

STAROSTIN, V. KH

USSR/Farm Animals. Horses

Q-2

Abs Jour : Ref Zhur - Biol., No 11, 1958, No 49958

Author : Starostin, V. Kh.
Inst : Lithuanian Scientific Research Institute for Animal Husbandry and Veterinary Sciences.

Title : Anatomic Investigations and the Process of Filling-in of Venous Vessels of the Thoracic Extremities in Horses.

Orig Pub : Byul. nauchno-tekhn. inform. Lit. n.-i. in-t zhivotnovodstva i veterinarii, 1957, No 2, 41-42

Abstract : A short description of 2 methods for filling venous vessels is given. A water suspension of barium sulfate injected into the vein was used as a contrast by the first method. The 2nd method consisted in injecting a 4-5 percent sulphurous solution into the artery, and then a 4-5 percent solution of lead acetate into the same artery. This resulted in dark-colored phosphorus lead being formed in the vessels. Instructions are provided with regard to the techniques which may be employed in order to study the injected vessels.

Card : 1/1

STAROSTIN, V M.

PHASE I BOOK EXPLOITATION

SOV/4354

Shorin, Aleksey Ivanovich, and Vasilii Mikhaylovich Starostin

Proizvodstvo spiral'nogo metallorezhushchego instrumenta metodom skruchivaniya dvukh metallov (The Manufacture of Helical Metal-Cutting Tools by Twisting Two Metals [Together] Moscow, Mashgiz, 1960. 54 p. 4,500 copies printed.

Reviewer: G. V. Podgurskiy; Managing Ed. for Literature on Metal-working and Toolmaking: V. V. Rzhavinskiy, Engineer; Ed. of Publishing House: G. I. Baydakov; Tech. Ed.: G. V. Smirnova.

PURPOSE: This brochure is intended for designers and process engineers in toolmaking and machine-building plants.

COVERAGE: Practical experience gained in the design and production of helical metal-cutting tools (face-milling cutters, end-milling cutters, arbor-type reamers, and others) by hot twisting of two different metals is discussed. This method was developed and applied by the Kolomenskiy teplovozostroitel'nyy zavod im. Kuybysheva (Kolomna Diesel-Locomotive-Building

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The Manufacture of Helical (Cont.)

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Plant imeni Kuybyshev). This new technological process differs considerably from the commonly used processes and may be used in mass production of metal-cutting helical tools. Methods and sample designs for blanks, as well as the characteristic features of machining and heat treatment, are explained and compared with the methods used presently in helical toolmaking. No personalities are mentioned. There are 8 references, all Soviet.

TABLE OF CONTENTS:

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Ch. I. Design and Construction of Helical Tools Made by the Twisting Method	7
1. [Basic] dimensions of tool types	7
2. General technical requirements in tool construction	8
3. Materials used in helical toolmaking by the twisting method	11
4. Types of blanks for making helical tools by the twisting method	11

Card ~~2/4~~

L 6368-66 EWT(1)/EWA(h)

ACC NR: AP5026755

SOURCE CODE: UR/0286/65/000/017/0028/0029

AUTHOR: Starostin, V. M.; Repnev, A. N. 25

ORG: none

TITLE: A waveguide switch. Class 21, No. 174235

SOURCE: Byulleten' izobreteniy i tovarnykh znakov, no. 17, 1965, 28-29

TOPIC TAGS: waveguide, waveguide coupler, switching circuit, electronic commutator

ABSTRACT: This Author's Certificate introduces a waveguide switch which contains a housing with input ports for connecting the unit to waveguide channels to be switched. The device also includes a spring-return commutating element and a drive motor for transposition of the commutating element in a direction perpendicular to the plane of the channels being switched. The degree of decoupling between the channels is increased and the working frequency range of the switch is expanded by making the commutating element in the form of a metal cylinder with curved waveguide sections placed one over the other for interconnection of the waveguide channels.

UDC: 621.395.658

Card 1/2

L 6368-66

ACC NR: AP5026755

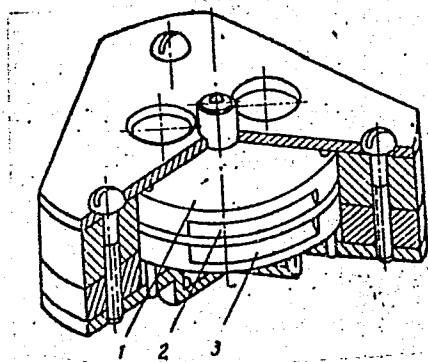


Fig. 1. 1--commutating element; 2 and 3--
--waveguide sections

SUB CODE: EC/

SUBM DATE: 01Aug64/

ORIG REF: 000/

OTH REF: 000

nw
Card 2/2

STAROSTIN, V.N.

Unification and standardization of fuel equipment. Standartizatsiia
25 no. 5:17-19 My '61. (MIRA 14:5)
(Gas and oil engines--Fuel systems--Standards)

STAROSTIN, V.N.

Flaws in the power plant of the motorship "Ingur." *Biul. tekhn.-
ekon.inform. Tekh. upr. Min. mor. flota* 7 no.5:54-57 '62.
(MIRA 16:3)

1. Starshiy mekhanik teplokhoda "Ingur".
(Marine engines—Fuel systems)

STAROSTIN, V.N.

Standardization of fuel systems. Standartizatsiia 26 no.5:28-29 My '62.
(MIRA 15:7)

(Gas and oil engines--Fuel systems)

STAROSTIN, V.P.

Coordinator of movements for teaching students to work with a
fret saw. Politekh.obuch. no.10:38-41 0 '59. (MIRA 13:2)

1. Shkola-internat No.1, Krasnodar.
(Carpentry--Study and teaching)

STAROSTIN, V.V.

Automatic lines for continuous centerless grinding of parts.
Avt.prom. 28 no.11:39-41 N '62. (MIRA 16:1)

1. Ural'skiy avtozavod.

(Grinding machines)

ACCESSION NR: AP4041853

S/0139/64/000/003/0134/0139

AUTHORS: Shalimova, K. V.; Travina, T. S.; Potapov, Yu. V.; Starostin, V. V.

TITLE: Electric properties of polycrystalline cadmium sulfide films

SOURCE: IVUZ. Fizika, no. 3, 1964, 134-139

TOPIC TAGS: cadmium sulfide, thin film, sublimated film, carrier density, carrier mobility, Hall effect, electric conductivity

ABSTRACT: The purpose of the research was to study and to learn to control the electric properties of sputtered layers of cadmium sulfide. The thin polycrystalline films were obtained by evaporating nonluminescent cadmium-sulfide powder in vacuum (10^5 -- 10^{-6} mm Hg) and also in spectrally pure argon and hydrogen sulfide (0.5--1 mm Hg). The substrate was insulating and its temperature could be varied and controlled. The evaporator of the initial material could also be

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ACCESSION NR: AP4041853

varied from 500 to 1100C. The electric conductivity and the Hall effect in these film specimens were investigated as functions of the sublimation temperature of the initial substance, and also of the medium in which the films were sputtered, and the substrate temperature at the instant of condensation of the semiconductor layer on the substrate. Data are given on the electric conductivity of these layers as functions of the medium, sputtering of the initial powder, its sublimation temperature, heating of the substrate on which the specimen is deposited, and the thickness of the sample. The Hall-effect measurements of cadmium-sulfide films obtained under different technological conditions are used to calculate the mobility and density of the carriers. A connection is established between the mobility and the density or thickness of the layer. The experimental and theoretical data are compared. It is concluded that at the instant when the sulfide layer is sputtered, excess cadmium atoms penetrate into it, and these determine the dark conductivity of the sample, along with exerting an influence on the scattering of

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ACCESSION NR: AP4041853

the carriers. There is no rigorous theory of carrier scattering in thin semiconductor layers but approximate calculations show that the scattering on the surface of the layer and on the boundaries between individual crystallites can greatly reduce the mobility. This distinguishes the produced films from single crystals of cadmium sulfide and probably explains the dependence of the electric conductivity on the layer thickness. Orig. art. has: 5 figures.

ASSOCIATION: None

SUBMITTED: 00

ENCL: 03

SUB CODE: SS

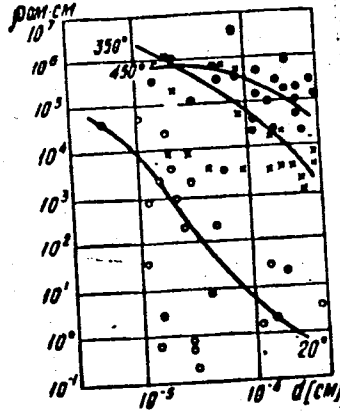
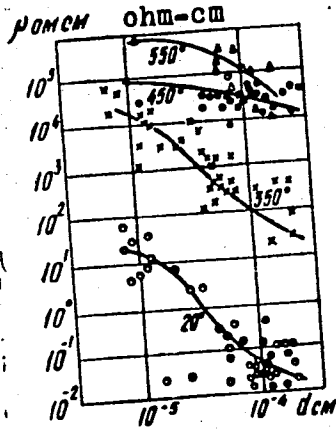
NR REF SOV: 002

