon. Layers 5 to 10 microns thick were then removed electrolytically and the activity of the zinc in each layer determined. Thus the diffusion of zinc could be followed.

Card 1/3

S/126/60/010/005/017/030
E021/E406

The Effect of the Degree of Polygonization on the Diffusion of Zinc in an Aluminium Single Crystal

The results showed that the mosaic structure had a marked effect on the character and the rate of diffusion. In the more perfect crystals with crystallites of about 10^{-2} cm and angle of misorientation 15 to 20', the zinc obeyed the laws of volume diffusion in the region 327 to 375°C. The temperature relationship was

$$D = 1.4\, e^{\frac{-30800}{RT}}$$

In the less perfect crystals with crystallites of about 10^{-3} cm and angle of misorientation 30 to 50', the boundaries between the crystallites played an important role in diffusion. This was shown by a change in the character of the fall in specific activity with depth, by an increase in depth of penetration and by an increase in the effective coefficient of diffusion.

Acknowledgments are expressed to S.D.Gertsriken and M.P.Pryanishnikov for participating in and evaluation of the work.

Card 2/3

S/126/60/010/005/017/030
E021/E406

The Effect of the Degree of Polygonization on the Diffusion of Zinc in an Aluminium Single Crystal

There are 5 figures 1 Table and 15 references: 8 Soviet and 7 Non-Soviet.

ASSOCIATION: Institut metallofiziki AN USSR
(Institute of Physics of Metals AS UkrSSR)

SUBMITTED: March 3, 1960 (initially)
June 7, 1960 (after revision)

V

Card 3/3

OVSIYENKO, D.Ye.; ZASIMCHUK, I.K.

Effect of mosaic structure on zinc diffusion in single aluminum crystals. Fiz. met. i metalloved. 10 no.5:7[illegible]749 N '60. (MIRA 14:1)

1. Institut metallofiziki AN USSR.
(Aluminum crystals) (Diffusion)

VSIYENKO, D.Ye.; ALFINTSEV, G.A.

Effect of the conditions of solidification and certain admixtures on the cast structure and the plasticity of chromium.
Fiz. met. i metalloved. 12 no.5:779-782 N '61.
(MIRA 14:12)

1. Institut metallofiziki AN USSR.
(Chromium--Metallography)
(Nonferrous ingots)

OVSIYENKO, D.Ye.; KOSTYUCHENKO, V.P.

Supercooling of chromium. Sbor. nauch. rab. Inst. metallofiz. AN URSR no.13:167-169 '61. (MIRA 14:12)
(Chromium) (Supercooling)

BYKHOVSKIY, A.I.; LARIKOV, L.N.; OVSIYENKO, D.Ye.

Mechanism of crystal growth in the $\alpha \rightarrow \beta$-transformation of p-dichlorobenzene. Kristallografiia no.2:284-286 Mr-Ap '61.

1. Institut metallofiziki AN USSR. i Ukrainskaya akademiya sel'skokhozyaystvennykh nauk.
(Phase rule and equilibrium) (Benzene)
(Crystals--Growth)

OVSIYENKO, D.Ye.

Effect of insoluble impurities on the crystallization and cast structure of metals. Sbor.nauch.rab.Inst.metallofiz.AN URSR no.12:3-20 '61. (MIRA 14:8)

(Crystallization) (Metallography)

35185
S/601/61/000/013/017/017
D207/D302

18.1231

AUTHORS: Ovsiyenko, D. Ye. and Kostyuchenko, V. P.

TITLE: The supercooling of chromium

SOURCE: Akademiya nauk Ukrayins'koyi RSR. Instytut metalofyzyky. Sbornik nauchnykh rabot, no. 13, 1961. Voprosy fiziki metallov i metallovedeniya, 167-169

TEXT: The authors studied supercooling of chromium in an atmosphere of purified hydrogen. The technique was the same as in the authors' earlier work on iron. Small molten drops, 1 - 2 mm in diameter, of chromium containing 0.003% O, 0.0002% H, 0.006% N, 0.05% Fe and 0.05% Si were placed on a BeO plate. The temperature was measured with a W-Mo-Al thermocouple ЦНИИЧМ-1 (TsNIIChM-1) in contact with chromium. Chromium was found to solidify at temperatures of 80 - 120°C below the melting-point; some drops crystallized 200°C below the melting-point. Scatter of these temperature intervals was due to impurities: traces of nitrogen and

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S/126/61/012/005/027/028
E040/E435

AUTHORS Ovsiyenko D Ye , Alfintsev, G A

TITLE Effect of solidification conditions and some impurities on the structure and plasticity of cast chromium

PERIODICAL Fizika metallov i metallovedeniye v 12 no 5 1961 779-782

TEXT The purpose of the investigation was to examine the possibility of reducing the brittleness of cast chromium by modification of its grain structure rather than by the usual means of achieving the same purpose by the removal of impurities and thermo-mechanical treatment The grain size was modified by varying the conditions of chromium crystallization and by introduction of boron beryllium and tantalum additions which form with chromium high melting point compounds (CrB_2 Cr_2Ta and CrBe) as well as nitrides and carbides and can therefore facilitate the formation of crystallization centres and thereby affect the cast structure of chromium The tests were made on electrolytic chromium containing 0 003% O 0 006% N 0 08% Fe and 0 05% Si Cylindrical test specimens were cast by melting