OTHER: 007

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ENCLOSURE: 01

ACCESSION NR: AP4041853

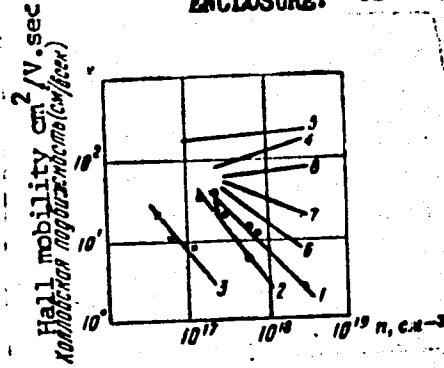
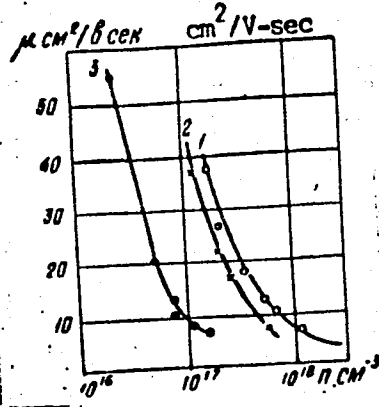


Dependence of resistivity on the thickness of cadmium sulfide films obtained in the following manner: Left - by sputtering the initial powder in an argon atmosphere on substrates heated to 20, 350, 450, and 550°C. Right - by sputtering in a hydrogen sulfide atmosphere on specially heated substrates, and also on substrates heated to 350 and 450°C

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ACCESSION NR: AP4041853

ENCLOSURE: 02

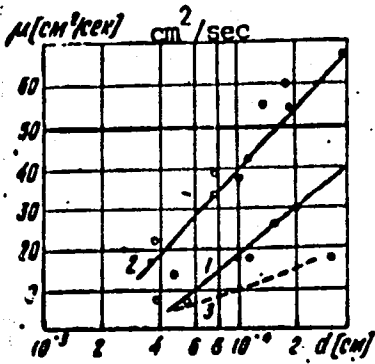


Dependence of carrier mobility on their density in cadmium sulfide. Left - obtained by vacuum sputtering and having different resistivities. Right - 1, 2, 3 - experimental data on films, 4, 5 - data on single crystals obtained elsewhere, 6, 7, 8 - theoretical curves for several densities.

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ACCESSION NR: AP4041853

ENCLOSURE: 03



Dependence of carrier mobility in cadmium sulfide films on their thickness. 1 - films sputtered in vacuum on heated substrates (180C); carrier density $2.3 \times 10^{17} \text{ cm}^{-3}$. 2 - films sputtered in argon atmosphere on substrates heated to 260C; carrier density $2.6 \times 10^{18} \text{ cm}^{-3}$. 3 - theoretical dependence of carrier mobility on sample thickness.

Card 6/6

STAROSTIN, V. V.

Complex compounds with anions of aromatic sulfonic acids in the outer sphere. Y. E. Yatsimirskii, K. E. Puik, E. P. Skvirskaya, and V. V. Starostin (Chem.-Technol. Inst., Ivanovsk). Zhur. Obshchei Khim. (J. Gen. Chem.) 21,436-90(1951).—Mixing 1% solns. of aromatic sulfonates (Na salts) with satd. eq. solns. of $[\text{Co}(\text{NH}_3)_6] \text{Cl}_3$ (I), $[\text{Cr}(\text{NH}_3)_6] (\text{NO}_3)_3$ (II), or $[\text{Cr}(\text{CON}_2\text{H}_4)_6] \text{Cl}_3$ (III) usually gave ppts. of the corresponding complex salts. *p*-Me₂NC₆H₄-SO₃Na gave with I and III ppts. having comps. of the type $[\text{Co}(\text{NH}_3)_6] (\text{C}_8\text{H}_9\text{SO}_3)_3$. The soly. of the Co salt is 0.0037 mole/l. at 20°. Na sulfanilate does not give ppts. 2,4-ClMeC₆H₃SO₃Na gives ppts. with I, II, and III: $[\text{Co}(\text{NH}_3)_6]-(\text{C}_7\text{H}_6\text{ClSO}_3)_3$, yellow; $[\text{Cr}(\text{CON}_2\text{H}_4)_6] (\text{C}_7\text{H}_6\text{ClSO}_3)_3$, green. The 2-nitro analog gives ppts. with I, II, and III; $[\text{Co}(\text{NH}_3)_6]-(\text{C}_7\text{H}_5\text{NSO}_5)_3$, yellow; $[\text{Cr}(\text{NH}_3)_6] (\text{C}_7\text{H}_5\text{NSO}_5)_3$, yellow, soly. 0.0087 mole/l. at 40°; $[\text{Cr}(\text{CON}_2\text{H}_4)_6] (\text{C}_7\text{H}_5\text{NSO}_5)_3$, green, soly. 0.0033 mole/l. at 20°. The 2-Chloro-5-nitro analog also gives ppts. with I, II, and III; $[\text{Cr}(\text{NH}_3)_6] (\text{C}_7\text{H}_5\text{ClNSO}_5)_3$, yellow; $[\text{Cr}(\text{CON}_2\text{H}_4)_6] (\text{C}_7\text{H}_5\text{ClNSO}_5)_3$, green. Na 3-carbazolesulfonate gives ppts. even in rather dil. solns. with I, II, and III. Even less sol. are the salts of 6-nitro-3-carbazolesulfonic acid; $[\text{Co}(\text{NH}_3)_6] (\text{C}_{12}\text{H}_6\text{N}_2\text{SO}_5)_3$, yellow; $[\text{Cr}(\text{CON}_2\text{H}_4)_6] (\text{C}_{12}\text{H}_6\text{N}_2\text{SO}_5)_3$, yellow; poorly sol. salts also form with derivs. of Cu, Zn, Ni, and Cd. Especially poorly sol. are salts of alizarinsulfonates; salts with I and II are especially mentioned but are not further characterized. Generally, the soly. declines with increased size of the anion and with introduction of polar groups into it. Introduction of OH, NH₂, or CO₂H groups into the sulfonate radical sharply raises the soly. of the complex

Starostin, V.V.

MS

Absorption of nitric oxide by aqueous solutions of ferrous salts. G. D. Sirotkin and V. V. Starostin, *J. Appl. Chem. U.S.S.R.*, 27, 1081-1084 (1954) (Engl. translation). See *Chem. Abstr.* 49, 7931i. B. M. R.

[Handwritten signature]

U S S R .

Absorption of nitric oxide by aqueous solutions of ferrous salts. G. B. Sirotkin and V. V. Starostin (Chem.-Technol. Inst., Ivanovo). *Zhur. Priklad. Khim.* 27, 1141-4 (1954). — Absorption of NO in aq. solns. of FeSO_4 and FeCl_2 was detd. and the equil. const. $K = V/(32.4 - V)P_{\text{NO}}$ was calcd.; V = liters of NO absorbed by 1 mol. of Fe^{++} . Max. absorption was obtained at 0° and $P_{\text{NO}} = 1$ atm.; at 20° the complex $[\text{FeNO}]_2$ is unstable and absorption was low. Absorption was independent of the concn. of FeCl_2 and decreased with increasing concns. (6.215 and 0.818M) of FeSO_4 . The calcd. values of the heat and entropy of absorption are: -11 kcal./mol. FeO and -37.7 e.u., resp. I. Benvenist.

STAROSTIN, V.V.

Determination of ethylenediaminetetraacetic acid in solutions of
metal complexonates. Zhur.anal.khim. 16 no.5:20-62 S-O '61.
(MIRA 14:9)

(Acetic acid) (Complexons)

11 2221

15460
S/078/63/008/003/009/020
B117/B186

AUTHORS: Starostin, V. V., Spitsyn, Vikt. I., Silina, G. F.

TITLE: Complexes between beryllium and ethylene diamine tetraacetic acid

PERIODICAL: Zhurnal neorganicheskoy khimii, v. 8, no. 3, 1963, 660-662

TEXT: The solubility of beryllium hydroxide in the presence of the ammonium salt of EDTA, H_4Y , was studied at $20^\circ C$ for different pH values and complexon concentrations. The solubility was found to depend linearly on EDTA concentration for all pH values investigated. This was explained in terms of the formation of the beryllium complex BeY^{2-} (pH 7-7.5) and the beryllium hydroxycomplex $BeOHY^{3-}$ (pH > 7.5). The Be concentration decreased with increasing pH due to destruction of complexes and precipitation of $Be(OH)_2$. The instability constants of the complexes were calculated from experimental data: at $20^\circ C$ and $\mu \approx 0.3$, $pK_{BeY^{2-}} = 10.2$, and $pK_{BeOHY^{3-}} = 5.4$. The beryllium complex has

Card 1/2

SHALIMOVA, K.V.; TRAVINA, T.S.; POTAPOV, Yu.V.; STAROSTIN, V.V.

Electric properties of polycrystalline cadmium sulfide
films. Izv. vys. ucheb. zav.; fiz. no. 3:134-139 '64.
(MIRA 17:9)

STAROSTIN, Ye. A.

STAROSTIN, Ye. A.

Spring wheat in the Far East. Vop. geog. Dal'. Vost. no. 3: 3-29 '57.
(MIRA 10:12)

(Soviet Far East--Wheat)

SIMONENKO, M.V.; BELOUSOV, N.N.; STAROSTIN, Ye.A.; TAV'YEVA, S.M.

Aluminum alloys instead of bronze in gas plug cocks. Gaz. prom.
6 no. 1:27-31 '61. (MIRA 14:1)

(Gas distribution)

ZOLOTNITSKIY, Vsevolod Aleksandrovich, kand. sel'khoz. nauk,
laureat Gosudarstvennoy premii; STAROSTIN, Ye.A., kand.
sel'khoz. nauk, red.; MARKOVA, S.M., red.; KAYDALOVA,
M.D., tekhn. red.