S/126/61/012/005/027/028
E040/E435

Effect of solidification conditions

a mixture of orthophosphoric acid (65%) sulphuric acid (21%) and 14% water using a current density of 3 amp/cm^2 Bending tests were carried out at the deformation rate of 25 mm/min The transition temperature from the brittle into the ductile state was taken to correspond to the test temperature at which the bending was 90° The grain size of cast structure was found to diminish with rising rate of cooling Tantalum and beryllium additions have little effect on the cast structure of chromium and at all additive concentrations the ratios of crystallization zones and grain size are approximately the same as in pure chromium Boron has a strong effect on the structure of cast chromium whose grain size diminishes very considerably even at an addition of 0.02% and diminishes still further at higher concentrations the maximum effect corresponding to 0 1% B addition Bending test data on pure and alloyed chromium are shown graphically It was found that in pure chromium the temperature of brittle-ductile transition drops with diminishing grain size Boron addition increases appreciably the transition temperature which rises with increasing boron concentration Tantalum additions up to 0 1% by wt lower the transition temperature while higher

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S/126/61/012/005/027/028
E040/E435

Effect of solidification conditions

ASSOCIATION Institut metallofiziki AN UkrSSR
(Institute of Physics of Metals AS UkrSSR)

SUBMITTED February 25 1961

Card 5/5

S/126/61/014/002/009/01
E193/E383

AUTHORS: [illegible], D.Ye. and Sosina, Ye.I.

TITLE: The effect of the structure on the magnitude of critical resolved stress in cast aluminium [illegible] crystals.

PERIODICAL: Fizika metallov i metallovedeniye, v. 14, no. [illegible], 1962, [illegible] - 275

TEXT: The investigation described in the present [illegible] a continuation of earlier work on the effect [illegible] on the [illegible] of aluminium single crystals (FMM, 1958, [illegible]). [illegible] experimental specimens (3 mm in diameter, 55 mm [illegible] 99.99 [illegible] were grown by a method entailing [illegible] seed crystals and regulated cooling of the melt at [illegible] rate. The axis of each crystal coincided with the [illegible] direction. After etching, the orientation of each crystal was checked by X-ray diffraction and the dimensions of the [illegible] and in the degree of their misalignment were determined. [illegible] specimens were then extended on a specially designed testing machine and the results were used to calculate the critical

Card 1/5

S 601 62 000 014 012 012
1003 1203

AUTHORS Ovsiyenko, D. E., and Alfintsev, G. A

TITLE The influence of conditions of solidification and of the additions of boron and tantalum on the structure and on the plasticity of cast chromium

SOURCE Akademiya nauk Ukrayins'koyi RSR. Instytut metalofyzyky. Sbornik nauchnykh rabot no. 14. Kiev, 1962. Voprosy fiziki metallov i metallovedeniya, 139-146

TEXT In recent years many investigators have tried to determine the causes of the brittleness of chromium. The chromium samples were smelted in vacuum either in an aluminum oxide or beryllium melting pot, and bottom-poured into a copper mold. As shown by the results the addition of from 0.005 to 0.1% of boron leads to a fine-grained structure, while tantalum has no effect under identical conditions of solidification. The dependence of the mechanical properties of chromium on its grain size is as follows: the reduction of grain size from 800 to 250μ decreases the temperature at which the metal acquires plasticity from 150° C to 105° C and the hardness from 150 to 115 kg/mm^2. The addition of 0.05 to 0.1% of boron increases the temperature at which chromium acquires plasticity by 150 to 200° C, but has little influence on the hardness, while the addition of 0.1% of Ta decreases the above plasticity limit by 40-50° C. There are 2 tables and 6 figures.

Card 1/1

OVSIYENKO, D.Ye.; SOSNINA, Ye.I.

Effect of the mosaic structure in cast single crystals of aluminum on their critical breaking stress. Fiz. met. i metalloved. 14 no.2: 252-258 Ag '62. (MIRA 15:12)

1. Institut metallofiziki AN UkrSSR.
(Aluminum crystals—Testing) (Dislocations in metals)

in the form of a 3-mm wire, was placed in the upper part (1) of the mould shaped as a standard tensile test piece. The mould was then placed in the single-crystal-growing apparatus and, after a vacuum of 10^{-4} - 10^{-5} mm Hg had been reached, the mould was heated in such a manner as to melt the charge and the upper portion (20 - 30 mm long) of the seed crystal. The furnace was then moved upwards and the molten metal solidified as a single crystal with the orientation of the seed crystal. The degree of misalignment between the mosaic blocks was varied by varying the rate of travel of the furnace between 0.5 and 10 mm/min. After the orientation of the specimens had been checked and the block dimensions and maximum angle of misalignment determined, creep tests were carried out at 250 °C under a stress of 600 g/mm^2. The results were automatically recorded in the form of g/time curves, from which the usual creep curves were subsequently constructed. Typical results are reproduced in Fig. 3, where the elongation (%) is plotted against time (hrs) for specimens with the angle of misalignment between blocks equal to 50 (upper curve) and 15 (lower curve) min. The results obtained indicated that the

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ASSOCIATION: Institut metallofiziki AN UkrSSR
(Institute of Metal Physics of the AS UkrSSR)

SUBMITTED: January 26, 1962

Card 3/4

ACCESSION NR: AT4013929 S/2659/63/010/000/0068/0076

AUTHOR: Ovsiyenko, D. Ye.; Sosnina, Ye. I.

TITLE: Influence of the mosaic structure of monocrystals of aluminum castings on the critical shearing stress

SOURCE: AN SSSR. Institut metallurgii. Issledovaniya po zharoprochny*m splavam, v. 10, 1963, 68-76

TOPIC TAGS: aluminum casting, aluminum structure, aluminum, cast aluminum, shear, shearing stress, aluminum monocrystal

ABSTRACT: Previously, the influence of the mosaic structure on the process of creep has been investigated. The present investigation covers the dependence of the critical shearing stress in cast monocrystals of pure aluminum on the initial mosaic substructure. The results of the study showed that the critical shearing stress is increased by a factor of two when the disorientation is increased by a factor of four and the size of the lattice is decreased by a factor of 25. Furthermore, the critical shearing stress increases linearly with an increase in the angle of disorientation and decreases in proportion to the square root of the lattice dimension. From this it follows that the critical shearing stress depends not only on the density of the subgranules, but also on the angle of disorientation of the

Card 1/2

OVSIYENKO, D.Ye. [Ovsiienko, D.IU.]; SOSNINA, Ye.I. [Sosnina, K.I.]

Method for growing single crystals of a definite shape and orientation. Ukr. fiz. zhur. 8 no.1:121-124 Ja '63. (MIRA 16:2)

1. Institut metallofiziki AN UkrSSR, Kiyev.
(Crystals--Growth)

OVSIYENKO, D.Ye., ALFINTSEV, V.A.

Mechanism of the growth of [illegible]lol crystals from the melt. Kristallografiia 8 no.5:796-799 S-O '63. (MIRA 16:10)

1. Institut metallofiziki AN UkrSSR.

L 22545-65 EWT(m)/T/EWP(t)/EWP(b) IJP(c) JD

ACCESSION NR: AP4048867 S/0185/64/009/010/1092/1101

AUTHOR: Zasy*mchuk, I. K. (Zasimchuk, I. K.); Ovsiyenko, D. Yu. (Ovsiyenko, D. Yu.)

TITLE: The effect of the growth rate and of the small addition of cadmium on the degree of perfection of zinc single crystals grown from a melt

SOURCE: Ukrayins'kiy*y fizy*chny*y zhurnal, v. 9, no. 10, 1964, 1092-1101

TOPIC TAGS: zinc single crystal, crystal growth rate, crystal imperfection, chemical etching

ABSTRACT: The effect of the rate of growth and of the addition of Cd on the perfection of zinc crystals grown from a melt was investigated by the x-ray method based on the principle of a double-crystal spectrometer and, in the zinc with Cd admixture, also by chemical etching. It was shown the crystals grown at a greater rate have a greater degree of imperfections. The distributions of the dislocations in crystals grown at different rates were essentially of different nature: the disorientation among the elements of the substructure and thus the density of dis-

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L 22545-65

ACCESSION NR: AP4048867

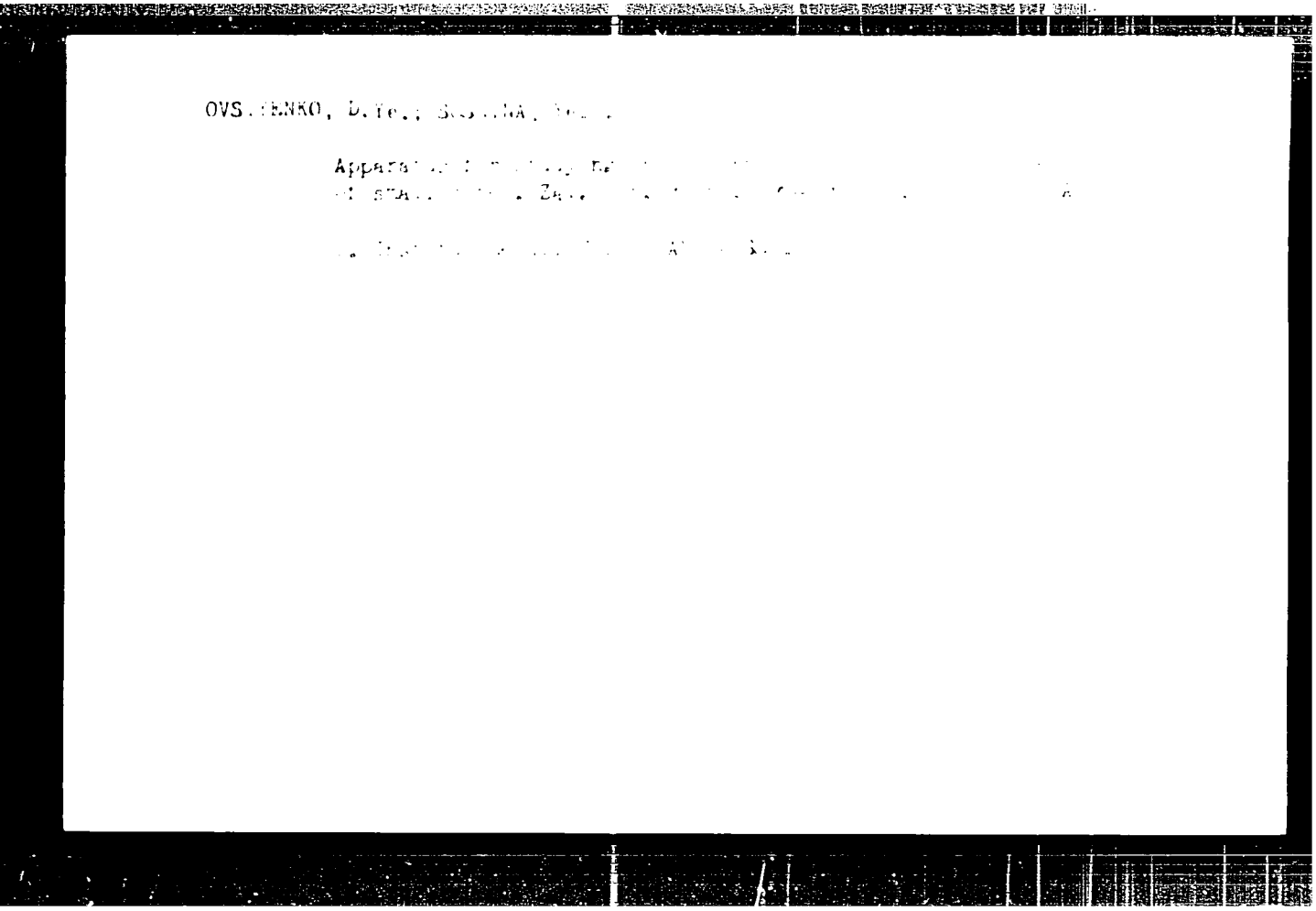
locations in the subboundaries increased. The addition of 0.04% Cd, the minimum amount detectable by etching dislocations on the different zinc crystal surfaces, caused additional disturbances. The distribution of the dislocations determined by this method was characteristic of the imperfections of the zinc crystals with the given amount of Cd, and not of the original zinc. This was believed to also be the case with other metals. The existence of elements of first and second order substructures was established and the nature of their opening was discussed. The effect of the degree of perfection of etching on the perfection of the grown crystals was established and an effective method was proposed for eliminating this effect, based on the application of a thin neck. Orig. art. has: 7 figures and 1 table