[Soybean in the Far East] Soia na Dal'nem Vostoke. Pod
red. E.A.Starostina. Khabarovsk, Khabarovskoe knizhnoe izd-
vo, 1962. 246 p. (MIRA 16:6)
(Soviet Far East--Soybean)

SOROKIN, Aleksey Ivanovich; GROZOV, Nikolay Vasil'yevich; STEPANOV, Aleksandr Makarovich; STABOSTIN, Yevgeniy Il'ich; CHERNYAK, Lev Mikhaylovich; BOKSERMAN, Yu.I., red.; SVYATITSKAYA, K.P., ved. red.; YAKOVLEVA, Z.I., tekhn. red.

[Liquefied gases in England; their transportation, storage, uses] Szhizhennyye gazy v Anglii; transport, khranenie, ispol'zovanie. Moskva, Gostoptekhizdat, 1963. 140 p.

(MIRA 16:10)

(Great Britain--Liquefied petroleum gas)

STAROSTIN, Yu. N.

AID Nr. 975-5 23 May

RADIO SOUNDING OF PLASMA MOVING AGAINST ELECTRODYNAMIC ACCELERATION IN A COAXIAL ACCELERATOR (USSR)

Brodskiy, V. B., Ye. M. Belitskiy, A. T. Voronchev, N. V. Konyakhin, and Yu. N. Starostin. Zhurnal tekhnicheskoy fiziki, v. 33, no. 4, 1963, ... 426-433. S/057/63/033/004/010/021

The relationship existing in a plasma between number of charged particles ejected both in and against the direction of electrodynamic acceleration has been evaluated to analyze processes occurring in a coaxial accelerator. A method is described for using two different wavelengths ($\lambda_1 = 0.8$ cm and $\lambda_2 = 3$ cm) simultaneously, by which the relationship between these quantities can be obtained. It was found that a plasmoid with a concentration of at least $n_1 > 10^{13}$ electrons/cm³ was moving in the direction of electrodynamic acceleration. The time it took for the plasmoid to cross the beam was

Card 1/2

STAROSTIN, Yu.S.

Seminar on pipe drawing on a self-adjusting mandrel. TSvet.
met. 36 no.10:84-85 0 '63. (MIRA 16:12)

STAROSTIN, Yu. S., MOLODCHININ, E. V., and SIMONOV, L. L.

"Determination of optimum and maximum drawings during drawing of pipes from aluminum alloys on self-aligning mandrels" - showed that adhering to this method is 1.5--2.0 times greater than pressing during drawing on cylindrical mounting. This allows intensification of the process of drawing.

Report presented at the branch seminar on drawing of tube and aluminum alloys on self-aligning mandrels, Metallurgical Factory im V. I. Lenin, Kuybyshev, 24-28 June 1963

(Tsvet. Metally, No. 10, 1963 pp 84-85, author Starostin, Yu. S.
JPRS 24,651 19 May 1964

L 3629-66 EWT(d)/EWT(1) IJP(c) GW

ACCESSION NR: AT5023297

UR/2547/65/000/157/0047/0057
528.21:531.26

33
30
8

AUTHOR: Yurkina, M. I.; Starostina, A. B.
44,55 44,55

TITLE: Model testing of the principle of numerical integration for computations based on the Molodenskiy integral equation for the disturbing potential

SOURCE: Moscow. Tsentral'nyy nauchno-issledovatel'skiy institut geodezii, aeros"yemki i kartografii. Trudy, no. 157, 1965. Issledovaniya po geodezicheskoy gravimetrii (Research on geodetic gravimetry), 47-57
16,44,55

TOPIC TAGS: geodetic gravimetry, disturbing potential, Molodenskiy equation, integral equation 12,44,55 12,44,55

ABSTRACT: The principle of numerical integration using the Molodenskiy integral equation for the disturbing potential has been tested on a terrestrial model in the form of a cone situated on a reference surface. [See AT5023296, ATD Press v. 4, no. 106, 22 Nov 1965, 7-9.] In the present study, the model was changed slightly by superimposing on the main cone a truncated cone in which the center of the upper surface coincided with the apex of the main cone. Computations were made for the value of the disturbing potential at the vertex of the cone. The surface of the

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L 3629-66

ACCESSION NR: AT5023297

3

cone was approximately represented by plane sides in two versions, the first for large areas and the second for small areas. Tabulated results show that the latter version is more accurate. Orig. art. has: 18 formulas, 2 figures, and 1 table.

[ER]

ASSOCIATION: Tsentral'nyy nauchno-issledovatel'skiy institut geodezii, aeros"yemki i kartografii (Central Scientific Research Institute of Geodesy, Aerial Surveying, and Cartography)

44.55

SUBMITTED: 00

ENCL: 00

SUB CODE: ES

NO REF SOV: 000

OTHER: 000

ATD PRESS: 4114

BVK

Card 2/2

KLYUCHNIK, N.S.; STAROSTINA, A.V.

Nonsynanthropic species of rodents in Leningrad. Zool. zhur. 42
no.10:1554-1561 '63. (MIRA 16:12)

1. Anti-Plague Port and Urban Observation Station of Leningrad.

KLIMOVA, T.K.; LEVACHEV, I.A.; STAROSTINA, A.V.; VITEZEVA, K.A.

Some data on tularemia in Archangel Province. Zhur. mikrobiol.,
epid. i immun. 40 no.6:48-54 Je '63. (MIRA 17:6)

1. Iz Leningradskoy protivochumnoy portovoy i gorodskoy
nablyudatel'noy stantsii.

TARARIN, R.A.; STAROSTINA, A.V.

Effect of aerosols in disinfection of enzootic foci; an
abstract. Med. paraz. i paraz. bol. 33 no.5:616-617 S-0 '64.
(MIRA 18:4)

1. Voenno-meditsinskaya ordena Lenina akademiya imeni Kirova,
Leninrad i Leningradskaya protivochumnaya nablyudatel'naya
stantsiya.

STAROSTINA, G.S., metodist

Innovations in printing equipment in the U.S.S.R. Inform.
biul. VDNKH no.7:38-39 JI '63. (MIRA 16:8)

1. Pavil'on "Sovetskaya kniga" na Vystavke dostizheniy
narodnogo khozyaystva.

SHAPIRO, S.Ye.; KONSTANTINOV, A.A.; ZELENSKAYA, M.I.; CHAPOVSKAYA, L.G.;
STAROSTINA, I.S.

Clinical and immunobiochemical parallels in typhoid-paratyphoid patients. Report No. 1: Effect of the severity of the course, the type of pathogen and the age factor on the protein composition of the blood serum of typhoid-paratyphoid patients. Trudy Khab.med. inst. no.20:38-42 '60. (MIRA 15:10)

1. Iz kliniki infektsionnykh bolezney (zav. dotsent S.Ye.Shapiro) Khabarovskogo meditsinskogo instituta i biokhimicheskoy laboratorii (zav. dotsent A.A.Konstantinov) Khabarovskogo nauchno-issledovatel'skogo instituta epidemiologii i gigiyeny (dir. A.M.Krupnikova).
(BLOOD PROTEINS) (TYPHOID FEVER) (PARATYPHOID FEVER)

KONSTANTINOV, A.A.; SHAPIRO, S.Ye.; STAROSTINA, I.S.; CHAPOVSKAYA, L.G.;
ZELENSKAYA, M.I.

Clinical and immunobiochemical parallels in typhoid-paratyphoid patients. Report No. 2: Effect of antibiotic therapy on the protein composition of the blood serum and Widal's reaction; the interrelation between Widal's reaction and the individual blood serum protein fractions. Trudy Khab.med.inst. no.20:43-48 '60.

(MIRA 15:10)

1. Iz kliniki infektsionnykh bolezney (zav. dotsent S.Ye.Shapiro)
Khabarovskogo meditsinskogo instituta i biokhimeskoy laboratorii
(zav. dotsent A.A.Konstantinov) Khabarovskogo nauchno-issledovatel'-
skogo instituta epidemiologii i gigiyeny (dir. A.M.Krupnikova).
(BLOOD PROTEINS) (ANTIBIOTICS) (TYPHOID FEVER)

KONSTANTINOV, A.A.; STAROSTINA, I.S.; SHMAKOTINA, Z.V.

Aldolase and transaminase activity of the blood serum and urine
in some diseases. Vop. med. khim. 7 no.5:485-487 S-0 '61;
(MIRA 14:10)

1. The Chair of Biochemistry of the Medical Institute and the
Biochemical Laboratory of the Research Institute for Epidemiology
and Hygiene, Khabarovsk.
(ALDOLASE) (TRANSAMINASE)

GRITSENKO, A.N.; TROFIMOVA, L.I.; BYKOVA, Z.I.; STAROSTINA, I.S.

Use of laboratory methods in the detection of aborted and anicteric forms of epidemic hepatitis in children. *Pediatrics* 42
no.5:51-54 My'63 (MIRA 16:11)

1. Iz Khabarovskogo instituta eksperimental'noy meditsiny (direktor A.M.Krupnikova) i Lineynoy sanitarno-~~epidemiologi-~~cheskoy stantsii Dal'nevostochnogo vodnogo otdela zdravookhraneniya (glavnyy vrach M.S. Konstantinova)

*

GEITSENKO, A.N.; MAKAREVICH, N.I.; TROFIMOVA, L.I.; SHMAKOTINA, Z.V.;
STAROSTINA, I.S.

Use of laboratory diagnostic methods for the early detection of
patients with epidemic hepatitis. Zhur. mikrobiol.; epid. i immun.
41 no.6:47-51 Je '64. (MIRA 18:1)

1. Khabarovskiy institut epidemiologii i mikrobiologii.

NESHATAYEV, Yu.N.; STAROSTINA, K.F.

Studying the dynamics of the grass cover in various types of the "Les
na Vorskle" wooded steppe oak forest. Probl. bot. 6:283-296'62.
(MIRA 16:5)

(Vorskla Valley—Oak)

(Vorskla Valley—Forest ecology)

STAROSTINA, K.F.