ASSOCIATION: Insty*tut metalofizy*ky* AN URSR, Kiev (Institute of Metallophysics, AN URSR)

SUBMITTED: 19Feb64 ENCL: 00

SUB CODE: SS, MM NO REF SOV: 007 OTHER: 007

Card 2/2



ACCESSION NR: AP4041146 S/0020/64/156/004/0792/0794

AUTHOR: Alfintsev, G. A.; Ovsiyenko, D. Ye.; Kurdyumov, G. V.

TITLE: Study of the mechanism of growth of gallium crystals from the melt

SOURCE: AN SSSR. Doklady*, v. 156, no. 4, 1964, 792-794

TOPIC TAGS: crystal growth, gallium crystal growth, crystal growth theory, crystallography, deformation effect

ABSTRACT: The purpose of this work was an investigation of the kinetics of gallium crystal growth. The specimen was 0.5 mm thick. Liquid gallium was maintained at a desired constant temperature by means of a ultrathermostat. The growth of the (001) face of the crystal was observed with an MIM-6 microscope. It was found that the rate of growth, at the same amount of undercooling ΔT, is very sensitive to deformation of the primary crystal. If vibrations which lead to deformation of solid gallium are avoided, the crystals did not grow even at a considerable ΔT. For instance, at $\Delta T = 0.4°C$, no growth was observed during one hour. At $\Delta T = 0.76°C$, the rate of growth was 1.56×10^{-4} m/sec. At $\Delta T = 0.63°C$, the growth was 1.26×10^{-4} m/sec. before deformation, and 2×10^{-4} m/sec. after deformation.

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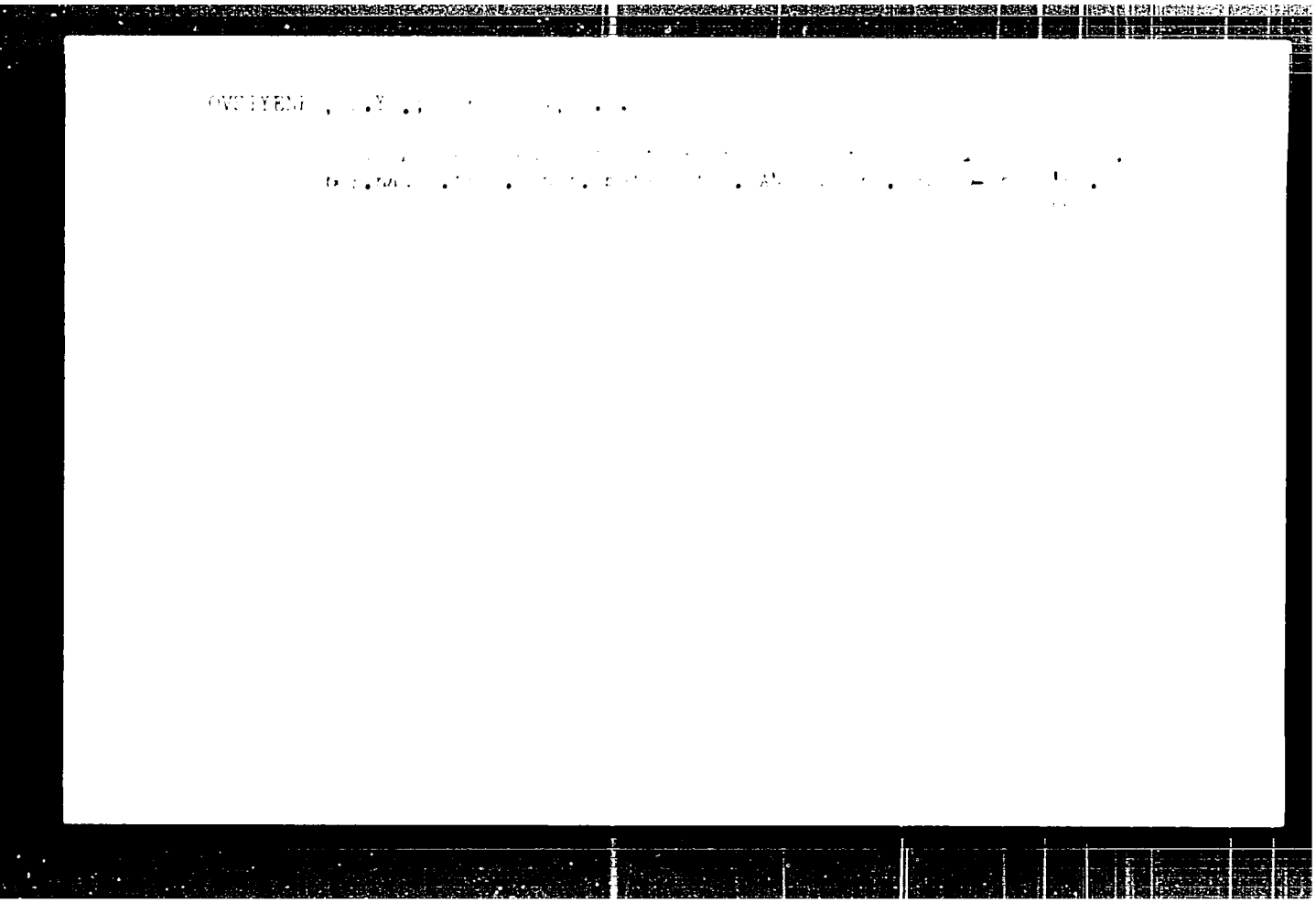