Experimental data on the influence of the raspberry *Rubus idaeus* L. on the growth of the spruce *Picea abies* (L.) Karst seedlings in clear-cuttings. Bot.zhur. 50 no.7:971-974 JI '65. (MIRA 18:11)

1. Laboratoriya lesovedeniya AN SSSR Moskovskoy oblasti, selo Uspenskoye.

STAROSTINA, K.M.

✓ The effect of calcining bauxite upon the recovery of alumina by the autoclave method. K. M. Starostina and V. A. Parukhin, *Sbornik Nauch. Trudov Moskov. Inst. Tselnykh Metal. i Zolota* 1954, No. 24, 104-10; *Referat. Zhur., Met.* 1956, No. 47.—Calcination at 600-800° increases the recovery of Al₂O₃ from diasporo-contg. bauxite, including hard infusible varieties. This calcination insures complete decompu. of the ore by KOH or NaOH in 2-3 hrs. Calcining of intermixed diasporo, boehmite, and kauxite at ≤600° does not lower the extrn. of Al₂O₃ because the αAl₂O₃ formed along with γAl₂O₃ has almost the same soly. as has boehmite. Adm. of lime is necessary in leaching bauxite. Calcining bauxite contg. up to 17% S in an effervescent layer at 700° for 20-30 min., removes 98% of the S. Leaching of bauxite calcined in such a manner for 2 hrs. at concn. of Na₂O (total) of 200 g./l. gave 7% higher recovery of Al₂O₃ than did calcining in a muffle furnace. Eighty-eight % of the Al₂O₃ from high-sulfur bauxite could be recovered by leaching by Bayer's method and preliminary calcining as the above.

Alexis N. Pestoff

AK

MA

fra
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4

SHORYGINA, N.N.; IZUMRUDOVA, T.V.; EL'KHONES, N.M.; STAROSTINA, K.M.

Chlorolignin and its industrial preparation. *Gidroliz. i lesokhim.*
prom. 11 no.6:8-10 '58. (MIRA 11:10)

1. Institut organicheskoy khimii AN SSSR (for Shorygina, Izumrudova).
2. Gosudarstvennyy nauchno-issledovatel'skiy institut redkikh metallov
(for El'khones, Starostina).
(Chlorolignin)

NIKOLAYEV, A.V.; STAROSTINA, L.I.; BYKHE, S.M.

Solubility of some calcium and magnesium salts in the presence
of complexons. Izv. Sib. otd. AN SSSR no.9:52-55 '61.

(MIRA 14:10)

1. Institut neorganicheskoy khimii Sibirskogo otdeleniya AN
SSSR, Novosibirsk.

(Calcium salts)
(Magnesium salts)
(Acetic acid)
(Solubility)

STAROSTINA, L.P.

Differential diagnosis of obliterating endarteritis and arterio-
sclerosis of the vessels of the extremities. Khirurgiia 36
no.3:98-106 Mr '60. (MIRA 13:12)
(ARTERIES—DISEASES) (ARTERIOSCLEROSIS)
(EXTREMITIES (ANATOMY)—BLOOD SUPPLY)

BRILLIANTOV, N.A.; STAROSTINA, L.S.; FEDOROV, O.P.

Production of molybdenum and tungsten single crystals in the process of crucibleless zone melting. Kristallografiia 6 no.2:
261-264 Mr-Ap '61. (MIRA 14:9)

1. Institut kristallografii AN SSSR.
(Molybdenum crystals--Growth) (Tungsten crystals--Growth)
(Melting)

ACCESSION NR: AP4004153

S/0294/63/001/002/0310/0312

AUTHORS: Starostina, L. S.; Kachinskiy, V. N.; Brilliantov, N. A.

TITLE: Method of growing perfect single crystals of refractory metals

SOURCE: Teplofizika vy*sokikh temperatur, v. 1, no. 2, 1963, 310-312

TOPIC TAGS: single crystal, single crystal growing, perfect single crystal, refractory metal single crystal, crucibleless vacuum zone melting, electron beam zone melting, crystal growing, zone melting, zone refining, refractory metal, crystal growth, single crystal growth

ABSTRACT: Apparatus is described for growing single crystals of refractory metals by zone melting in deep vacuum without a crucible, using a focused electron beam for heating. Multiple zone recrystallization is possible in the equipment. Single crystals of tungsten, rhenium, tantalum, niobium, molybdenum, vanadium, and zirconium were grown. The purity and perfection of the crystals was monitored by measuring the ratio of the specific resistivities at room

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ACCESSION NR: AP4004153

temperature and at liquid helium temperature. Single crystals grown from initial material 99.9% pure had a ratio of 10,000 for tungsten and 3,000 for molybdenum, thus refuting the assumption that transition metals cannot give a large resistance ratio because of the small electron-electron interaction at low temperatures. Measurement of the Hall effect in the very pure specimen of tungsten makes it possible to obtain some information on the Fermi surface of tungsten. Orig./art. has: 2 figures.

ASSOCIATION: Institut kristallografii AN SSSR (Crystallography Institute AN SSSR)

SUBMITTED: 11Jun63

DATE ACQ: 26Dec63

ENCL: 01

SUB CODE: PH, ML

NO REF SOV: 003

OTHER: 001

Card 2/3

L 11394-63

BDS

S/120/63/000/002/033/041

45

AUTHOR: Fedorov, O. P. and Starostina, L. S.

TITLE: A power stabilizer for an electron-bombardment heater

PERIODICAL: Priboiy i tekhnika eksperimenta, March-April 1963, v. 8, no. 2, 156-159.

TEXT: The article describes the power stabilizer of an electron-bombardment heater used in zone fusing to purify metals and for similar applications. Current between 1 and 100 ma is stabilized to within 1 percent and voltage is stabilized to within 4 percent. The power is constant to within 5 percent. There are five figures.

ASSOCIATION: Institut kristallografii AN SSSR (Crystallography Institute of the Academy of Sciences USSR)

SUBMITTED: June 23, 1962

ja/Ch
Card 1/1

Starostina, L.S.

N.A. Brilliantov, V.N. Kachinskiy, L.S. Starostina. The growing of molybdenum and tungsten single crystals by zone melting and determination of the Hall effect.

Title: Seminar on refractory metals, compounds, and alloys (Kiev, April 1963).

Source: Atomnaya energiya, v. 15, no. 3, 1963, 266-267

L 16887-63 EWT(1)/EWP(q)/EWT(m)/BDS AFFTC/ASD/ESD-3 JD/JG
ACCESSION NR: AP3005240 S/0056/63/045/002/0043/0045

AUTHOR: Volkenshteyn, N. V.; Kachinskiy, V. N.; Starostina, L. S.

67
63

TITLE: On the Fermi surface of tungsten 27

SOURCE: Zhurn. eksper. i teoret. fiz., v. 45, no. 2, 1963, 43-45

TOPIC TAGS: tungsten, Fermi surface, galvanomagnetic property, magnetoresistance, Hall effect

ABSTRACT: The electric resistance in a transverse field, the Hall effect, and the transverse voltage on the Hall contacts were investigated in single crystals of pure tungsten at 4.2 K. The dependence of the resistance on the field direction and the quadratic variation of the resistance with the field (in all directions) were similar to those obtained by Fawcett (Phys. Rev. v. 128, 154, 1962), but the angular dependence of the Hall effect, and particularly of the even transverse voltage, exhibited strong anisotropy, with singularities in the form of rather sharp peaks. It is concluded tentatively on the basis of the results obtained that the Fermi surface of tungsten is open, and that Fawcett's conclusions concerning the absence of open trajectories in tungsten cannot be considered final.

Card 1/82

L 16887-63

ACCESSION NR: AP3005240

"The authors express their appreciation to A. I. Shal'nikov for his interest in the work and participation in its progress, and to N. A. Brilliantov for interest." Orig. art. has 1 figure. 4

ASSOCIATION: Institut kristallografi AN SSSR (Crystallography Inst. Acad. Sci. SSSR); Institut fiziki metallov AN SSSR (Metal Phys. Inst. Acad. Sci. SSSR)

SUBMITTED: 13Feb63

DATE AQ4: 06Sep63

ENCL: 01

SUB CODE: PH

NO REF SOV: 004

OTHER: 003

Card 2/12

ACCESSION NR: AP4034065

S/0126/64/017/004/0627/0629

AUTHORS: Volkenshteyn, N. V.; Romanov, Ye. P.; Starostina, L. S.; Startsev, V. Ye.

TITLE: Temperature dependence of the electrical conductivity of monocrystalline molybdenum

SOURCE: Fizika metallov i metallovedeniye, v. 17, no. 4, 1964, 627-629

TOPIC TAGS: molybdenum, electric conductivity, monocrystalline molybdenum, polycrystalline molybdenum, cryostat, copper molybdenum thermocouple, phonon, electron electron interaction

ABSTRACT: The authors studied the temperature dependence of monocrystalline Mo having a high degree of purity and a relative electrical resistance on the order of $R_{300\text{ K}}/R_{4.2\text{ K}} > 3500$, where 4.2K stands for liquid helium temperature. Test samples were obtained from a parent material of polycrystalline Mo rods 5 mm in diameter and 150 mm long, having a relative resistance of the order of 40. The approximate chemical composition was: 0.004% Fe, 0.001% Si, 0.0005% Ni, 0.0003% Mn and Al, 0.0002% Ca and Mg, 0.0001% Cu, and 0.0001% Na. Test specimens 4 mm in diameter and 25 mm long were placed in a cryostat. Temperature measurements were made with a dual copper-molybdenum thermocouple. The electrical resistance was

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L 36627-65 EWT(m)/T/EWP(t)/EWP(b)/EWA(c) Pu-4 IJP(c) JD/JG
ACCESSION NR: AP5002346 S/0126/64/018/006/0888/0894

38
34
B

AUTHOR: Volkenshteyn, N. V.; Starostina, L. S.; Startsev, V. Ye.; Romanov, Ye. P.