L 7390-66 EWT(m)/EWP(m)-2/ETC(F)/EWG(m)/T/EWP(b)/EWP(j) IJP(c) JD/JG

ACC NR: AP6009169 SOURCE CODE: UR/0030/65/000/012/0093/0096

AUTHOR: Ovsiyenko, D. Ye. (Doctor of physico-mathematical sciences)

ORG: none

TITLE: Study of the mechanism of growth and imperfections of metal crystals (All Union Conference in Kiev)

SOURCE: AN SSSR. Vestnik, no. 12, 1965, 93-96

TOPIC TAGS: metallurgic conference, solid state physics conference, metal crystal, metal crystallization, crystal dislocation, crystal defect, crystal growth

ABSTRACT: An all-union conference held June 7-12, 1965 in Kiev discussed research on the formation of metal crystals, crystal deformation, and related topics. The conference was sponsored by the Scientific Council on Problems of Solid State Physics of the Academy of Sciences SSSR, the Scientific Council on Solid State Physics and the Institute of Metal Physics of the Academy of Sciences of the Ukrainian SSR. Attention was focussed on the mechanism of the growth of metal crystals from melts and the crystal dislocation structure. In addition, reports devoted to new methods of preparation of crystals, studies of their

Card 1/2

OVSYSHCHEV, I.A.

Functional changes in the myocardium in exposure of the heart. (MIRA 14:2)
Trudy LSGNI 48:462-474 '59.
(HEART--MUSCLE)

S/128/60/000/00[illegible]/0[illegible]/0[illegible]/XX
A[illegible]04/A[illegible]

AUTHORS: O[illegible]syuk, G. S., T[illegible], A. F., and Kharykovskiy, I. G.

TITLE: Deoxidation of steel by aluminum

PERIODICAL: Liteynoye proizvodstvo, no. [illegible], 1960, 47-4[illegible]

TEXT: The article reviews the effect of increased Al addition during the final deoxidation of [illegible] - 25ЛК ([illegible] - 25LK) steels, cast in ДСН [illegible] (DSN[illegible]) acid lined electric arc furnaces. Tests were carried out at the Dnepr[illegible] zhinskiy zavod imeni gazety "Pravda" (Dneprodzerzhinsk Plant imeni "Pravda" Newspaper). The process included the production and draining off [illegible] containing 5 - 6% CaO, 50 - 51% SiO_2, 9 - 10% FeO and 20 - 2[illegible]% MnO. The [illegible] oxidation was performed with [illegible] kg of 70% ferromanganese and [illegible] kg [illegible] 45% ferrosilicon per ton of liquid steel. The steel was tapped into tw[illegible] ladles and additionally reduced with [illegible] kg/ton aluminum. The pouring of a [illegible] ton ladle lasted 20 minutes. About 12 - 15% of castings were retested [illegible] their plastic properties. Blowhole rejects contained 0.[illegible]% of servi[illegible] castings. Microscopic examinations revealed a low ductility of castings en[illegible] riched with [illegible] kg Al (see Table), owing to sulfide inclusions at the grai[illegible]

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Deoxidation of steel by aluminum S/128/60/000/004/007/007/XX
A104/A133

borders (Figs 1 a and b). The addition of 1.5 kg/ton Al yielded satisfactory castings and blowhole rejects were reduced to 0.0[illegible]%. The metallographic inspection showed that an addition of 1.5 kg/ton Al renders the [illegible] inclusions annular and isolated from each other (Fig. 2 a) while the pearlite and ferrite structure becomes uniform and free of ferrite ghost (Fig. 2 b). According to Reference 1 [Nekhendzi, Yu. A., Stal'noye litoye (Steel Casting), Metallurgizdat, 1948], increased quantities of Al facilitate the formation of Al_2S_3 sulfide which forms non-[illegible] compounds and does not decrease the ductility of metals. Residual Al protects the liquid metal from oxidation during the pouring and prevents blowholes. Greater quantities of Al are proportional to the carbon and silicon content of the metal are recommended by S. R. Mamedov (Ref. 3: "Liteynoye proizvodstvo", no. 12, 1958) [illegible] Borkov, Nekhendzi, Samarin and Leykin, stating that with an increase of Al [illegible] steel the content of Al_2O_3 also increases. The authors disapprove this conclusion approving the contrary opinion of S. L. Keyz and K. R. Van Gr[illegible] [Ref. 4: Aluminiy v chugune i stali (Aluminum in Cast Iron and Steel), Metallurgizdat, 1959]. There are 2 figures and 4 tables.

Card 2/4

Химический состав стали в ...