TITLE: Investigation of the temperature dependence of the electrical conductivity of molybdenum and tungsten monocrystals in the low temperature regions

SOURCE: Fizika metallov i metallovedeniye, v. 18, no. 6, 1964, 888-894

TOPIC TAGS: molybdenum, tungsten, monocrystal, polycrystalline molybdenum, polycrystalline tungsten, electrical conductivity, Debye characteristic temperature

ABSTRACT: The temperature dependence of the electrical resistance of high purity molybdenum and tungsten monocrystals and of polycrystalline samples of these metals was measured in the 4.2-300 K temperature range. The crystallographically perfect monocrystals were obtained by zone melting, using electron bombardment heating. The characteristic Debye temperature was calculated for the temperature interval of 10-100 K. The experimental R(T) curves compared favorably with the theoretical Bloch-Gruneisen and Wilson curves. The effect of

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L 36627-65

ACCESSION NR: AP5002346

4

s--d transitions on the temperature dependence of the electrical resistance of these nonferromagnetic transition metals was discussed. "The authors thank Yu. P. Irkhin for helpful discussion and V. A. Novoselov for assistance in the measurements." Orig. art. has: 3 figures and 6 equations

ASSOCIATION: Institut kristallografii AN SSSR (Institute of Crystallography AN SSSR); Institut fiziki metallov AN SSSR (Institute of the Physics of Metals, AN SSSR)

SUBMITTED: 03Apr64

ENCL: 00

SUB CODE: MM

NR REF SOV: 012

OTHER: 016

Card 2/2

L 5115-66 EWT(1)/T IJP(c) GG

ACC NR: AP5025340

SOURCE CODE: UR/0126/65/020/003/0474/0475

AUTHOR: ^{14.55}Mezentseva, N. L.; ^{44.55}Mikhaylova, N. P.; ^{44.55}Starostina, L. S.; Dolomanov, L. A.

ORG: ^{14.55}Institute of Crystallography, AN SSSR (Institut Kristallografii AN SSSR) ^{44.55}

TITLE: Growing and refining of yttrium single crystals ⁴¹
²⁷ ¹⁴ ^{DB}

SOURCE: Fizika metallov i metallovedeniye, v. 20, no. 3, 1965, 474-475

TOPIC TAGS: yttrium, yttrium zone refining, zone refining, yttrium single crystal, single crystal growth

ABSTRACT: Experiments have been made to combine vacuum crucibleless zone refining of yttrium with simultaneous growing of yttrium single crystals. Yttrium ingots 80 mm long were subjected to crucibleless zone refining during which yttrium single crystals up to 1 mm long and 5 mm in diameter were successfully grown. A polymorphic transformation in yttrium at 1475C made it impossible to obtain large single crystals. Zone refining decreased the content of iron, copper, and calcium in the ingots by 27, 20, and 10 times, respectively. The oxygen content decreased by only 2.4 times, presumably because of the formation of stable yttrium oxides, whose distribution coefficient is close to 1. For more effective refining of the growing single crystals, electric current was passed through the ingot simultaneously with the zone fusion. After 8-hr processing at a current density of 5 amp/mm², the oxygen content in the ingot anode portion, simultaneously zone fused, was three times lower than that near the cathode portion. Orig. art. has: 1 figure. [MS]

Card 1/2

UDC: 669.794.172

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L 5115-66

ACC NR: AP5025340

SUB CODE: 88/ SUBM DATE: 20Oct64/ ORIG REF: 002/ OTH REF: 001/ ATD PRESS: 4/33

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Card 2/2

5(2) PHASE I BOOK EXPLOITATION 307/1916

Vesoyuznoye soveshchaniye po khimii bora, 1955
 Bor'i trudy konferentsii po khimii bora i yego sovedinivny (boron):
 Transactions of the conference on the Chemistry of Boron and
 its Compounds. Moscow, Goskhimizdat, 1958. 189 p. Errata slip
 inserted. 2,000 copies printed.

Ed.: G.P. Leshinskiy; Tech. Ed.: N.S. Kur'ya.

PURPOSE: This book is intended for chemists, as well as for
 industrial personnel working with boron and its compounds.

COVERAGE: This collection contains 24 studies on the chemistry,
 crystalline structure, physicochemical properties, and
 technology of boron and its compounds. Twenty-two of the
 studies were presented at the All-Union Conference on Boron
 Chemistry, held at the Nauchno-Issledovatel'skiy i
 khimicheskii institut im. L. Ya. Karпова (Scientific Re-
 search Physicochemical Institute im. L. Ya. Karпов) in

December 1955. Two of these articles deal with the thermo-
 chemistry of boron. The two studies on "boronum" pro-
 ducts are being published for the first time. The studies
 are well illustrated and accompanied by bibliographies.

TABLE OF CONTENTS:

Boron; Transactions of the Conference (Cont.)	307/1916
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Emintseva, G.A., B.M. Tsarev, and V.A. Epo'l'baum. Borides of Transition Metals and Their Electron Emissive Properties	106
Emintseva, G.A., V.A. Epo'l'baum, and B.M. Tsarev. Synthesis of the Hexaborides of Certain Rare Earth Metals and Their Electron Emissive Properties	112
Shverdlina, M.Y., M.M. Mad' (deceased), and E.A. Eche- skov. Calcium Borohydride as Reducing Agent of Organic Fluorine Compounds	120
Kurman, I.M. Present State and Future Prospects for Expanding the Raw Material Base of Boron	124
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Card 4/6

5(2)

SOV/78-4-8-28/43

AUTHORS: Epel'baum, V. A., Gurevich, M. A., Starostin, M. I.

TITLE: On the Solubility of Boron in Silicon (O rastvorimosti bora v kremnii)

PERIODICAL: Zhurnal neorganicheskoy khimii, 1959, Vol 4, Nr 8, pp 1881-1884 (USSR)

ABSTRACT: After a survey on the publication data dealing with this subject (Refs 1-14) the importance of the system mentioned in the title is pointed out since according to the publication data (Refs 5-7) the cermets which are produced from silicon and boron under the action of very high temperatures, are now industrially used. They are characterized by high strength, chemical stability, heat resistance, semiconductor properties, etc. The authors investigated the solubility of boron in silicon and its effect on the structure of the silicon crystal lattice. The composition of the samples was varied between 99Si : 1B and 1Si : 6B. The samples were melted at 1350° or 2100-2200°C in argon atmosphere and analysed by X-ray methods (X-ray camera RKU-86 and RKU-114, copper radiation $\lambda_{CuK_{\alpha 1}} = 1.537396$ kX). The lattice period of silicon decreasing with

Card 1/2

SOV/78-4-8-28/43

On the Solubility of Boron in Silicon

increasing boron content is shown by table 1 and graphically represented by using the data by F. Horn (Ref 14) and E. Nowotny (Ref 15) in figure 1. The behaviour of the solution of boron in silicon corresponds to the solid substitution solution. The strong contraction of the silicon lattice under the influence of relatively small boron amounts could not be explained. There are 1 figure, 1 table, and 17 references, 5 of which are Soviet.

SUBMITTED: April 26, 1958

Card 2/2

GRYUNER, V.S., professor; STAROSTINA, M.A., kandidat khimicheskikh nauk
REZNIKOVA, S.B., nauchnyy sotrudnik; APANAS'YEVA, N.V., nauchnyy
sotrudnik; OSMOLOVSKAYA, V.A.; NIKIFOROVA, G.V.; BUDORAGIN, M.G.,
proizv.instr. LYUBIMOV, P.V.

Testing the technical qualities of berry varieties for confection-
ary products. Trudy VKNII no.10:84-105 '54. (MLRA 8:9)
(Berries)

STAROSTINA, N.V.

Automatic operation of the abutting stations of double-track insertions in single-track line bypasses. Avtom. telemekh. i svyaz' 8 no.524-8 My '64. (MIRA 17:10)

1. Glavnyy inzh. proyektov Gosudarstvennogo projektno-izyskatel'skogo instituta po projektirovaniyu signalizatsii, tsentralizatsii, svyazi i radio na zhelezнодорожном transporte.

3/1/58
MIKHAYLOV, I. G., KOSHKIN, N. I., LUTOVININ, V. S., NOZDREV, V. F. and STAROSTINA, O. A.

"Absorption of Sound in Acetates."

report presented at the 6th Sci. Conference on the Application of Ultrasound
in the investigation of Matter, 3-7 Feb 1958, organized by Min. of Education
RSFSR and Moscow Oblast Pedagogic Inst. im. N. K. Krupskaya.

STAROSTIWA, O.A.

24(1) PHASE I BOOK EXPLOITATION SOV/3150

Vserossiyskaya konferentsiya professorov i prepodavately pedagogicheskikh institutov

Primeneniye ultrazvukov k issledovaniyu veshchestv; trudy konferentsii, Vyp. 7 (Application of Ultrasonics for Analysis of Substances; Transactions of the All-Russian Conference of Professors and Teachers of Pedagogical Institutes, Nr 7) Moscow, Izd. MOPI, 1958, 283 p. 1,500 copies printed.

Tech. Ed.: S. P. Zhitov; Eds.: V. P. Mordrev, Professor, and B. B. Kudryavtsev.

FOURSE: This book is intended for physicists, technicians, aeronautical engineers and other persons concerned with ultrasonics.