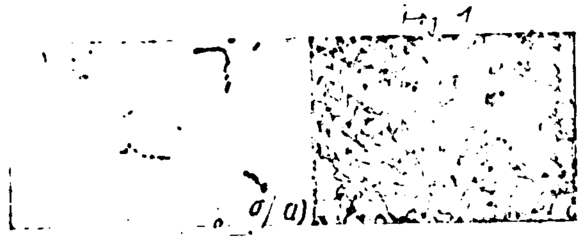
C	Mn	Si	S	P					
[illegible]	0,6[illegible]	0,28	0,030	0,017	0,071	54	15	19	[illegible]
[illegible]	0,69	0,31	0,010	0,011	0,102	51	[illegible]	[illegible]	[illegible]
[illegible]	0,53	0,25	0,052	0,020	0,022	49	[illegible]	[illegible]	[illegible]
0,17	0,65	0,24	0,055	0,01[illegible]	0,025	52	[illegible]	11	26
0,30	[illegible]	0,25	0,054	0,040	0,[illegible]21	50	[illegible]	14	[illegible]
0,20	0,80	0,23	0,046	0,035	0,062	51	[illegible]	20	[illegible]
[illegible]	0,65	0,29	0,052	0,028	[illegible]	40	12	16	28
0,20	0,70	0,30	0,04[illegible]	0,035	[illegible]	50	[illegible]	[illegible]	19
0,22	0,82	[illegible]	0,011	0,0[illegible]	0,02	51	[illegible]	18	20
0,22	0,70	0,25	0,035	0,015	[illegible]	51	[illegible]	18	21
0,17	0,54	0,28	0,019	0,01[illegible]	0,0[illegible]5	48	[illegible]	29	18
0,16	0,49	0,30	0,040	0,04[illegible]	0,06[illegible]	[illegible]		[illegible]	[illegible]
0,21	0,69	0,30	0,038	0,035	0,053	51		26	[illegible]
0,16	0,62	0,20	0,019	0,030	0,00[illegible]	48	[illegible]	28	41
0,17	0,57	[illegible]	0,018	0,01[illegible]	0,[illegible]62	47	20	31	51
[illegible]	0,51	0,20	0,015	0,015	0,06[illegible]	46	28	28	41
[illegible]	0,54	0,25	0,039	0,035	0,048	47	20	30	29
[illegible]	0,51	0,21	0,036	0,040	0,055	46	20	32	54
[illegible]	0,72	0,29	0,019	0,045	0,043	50	35	22	33
0,[illegible]	0,63	0,29	0,044	0,030	0,049	55	[illegible]	23	39

APPROVED FOR RELEASE: Wednesday, June 21, 2000 CIA-RDP86-00513R001238

[illegible]

[illegible]

Fig 1



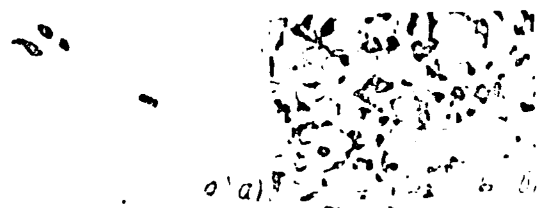


Fig 2

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APPROVED FOR RELEASE: Wednesday, June 21, 2000 CIA-RDP86-00513R00123

L 12926-65 EWT(m)/EWP(t)/EWP(b) IJP(c) JD SSD/AS(mp)-2/AFWL/AFETR
ESD(gs)/ESD(t)
ACCESSION NR: AP4046615 S/0181/64/006/010/3031/3037

AUTHORS: Ovsyuk, V. N.; Smirnov, L. S.

TITLE: Influence of electron bombardment on the surface state of germanium

SOURCE: Fizika tverdogo tela, v. 6, no. 10, 1964, 3031-3037

TOPIC TAGS: germanium, electron bombardment, surface property, photoconductivity

ABSTRACT: Results are reported of an investigation of the influence of electron bombardment (electron energy 1--16 keV) on the surface state of n-type germanium, carried out in order to derive information on the structure of the surface by investigating the dependence of the surface recombination rate on the time. The electron energies were in a range 1--16 keV sufficient for desorption of the physically and chemically adsorbed atoms on the surface. The samples were thin

Card 1/5

plates measuring 7 x 4 x 0.3--0.5 mm and having a surface resistivity 30--40 ohm cm. The measurements were carried out in vacuum at ~5 x 10^{-6} mm Hg. The current density employed in the measurements was usually 10^{-8}--10^{-6} A/cm^2. The surface state was monitored by measuring the stationary photoconductivity of the samples. The schematic diagram of the measuring setup was shown in Fig. 1 of the enclosure, and a typical variation of the photoconductivity during the time of bombardment is shown in Fig. 2 of the enclosure. The results indicate that the processes occurring on the germanium surface can be of two kinds: redistribution of the charge in the surface layer, and outgassing under the influence of the electron beam. The rate of outgassing depends on the electron energy and exhibits a sharp maximum near 12--16 keV. Further study of the surface processes is planned, using combined measurements of the photoconductivity and of the field effect, as well as measurement of infrared photoconductivity during the electron bombardment. "The authors thank corresponding member AN SSSR, A. V. Rzhanov for continuous

L 12926-65
ACCESSION NR: AP4046615

interest in the work and for valuable remarks." Orig. art. has: 7 figures and 7 formulas.