COVERAGE: The book contains twenty eight articles which treat ultrasonic phenomena in five general categories: 1) historical data on the development of ultrasonics in the Soviet Union over the past forty years; 2) the speed of sound in suspensions of varying concentration and number and type of components and the relationship between sound velocity and the compressibility of electrolytes; 3) ultrasonic investigations of physical and chemical properties of materials and the determination of physical and chemical constants, e. g. density of aqueous solutions, adiabatic compressibility, solarity of solutions (with given temperatures), viscosity, surface tension, saturation pressure and also ultrasonic investigation of the carbon content and petrographic state of coal; 4) industrial applications of ultrasonics, e. g. emulsification of lagers, cleansing of textile fibers and enhancing the acceptability of synthetic fibers to dyeing, etc.; and 5) apparatus which produce ultrasonic waves. No personalities are mentioned. REFERENCES accompany each article.

Yagov, M. N. Application of Ultrasonic Methods for Measurement of the Depth of a Tempered Surface Layer 169

Yakovlev, V. F. and A. D. Zipir. Elementary Theory of a Quartz Converter 185

Kal'yanov, B. I. Measurement of the Coefficient of Absorption of Ultrasound in the Critical Range of Methyl Acetate by the Pulse Method 201

Kal'yanov, B. I. Methodological Peculiarities of Investigating the Coefficient of Absorption of Substances in the Critical Range by the Pulse Method 207

Sobolev, V. D. The Application of a Telescopic System for Measurement of the Speed of Ultrasound by the Optical Method 217

Pomosev, Yu. N. and O. A. Skazotina. A New Design for the Measuring Chamber of a Photoelectric Apparatus 221

Maksimov, Ya. S. and A. I. Lyannik. A Demonstrator Pulse Generator With Ultrasonic Indicator 225

Mel'nikov, A. S. Some Academic Experiments With the Application of Electroacoustic Apparatus 229

Kudryavtsev, B. B. The Propagation of Sound in Liquids 257

Belinakiy, B. A. The Theory of Speed Dispersion and the Coefficient of Absorption of Ultrasound in Esters of Organic Acids 269

Manjov, M. S. The Theory of Phase Transitions With Two Curie Points 279

Card 6/7

S/194/61/000/008/053/092
D201/D304

AUTHOR: Starostina, O.A.

TITLE: The optical method of measuring ultrasound absorption in ethyl-acetate and propyl-acetate

PERIODICAL: Referativnyy zhurnal. Avtomatika i radioelektronika, no. 8, 1961, 7, abstract 8 E53 (Uch. zap. Mosk. obl. ped. in-ta, 1960, 92, 199-210)

TEXT: The usual arrangement of diffraction method was used. A description is given of the block diagram and the optical section of the arrangement for observing light diffraction at US. The arrangement employs the ФЭУ-19 (FEU-19) multi-stage photomultiplier, the diffraction spectrum being focussed at its cathode by a lens. The visual observation and control of the slot size were made possible by a special photo-micro attachment between the photomultiplier and the lens. The light beam was controlled by a small unit containing a photo-element and a micro-ammeter. The analyzed

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The optical method...

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fluid was poured into a glass cuvette with double walls with the temperature stabilizing fluid between them; the cuvette was placed in a Dewar's vessel. The absorption of ultrasound was measured by the intensity of spectra of the \pm 1st order at two different distances from the quartz. A standard signal generator was used so that quick-tuning and frequency stability could be attained; the generator voltage was amplified by a single stage resonance amplifier with a pentode 6П9 (6P9). The frequency was measured either from the Vernier reading or by a wavemeter. The generator and amplifier supplies were mains stabilized. The voltage applied to the quartz was controlled by a cathode voltmeter BKC -7 (VKS-7), connected in parallel to the quartz at the output of the amplifier. 2 series of measurements of ultrasound absorption in propyl-acetate (P) were made. In the first of the series, measurements were carried out at 11 frequencies (from \sim 7 to \sim 25 mc/s) in the interval -30 to +50°C. In the second they were carried out at 3 isotherms: -10, 0 and 20°C in the range 6-25 mc/s. The parameters of P are

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S/194/61/000/008/055/092
D201/D304

AUTHOR: Starostina, O.A.

TITLE: Ultrasound absorption by esters of acetic acid

PERIODICAL: Referativnyy zhurnal. Avtomatika i radioelektronika, no. 8, 1961, 9, abstract 8 E64 (Uch. zap. Mosk. obl. ped. in-ta, 1960, 92, 211-222)

TEXT: The absorption of ultrasound in propyl acetates has been investigated at temperatures from -30 to $+50^{\circ}\text{C}$ at frequencies from 5 to 26 mc/s. The experimental results obtained cannot be explained by either the classical theory of absorption of Stokes-Kirchhoff or by relaxation. Because of this, assessment of experimental data is being made on the basis of quantum mechanics analysis of B.A. Belinskiy (Dissertation, MOPI im. Krupskoy, 1959), who has found a more accurate solution of the relaxation equation than that given by Kneser (Ann. der Phys. 1935, 21, 682). The experimental results of study of absorption in two samples of propyl-acetate at

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Ultrasound absorption...

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+20° and -10°C are in good agreement with the more exact theory of relaxation. The velocity dispersion and thermal capacity of the internal degrees of freedom have been evaluated as 0.25% and 1.6 cal/mol. degree respectively. Graphs are given which represent the results of similar analysis of ethyl acetate. 11 figures. 10 references. [Abstracter's note: Complete translation]

Card 2/2

X

STAROSTINA, R. F.

Levin, L. M. and Starostina, R. F. Nekotorye rezul'taty issledovaniia struktury oblakov. [Some results of the investigation of the structure of clouds.] *Akademiia Nauk SSSR, Doklady*, Moscow, 93(2):253-256, Nov. 11, 1953. 2 figs., 5 refs., 7 eqs. DLC—Some results of a complex investigation of the microstructure of clouds by means of collecting cloud drops with the aid of a cloud drop "trap" carried out during June–Nov. 1951 as part of the Elbrus high-mountain expedition of the Geophysical Institute of U.S.S.R. are presented and discussed. They concern: the number of drops with diameter exceeding 4μ which varied (depending on the types of the clouds) from less than 100 to 1000 in m^3 ; the size of the drops; their average cubic diameter, etc. Subject Headings: 1. Cloud structure 2. Cloud droplets 3. Drop size data.—A.M.P.

20

STAROSTINA, R.F.; CHUDAYKIN, A.V.

Cloud droplet traps used in the Elbrus Expedition. Trudy
Vysokogor. geofiz. inst. AN SSSR 2:72-78 '61. (MIRA 14:12)
(Cloud physics)
(Meteorological instruments)

CA STAROSTINA, T. A.

10

Preparation of triglycerides of hydroxy acids. G. V. Piguelskii and T. A. Starostina (A. Zhdanov State Univ., Leningrad). *Doklady Akad. Nauk S.S.S.R.* 79, 261-2 (1951); cf. *C.A.* 34, 378^g. Treatment of 100 g. peach oil in 200 ml. Et₂O with 65 ml. Ac₂O in Et₂O gave after 16 days 87 g. product, m. 44-5°, which on hydrogenation over Pd gave 3-palmito-1,2-stearin or the isomeric 2-palmito-1,3-stearin, m. 62.4° (from EtOH). Sapon. with alc. NaOH gave palmitic acid, m. 62°, and α -hydroxystearic acid, m. 82°, in 1:2 ratio. Hence, peach oil contained palmito-
G. M. Kosolapoff

STAROSTINA, T.A.

Gynecological operations in elderly and senile women. ^{Akush.}
i gin. no.2:38-44'63. (MIRA 16:10)

1. Iz ginekologicheskoy kliniki na baze 61-y Klinicheskoy
bol'nitsy (glavnyy vrach - kand.med.nauk L.N. Vasil'evskaya)
i kafedry akusherstva i ginekologii (zav. - zasluzhennyy de-
yatel' nauki prof. K.N.Zhmakin) I Moskovskogo ordena Lenina
meditsinskogo instituta imeni I.M.Sechenova. Nauchnyy ruko-
voditel' raboty prof. V.I.Bodyazhina.

(GYNECOLOGY, OPERATIVE) (GERIATRICS)

STAROSTINA, V.D.; YATSIMIRSKIY, K.B.

Spectrophotometric analysis of the interaction of acid chrome blue K with copper, zinc and cadmium ions in solutions. Izv.vys.ucheb. zav.; khim. i khim.tekh. 8 no.2:343-345 '65.

(MIRA 18:8)

1. Ivanovskiy khimiko-tehnologicheskii institut, kafedra neorganicheskoy khimii i kafedra analitichskoy khimii.

STAROSTINA, V.D.; YATSIMIRSKIY, K.B.

Spectrophotometric studies of compounds of acid chrome blue K
with nickel and cobalt ions. *Izv.vys.ucheb.zav; khim.i khim.*
tekh. 4 no.5:710-714 '61. (MIRA 14:11)

1. Ivanovskiy khimiko-tehnologicheskii institut, kafedra
neorganicheskoy i analiticheskoy khimii.
(Azo compounds--Spectra)

FEODOT'YEV, K.M.; STAROSTINA, V.G.

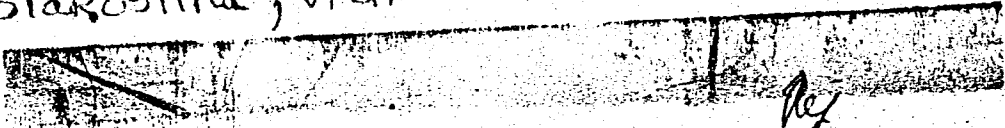
Natural and artificial ferroaluminosiliceous hydrates. (In: Akade-
mija nauk SSSR. Voprosy petrografii i mineralogii. Moskva, 1953.

Vol. 2, p.220-227)

(MLRA 7:4)

(Silicates)

Starostina, V. G.



Natural and synthetic iron aluminum silicates hydrates.
 K. M. Feodorov and V. G. Starostina. *Voprosy Petrog. i Mineral., Akad. Nauk S.S.S.R.* 2, 229-7 (1953). — Described are the contacts of carboniferous limestones and Jurassic clay sediments of the Moscow Basin which show as decarbons. products of pyrite nodules abundant jarosite, chalcophanite, and Al and Fe oxide hydrogels, associated with allophanoids among which an Fe halloysite and ferrallophanite are characteristic. The differential-thermal curves of Fe allophanite show dehydration at 100-190°, and a weak exothermic effect at 350° which corresponds to the reaction $\gamma \rightarrow \alpha \text{ Fe}_2\text{O}_3$. Weak exothermic effects are observed at 825° and 975° (indicating the multistage). On the differential-thermal curve of Fe halloysite the 2 endothermic effects are identical with those of common halloysite; the exothermic effects at 320° ($\gamma \rightarrow \alpha \text{ Fe}_2\text{O}_3$), 810-830° (strong) and 1140-1150° are observed in Fe halloysite from the Vishnev Mts. and Kazakhstan. Fe halloysite is tabular in the electron-microscopic image; ordinary halloysite is lath-shaped. Synthetic expts. for the production of Fe Al

Ref

MS

silicate hydrates are successful only at low temps., by a reaction of an alk. silicate soln. with an acidic $AlCl_3 + FeCl_3$ soln. in equivalent ratios $R_2O_3 : SiO_2 = 1:2-5$, and $Al_2O_3 : Fe_2O_3 = 0.10-1.07$. The differential-thermal curves of the ppts. are nearly identical with those of Fe allophane and Fe halloysites of low Fe_2O_3 contents, with their characteristic endo- and exothermic effects. Autoclaved samples (at 150 and 240°) show the crystn. of Fe_2O_3 hydrates. The evidently high stability of $\gamma-Fe_2O_3$ even under autoclave conditions (240°) is somewhat surprising; one may conclude that lepidocrocites are hydrothermal-secondary products in nature. Only at low temps. are the complex Fe Al silicate hydrates stable; a slight increase in temp. is sufficient to separate Fe_2O_3 . The products low in Fe_2O_3 show exothermic effects at 900° and 1100°; the higher the Fe_2O_3 content the more pronounced in the autoclaved products are exothermic effects at 770°, and 1130-1180°, and even higher for Fe_2O_3 -rich compus. (crystn. of cristobalite). W. Eitel.

IVANCHIKOVA, Ye.I.; STAROSTINA, V.N.

Doubling capron thread with cotton on automatic circular hosiery
knitting machines. Obm.tekh.opyt. [MLP] no.36:16-17 '57.
(Knitting, Machine) (Hosiery) (MIRA 11:11)

L 23474-66 EWT(m)

ACC NR: AP6013980

SOURCE CODE: UR/0228/65/000/002/0017/0019

AUTHOR: Shteyn, Ya. Sh. (Candidate of technical sciences); Yakub, I. A. (Candidate of technical sciences); Starostina, V. P. (Engineer)

ORG: none

14
B

TITLE: Porous clay aggregate for high-strength concrete/

SOURCE: Stroitel'nyye materialy, no. 2, 1965, 17-19

TOPIC TAGS: concrete, clay

ABSTRACT: Not all heat-expanded clay aggregates are suitable for high-strength concrete, and this paper reports on studies made to determine the better kinds. Both laboratory and regular industrial concrete samples were tested. Samples of concrete with expanded filler were prepared for strength testing. The aggregates were graded by specific weight and strength. In all cases the grains were similar in shape and surface characteristics and the intergranular space was about 47%. Samples were also made with crushed aggregates of various strengths and specific weights. Strength as a function of cement content was also tested, and results are shown by ternary diagrams (nomograms).

Concrete mixtures contained the following fractions by volume: 15% 12 mm, 20% 1.2 to 5 mm, 27% 5 to 10 mm, 38% 10 to 20 mm. Samples were cured in steam ovens. Strength details of samples containing various proportions of Portland cement and aggregates of various strengths are compared in tables and graphs and are discussed extensively. Certain expanded aggregates are shown

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L 23474-66

ACC NR: AP6013980

to permit savings of up to 30% to 50% cement for given strengths as compared to ordinary heavy concrete. [JPRS] 0

SUB CODE: 13 / SUBM DATE: none

Card

2/2

SHTEYN, Ya.Sh., kand.tekhn.nauk; STAROSTINA, V.P., inzh.

Properties of agloporites and concretes made with them. Sbor.
trud.VNIINSM no.6:181-187 '62. (MIRA 15:12)

1. Vsesoyuznyy nauchno-issledovatel'skiy institut novykh
stroitel'nykh materialov Akademii stroitel'stva i arkhitektury
SSSR.

(Aggregates (Building materials))
(Lightweight concrete)

SHTEYN, I.A., kand. tekhn. nauk; YAKUB, I.A., kand. tekhn. nauk;
STAROSIINA, V.P., inzh.

Keramit gravel for high-strength concrete. Strof. mat. II
no.2817-29 5 '65. (MIRA 1883)

STAROSPINA, Ye.I., inzhener.

Constructing a roadbed with graders. Stroi. dor. 10 no.7:10-12
J1-Ag '47. (MIRA 6:12)

(Road construction)

8/081/61/000/021/058/094
B138/B101

AUTHORS: Morina, I. N., Vinogradova, N. P., Listopadov, M. V.,
Starostina, Ye. S.

TITLE: Combined synthesis of acetylene and ethylene by hydro-
carbon pyrolysis

PERIODICAL: Referativnyy zhurnal. Khimiya, no. 21, 1961, 317, abstract
21L11 (Sb. "Sintez monomerov dlya proiz.-va sintetich.
kauchuka". L., Goskhimizdat, 1960, 197 - 206)

TEXT: C_2H_2 and C_2H_4 are simultaneously produced, in quantities of up to
50 % by weight of the starting hydrocarbons, by the pyrolysis of propane
and butane (temperature $\geq 1050 - 1100^\circ C$, contact time 0.1 - 0.15 sec.).
Depending on conditions of production, the C_2H_2/C_2H_4 ratio varies between
1 : 3 and 3 : 1. For commercial production it is suggested that tubular
furnaces should be used. They should be made of the refractory alloy No. 2,
have tube diameter 50 mm and length 23 m, and allow for the rare action

Card 1/2

STAROSTINA, YE. S.

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S/081/61/000/020/070/089
B126/B147

AUTHORS: Morina, I. N., Vinogradova, N. P., Davydov, A. N.,
Kornilova, N. S., Konetspol'skiy, L. I., Listopadov, M. V.,
Starostina, Ye. S., Chernysheva, R. K., Shainskiy, Ya. B.

TITLE: Separation of acetylene from pyrolysis gases, using
dimethyl formamide as absorbent

PERIODICAL: Referativnyy zhurnal. Khimiya, no. 20, 1961, 317, abstract
20L9 (Sb. "Sintez monomerov dlya proiz-va sintetich.
kauchuka". L., Goskhimizdat, 1960, 207-215)

TEXT: A scheme for separating concentrated C_2H_2 from gases produced by
high-temperature pyrolysis of hydrocarbons, using dimethyl formamide as
absorbent, was developed and checked on a test unit. The optimum
conditions for the process were established which ensure a virtually
complete extraction of C_2H_2 from pyrolysis gases and a yield of concentrate
containing 98 to 99 % by volume of C_2H_2 . [Abstracter's note: Complete
translation.]

Card 1/1

+

STAROSTINA, Z. D.

"A Comparative Evaluation of the Effectiveness of Some Depot Penicillin Preparations in the Treatment of Gonorrhea in Men." Cand Med Sci, Gor'kiy State Medical Inst, Gor'kiy, 1954. (RZhBiol, No 6, Nov 54)

Survey of Scientific and Technical Dissertations Defended at USSR Higher Educational Institutions (11)

SO: Sum. No. 521, 2 Jun 55

ARTEM' YEV, S.A.; NYUNIKOVA, O.I.; ZHAROV, A.V.; METAL'NIKOV, B.P.; KISLOVA, T.A.;
STAROSTINA, Z.D.; CHASTIKOVA, A.V.; TEMYANKO, S.A.; IKONNIKOV, N.E.;
ARALOVA, Z.T.; GRISHINA, A.M.

Levomycetin in the treatment of gonorrhea; results of a cooperative
study. Vest. dermat. i ven. 33 no.2:70-73 Mr-Apr '59. (MIRA 12:7)

1. Iz Tsentral'nogo nauchno-issledovatel'skogo kozhno-venerologicheskogo
instituta (zav.otdelom gonorei - prof. I.M. Porudominskiy, dir. - kand. med.
nauk N.M. Turanov) Ministerstva zdravookhraneniya RSFSR. 2. Tsentral'nyy
nauchno-issledovatel'skiy kozhno-venerologicheskii institut (for Nyunkova).
3. Bashkirskiy krayevoy kozhno-venerologicheskii institut (for Zharov).
4. Gor'kovskiy krayevoy kozhno-venerologicheskii institut (for Temyanko).
5. Sverdlovskiy krayevoy kozhno-venerologicheskii institut (for Grishina).
(CHLORAMPHENICOL, ther. use,
gonorrhea (Rus))
(GONORRHEA, ther.
chloramphenicol (Rus))

DRUBLYANETS, E.E., kand. biol. nauk; TKACHENKO, N.I., kand. biol. nauk; STAROSTINA, Z.I., nauchn. red.; SHENDAREVA, L.V., tekhn. red.