ASSOCIATION: Institut fiziki tverdogo tela i poluprovodnikovoy elektroniki SO AN SSSR, Novosibirsk (Institute of Solid State Physics and Semiconductor Electronics SO AN SSSR)

SUBMITTED: 20Apr64 ENCL: 02

SUB CODE: SS NR REF SOV: 003 OTHER: 001

Card 3/5

L 12926-65

ACCESSION NR: AP4046615 ENCLOSURE: 01

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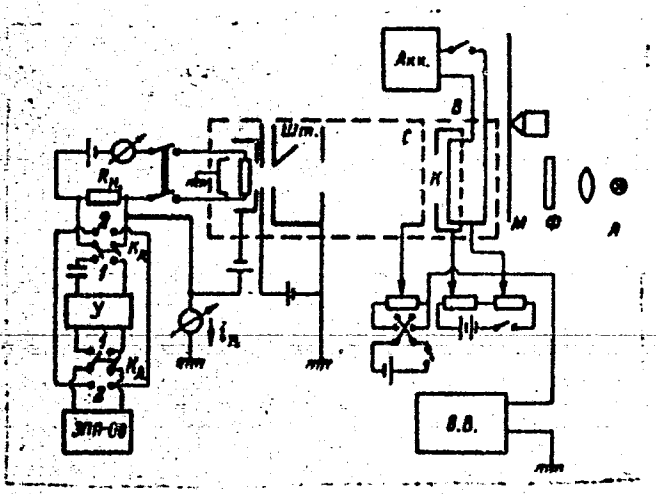

Л - lamp
Ф - filter
К - cathode
М - light modulator
В - Wehnelt cylinder
С - control grid
Шт - shutter to cover beam
В.В. - high volt. rectifier
У - amplifier
ЭПП-09 - automatic potentiometer

Fig. 1. Schematic diagram of measuring set-up

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L 12926-65
ACCESSION NR: AP4046615

ENCLOSURE: 02

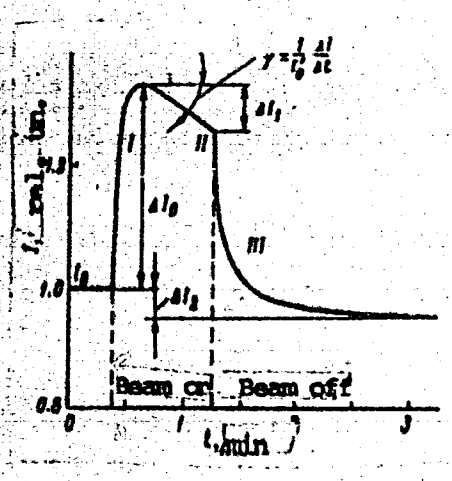

Fig. 2. Typical photoconductivity vs. irradiation time curve

Card 5/5

ACCESSION NR: AP3008339 S/0120/63/000/005/0224/0224

AUTHOR: Ovsyuk, Z. Sh.

TITLE: Semitransparent indium contacts

SOURCE: Pribory* i tekhnika eksperimenta, no. 5, 1963, 224

TOPIC TAGS: semitransparent conductive indium film, semitransparent film, indium germanium contact, indium deposition

ABSTRACT: Semitransparent conductive indium films have been obtained by vaporization in vacuum. The films were prepared in three cycles, each consisting of deposition at 10^{-4} mm Hg followed by admittance of air. The vaporizer was a conical tungsten spiral passing a current of 10 amp. In each cycle the vaporization time necessary to obtain minimal film thickness varied from 0.5 to 2 min. The total thickness of the films was less than 0.03 μ. At a specimen width of 1 cm and a distance of 1 cm between electrodes, a resistance of 50 kohm was considered adequate. Three cycles proved sufficient to obtain a conductive layer capable of passing 50% of

Card 1/2

ACCESSION NR: AP3008339

incident normal light. An increase in the number of cycles did not improve results. With this technique, In layers were deposited on n- and p-germanium, the former yielding the normal rectifying contact surface and the latter an ohmic contact. Orig. art. has: 2 figures.

ASSOCIATION: Leningradskiy tekhnologicheskiy institut (Leningrad Technological Institute)

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OVSYUKOV, A.

Workers have decided. Avt. transp. 37 no.9:36 S '59.
(MIRA 12:12)

1. Nachal'nik Omskogo oblavtoupravleniya.
(Omsk Province--Transportation, Automotive)

TUKOV, V.; OVSYUKOV, A.; KLIMENKO, M.

Competition for the title "brigades of Communist Labor." Avt. transp. 37 no.4:53 Ap '59. (MIRA 12:6)

1. Nachal'nik shorochnogo tsekha avtoremontnogo zavoda Leningradskogo upravleniya avtotransporta (for Tukov). 2. Upravlyayushchiy Omskim avtotrestom (for Ovsyukov). 3. Chlen mestkoma avtokolonny No.20, Novocherkassk (for Klimenko).
(Socialist competition)

STRAKHOV, L.P.; CHERNYAVSKIY, B.G.; KALINKIN, I.P.; OVSYUK, Z.Sh.

Spectral distribution of optical changes in the contact potential of CdSe films. Fiz.tver.tela 4 no.12:3422-3426 D '62. (MIRA 15:12)

1. Leningradskiy gosudarstvennyy universitet.
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OVSYUKOV, A.

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TRUBIN, B.G., prof.; LUR'YE, A.B.; GRIGOR'YEV, S.M.; IVANOVICH, E.M.; MEL'NIKOV, S.V.; ANTIPIN, V.G., kand. tekhn. nauk, retsenzent; VOLKOV, B.G., kand. tekhn. nauk, retsenzent; MULLAYANOV, R.G., kand. tekhn.nauk, retsenzent; OVSYUKOV, V.N., kand. tekhn. nauk, retsenzent; BELYAYEV, A.S., st. nauchnyy sotr., retsenzent; KOZLOVSKIY, Ye.V., insh., retsenzent; TRAK, E.E., insh., retsenzent; SIMONOVSKIY, N.Z., red.izd-va; SPERANSKAYA, O.V., tekhn. red.