[Improvement of the biological system of purification of the waste waters of hydrolysis plants] Sovershenstvovanie rezhima biologicheskoi ochistki stochnykh vod gidroliznykh zavodov. Moskva, TSentr. in-t tekhn. informatsii i ekon. issledovaniy po lesnoi, bumazhnoi i derevoobrabatyvaiushchei promyshl., 1963. 35 p. (MIRA 17:4)

KOROTCHENKO, N.I., kand. vet. nauk; STAROSTINA, Z.I., nzuhn. red.;
MILIKESOVA, I.F., tekhn. red.

[Vitamin content of feed yeasts and methods for its
determination] Soderzhanie i metody opredelenia vita-
minov v kormovykh drozhzhakh. Moskva, TSentr. in-t tekhn.
informatsii i ekon. issl. po lesnoi, bumazhnoi i derevo-
obrabatyvaiushchei promyshl., 1963. 39 p.

(MIRA 16:9)

(Yeast--Analysis) (Vitamins)

POLIVANNYY, V.I., red.; STAROSTINA, Z.I., red.; DAVYDOVA, M.I.,
red.; PETRENKO, V.M., tekhn. red.

[Intensifying the production processes at hydrolytic and
wood chemistry enterprises] Intensifikatsia proizvodstven-
nykh protsessov na gidroliznykh i lesokhimicheskikh pred-
priyatiyakh. Moskva, 1963. 45 p. (MIRA 16:11)

1. Tsentral'nyy institut tekhnicheskoy informatsii i eko-
nomicheskikh issledovaniy po lesnoy, bumazhnoy i derevo-
obrabatyvayushchey promyshlennosti.

(Woodpulp industry) (Hydrolysis)

ACCESSION NR: AT4010740

S/2839/63/000/002/0017/0024

AUTHOR: Edel'man, N. M. (Engineer); Starostina, Z. I. (Engineer)

TITLE: The new deformable aluminum alloy AD35

SOURCE: ASIA SSSR. Institut stroitel'ny*kh konstruksiy. Stroitel'ny*ye konstruksii iz alyuminiyevy*kh splavov, no. 2, 1963, 17-24

TOPIC TAGS: aluminum alloy, heat treatable alluminum alloy, alloy AD35, corrosion resistant aluminum alloy, weldable aluminum alloy, construction aluminum alloy, aluminim, aluminum magnesium silicon alloy

ABSTRACT: The article describes experimental alloy AD35, 4th in the Al-Mg-Si series, which is currently undergoing production tests in the SSSR. The other three (AD31, AD33 and AV) are currently used in the manufacture of numerous types of semifinished products. The chemical composition of AD35 includes 0.8 - 1.4% Mg, 0.8 - 1.2% Si, and 0.5 - 0.9% Mn. It has good corrosion resistance, machinability, enameling and polishing characteristics, welds easily and is free of deficit Cu. The alloy is recommended for wide use in constructions requiring medium strength and good corrosion resistance. Use of the material is not recommended for temperatures above 170C. Several tables illustrate the mechanical properties (longitudinal and transverse) for sheets, rods, angles, bars, as well as the effect

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ACCESSION NR: AT4010740

of heat, corrosion and tempering-aging interval on such properties. The specific gravity of the alloy is 2.72, the linear expansion coefficient ranges from $23.6 \cdot 10^{-6}$ at 20 - 100C to $29.7 \cdot 10^{-6}$ at 300-400C, the thermal conductivity is 0.41 - 0.44 cal/cm sec. degrees at 100 - 400C, the specific resistance is 0.0329 ohm mm²/m. "Ye. A. Gubareva took part in studying the properties of alloy AD35. The corrosion resistance of semifinished products made of alloy AD35 was studied by Ye. I. Burova and L. I. Agapova. The profiles of PS754-5 were studied by Ye. I. Kutaytseva and S. M. Ambartsumyan. Semifinished products of alloy AD35 were welded by Yu. P. Arbuzov." Orig. art. has: 7 tables.

ASSOCIATION: Institut stroitel'ny*kh konstruktsiy, ASIA SSSR (Institute for structural Components, ASIA SSSR)

SUBMITTED: 00

DATE ACQ: 17Jan64

ENCL: 00

SUB CODE: MA, ML

NO REF SOV: 000

OTHER: 000

2/2

ard

ACCESSION NR: AT4037643

S/2981/64/000/003/0005/0026

AUTHOR: Edel'man, N. M.; Fridlyander, I. N.; Starostina, Z. I.

TITLE: A study of the properties of alloys in the Al-Mg-Si system

SOURCE: Alyuminiyevy*ye splavy*, no. 3, 1964. Deformiruyemy*ye splavy* (Malleable alloys), 5-26

TOPIC TAGS: aluminum alloy, aluminum magnesium silicon alloy, alloy AV, alloy AD31, alloy AD33, alloy AD35, alloy mechanical property, alloy chemical composition, alloy corrosion resistance, alloy weldability, alloy heat treatment, alloy stampability, silicon containing alloy, magnesium containing alloy

ABSTRACT: Tests were carried out on sheet samples (1.5 mm thick) of 87 alloy compositions to determine the effects of alloy composition and heat treatment conditions on mechanical properties, the effects of composition on corrosion resistance, and the weldability. Content of Mg varied by 0.2% from 0 to 2.0%, Si by 0.2 or 0.4% from 0.0 or 0.2% to 2.0% for each Mg content. The samples were annealed (1 hr. at 370C, cooled in a furnace to 150C, then in free air) or hardened (530C, niter bath) and tested either prior to aging, after 15 days of natural aging or after 12 hrs. of artificial aging at 160C. Machine welding operations were in a argon atmosphere, using a nonconsumable electrode and welding rods of the basic

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ACCESSION NR: AT4037643

material. Analysis of concentration triangles plotted for the system indicates that peak strength for all hardening procedures used applies to alloys in the triphasic area $\alpha + \text{Mg}_2\text{Si} + \text{Si}$ at $\text{Mg} + \text{Si} = 2.5$ to 4% total. The alloys exhibited good plasticity after annealing, as well as after hardening with artificial aging or prior to aging. Stamping, cupping, flanging and extrusion are possible at high levels of deformation. Corrosion resistance to immersion in 3% NaCl with 0.1% H_2O_2 added decreased with an increase in Si and the Mg_2Si phase, was relatively unaffected by an increase in Mg, and deteriorated sharply in the direction from excess Mg to excess Si where Mg_2Si was constant. Weldability was adequate for argon arc roll or spot welding, tensile strength of seams was 60-70% of initial material levels and was restored to 90-95% by subsequent heat treatment. Tendency to crystallization cracking was high when using welding rods of original material (cracking coefficient 60-80%), but use of SVAK5 rods (5% Si, balance Al) reduced that value to 0-20%. Use of such rods did not affect strength, plasticity or corrosion resistance. Alloys in this system are recommended for applications requiring high corrosion resistance, high yield points (compared to magnesium), good weldability and a decorative appearance in riveted or cemented constructions,

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ACCESSION NR: AT4037643

as well as welded structures where lowered strength of weld joints can be tolerated. Three alloys (AD31, AD33 and AD35, composition and mechanical properties given) were submitted for industrial use as a result of this study. "Ye. A. Gubareva, Ye. I. Burova, L. A. Agapova, Yu. P. Arbuzov and R. N. Naumova also took part in the work." Orig. art. has: 3 tables and 16 graphs. X

ASSOCIATION: none

SUBMITTED: 00

DATE ACQ: 04Jun64

ENCL: 00

SUB CODE: MM

NO REF SOV: 008

OTHER: 002

Card 3/3

ARBUZOV, Yu.P.; Primalni uchastiye: FRIDLYANDER, I.N.; EDEL'MAN, N.M.;
BUROVA, Ye.I.; SOLOV'YEVA, V.V.; STAROSTINA, Z.I.; GUBAREVA, Ye.A.

Properties of welded joints in AD31 and AD33 aluminum alloys.
Alum. splavy no.3:36-45 '64. (MIRA 17:6)

L 37160-66 EWT(m)/EWP(w)/EWP(v)/T/EWP(t)/ETI/EWP(k) IJP(c) JH/JD/HM/WB/GD/HW

ACC NR:

AT6016415

(N)

SOURCE CODE: UR/0000/65/000/000/0093/0101

58

52

2+1

AUTHORS: Edel'man, N. M.; Starostina, Z. I.

ORG: none

TITLE: Deformable aluminum alloy AD35SOURCE: AN SSSR. Institut metallurgii, Metallovedeniye legkikh splavov (Metallography of light alloys). Moscow, Izd-vo Nauka, 1965, 93-101

TOPIC TAGS: aluminum alloy, silicon, manganese, magnesium / AD35 aluminum alloy

ABSTRACT: The mechanical properties, welding behavior, and corrosion stability of the alloy AD35 (0.8--1.4% Mg, 0.8--1.2% Si, and 0.5--0.9% Mn) were investigated. This investigation supplements the results of an earlier study by N. M. Edel'man, I. N. Fridlyander, and Z. I. Starostina (Issledovaniye svoystv splavov sistemy Al--Mg--Si--Sb. Alyuminiyevyye splavy, vyp. 3, Izd-vo Mashinostroyeniye, 1964). The experimental results are tabulated. Photographs of the macrostructure of several forged objects manufactured from alloy AD35 are presented. It is concluded that alloy AD35 is a suitable material for applications requiring moderate mechanical strength and increased corrosion stability as compared with alloy AV. Ye. A. Novikova and T. I. Ivanova participated in the determination of the mechanical properties of the alloy AD35. Welding of AD35 semifinished products was carried out

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