[Agricultural machines; theory, design, and calculations] Sel'skokhoziaistvennye mashiny; teoriia, konstruktsiia i raschet. Pod red. B.G.Turbina. Moskva, Mashgiz, 1963. 575 p. (MIRA 16:5)

1. Nauchno-issledovatel'skiy institut mekhanizatsii i elektrofikatsii sel'skogo khozyaystva Severo-Zapada (for Antipin, Volkov, Mullayanov, Ovsyukov, Belyayev, Kozlovskiy, Trak).
(Agricultural machinery--Design and construction)

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O SY[illegible] V, V. [illegible]., Cand [illegible] Tech [illegible] Sci -- (diss) "Study of the

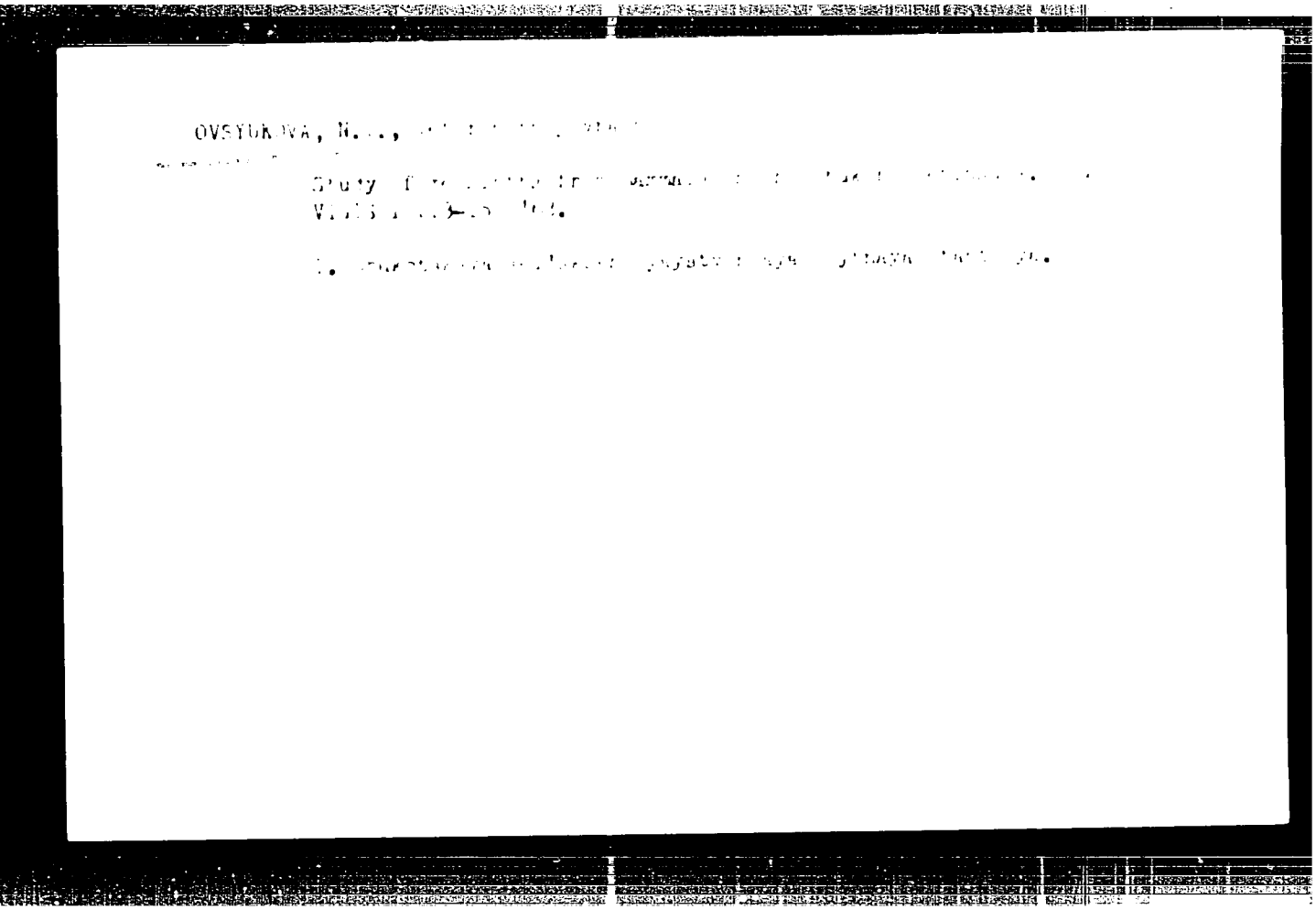
operation of the driving [illegible]ts of the tractor "Belarus'"

with application of [illegible] mecha[illegible]s increasing ground

passage and adhesion." Len [illegible], [illegible] [illegible] f A[illegible] [illegible].

Len [illegible] Inst. Chair of "Tractors and Automobiles" [illegible]

([illegible], [illegible], [illegible]



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KOZLOV, [illegible]; [illegible], [illegible]; RAUKE[illegible]

A [illegible]ew species [illegible] ... [illegible] arctic foxes [illegible] [illegible]mmon f[illegible]. Trudy [illegible]

(M.RA [illegible])

APPROVED FOR RELEASE: Wednesday, June 21, 2000 CIA-RDP86-00513R00123[illegible]

OVTCHINNIKOV, A. M.

"The Hydrogeology of Mineral Formations," by G. N. Kamensky, P. P. Klimentov and A. M. Ovtchinnikov, and authorized by the General Administration for Higher Education of the Ministry of Culture of USSR to be used as a textbook in Geological Institutes. Published by the State Publishing House for Literature on Geology, Moscow, 1953.

The book gives a survey of Mining Hydrogeology from the theoretical, methodical and practical points of view. It gives information on the presence of water in different geological structures, the chemical composition of ground waters, observations on infiltration and its effect on rock. It explains the best measures to use for fighting infiltration and methods of hydrogeological analysis and hydrogeological service.

SO: 38305

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1. Laboratory of Zoology of the Biological Institute in Sverdlovsk of the Ural Branch of the Academy of Sciences of the U.S.S.R.

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(Tactics)

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