

SHELECHNIK, M.Y., Inzh.; SFRIZHINSKY, I.I., kand. fiz.-mat. nauk

Investigating the hydrolysis process of calcium carbide by the  
"water displacement" system. Trudy VNIIMyogen no.1C-132-143  
'64. (MIRA 17:10)

KOVAL'SKII, Vasilii Antonovich; OFITSEROV, Dmitriy Maksimovich;  
SHEMECHIN, Moisey Markovich; NOVETSOV, A.M., red.

[Design and operation of equipment for the production  
of acetylene] Ustroistvo i ekspluatatsiya oborudovaniia  
dlja polucheniia atsetilena. Moskva, Vysshiaia shkola.  
1965. 187 p. (MIRA 18:8)

SIROVA, N.N.; SHELEG, A.U.

Dynamic atomic displacements, coefficient of linear expansion,  
and characteristic temperature of silicon. Dokl.AN BSSR 3  
no.10:403-404 0 '59. (MIRA 13:2)  
(Silicon)

SIROTA, N.N.; OLEKHNOVICH, N.M.; SIELEG, A.U.

Distribution of electron density in silicon. Dokl.AN BSSR 4 no.4:  
144-147 Ap '60. (MIRA 13:10)

1. Otdel fiziki tverdogo tela i poluprovodnikov AN BSSR.  
(Silicon)

80067

24.7/00

## AUTHORS:

Sirota, N. N., Academician of the  
AS BSSR, Olekhovich, N. M.,  
Sheleg, A. U.

S/020/60/132/01/042/064  
B004/B007

## TITLE:

The Determination of the Distribution of Electron Density in  
Crystals

PERIODICAL: Doklady Akademii nauk SSSR, 1960, Vol 132, Nr 1, pp 160 - 163  
(USSR)

TEXT: The electron density distribution  $\rho$  and its value at a certain point  $(x, y, z)$  is determined by summation of a three-dimensional Fourier series (1). The number of terms in this series is limited by the number of experimentally determinable reflections. The authors mention the methods which were suggested for the purpose of further increasing the precision of the determination of electron density (extrapolation of the f-curve, introduction of a temperature coefficient), and point out the errors arising in this connection. They then explain their method, which makes use of the value of the atomic scattering factor, which may be determined by means of CuK $\alpha$  radiation as well as by less hard radiations. The authors divide the value of the scattering factor into two parts with a density distribution  $\rho_1(\vec{r})$  and  $\rho_2(\vec{r})$ , where  $\rho_1(\vec{r})$  corresponds to the density of the electrons near the atom and is described by

Card 1 / 3

80067

The Determination of the Distribution of  
Electron Density in Crystals

S/020/60/132/01/042/064  
B004/B007

the Gauss function  $\rho_1(\vec{r}) = A \exp(-\frac{1}{2}r^2)$ , on the other hand, corresponds to the electron density of the outer electrons, which, in the case of high reflection indices, cause only a slight change in the course of the f-curve. Figure 1 shows the course of the  $f_1$ -curve and the  $f_2$ -curve for diamond, where  $f - f_1 = f_2$ .  $f_2$  corresponds to the unknown density  $\rho_2$  of the outer electrons, which may thus be determined from the difference. For the electron density in an arbitrary point of the crystal,  $\rho(\vec{r}) = \rho_1(\vec{r}) + \rho_2(\vec{r})$ . This equation is expanded into a series (6). Figure 2 shows the results obtained by calculating the electron density for diamond in the direction [111] according to the method suggested and by means of a temperature factor at 7500°K and 20°C. Figure 3 shows the calculation for the points 0, 0, 0; 1/8, 1/8, 1/8 and 1/2, 1/2, 1/2 according to both methods between 0 and 15000°K. There are 3 figures, and 18 references, 7 of which are Soviet.

Card 2/3

80067

The Determination of the Distribution of  
Electron Density in Crystals

S/020/60/132/01/042/064  
B004/B007

ASSOCIATION: Otdel fiziki tverdogo tela i poluprovodnikov Akademii nauk BSSR  
(Department of the Physics of Solids and Semiconductors of the  
Belorussian Academy of Sciences)

SUBMITTED: January 5, 1960

W

Card 3/3

86843

S/020/60/135/005/034/043  
B004/B075

9.4300(3203,1043,1143)

AUTHORS: Sirota, N. N., Academician of the AS BSSR and Sheleg, A. U.

TITLE: Distribution of the Electron Density in Germanium

PERIODICAL: Doklady Akademii nauk SSSR, 1960, Vol. 135, No. 5,  
pp. 1176-1178

TEXT: The author systematically investigated the distribution of electron density in semiconductors. The present paper gives some results of the determination of the atomic scattering factor f as a function of

 $\sum_i h_i^2$  and of the distribution of electron density in germanium. The investigation was carried out with n-type germanium monocrystals pulverized up to  $5-8\mu$  (resistivity 60 ohm·cm). The X-ray pictures were taken in Cu K $\alpha$  radiation at room temperature by means of a YPC-50M (URS-50I) recorder. A 20- $\mu$  thick nickel foil served as a filter. The reflection intensity  $I_{hkl}$  was calculated on the strength of the peak areas of the EPM-09 (EPP-09)-type recording electronic potentiometer. To find out the absolute

Card 1/4

86843

S/020/60/135/005/054/043  
B004/B075

Distribution of the Electron Density in  
Germanium ✓

values, the  $I_{hkl}$  of Ge was compared with the 220- and 311-lines of Si and NaCl, which served as standards. The absorption coefficient of Ge was determined from the reduction of the intensity of the primary beam during its passage through 50-200  $\mu$  thick lamellas. Results are given in Figs. 1, 2, 4. On the level of electron density of  $1.5 \text{ el}/\text{A}^3$ , a Ge-ion diameter of 0.5  $\text{\AA}$  is obtained, and on the level of  $0.05 \text{ el}/\text{A}^3$ , one of 2  $\text{\AA}$ . For a comparison, the corresponding values for diamond (0.20 - 0.25 and 1.25  $\text{\AA}$ ) and silicon (0.4 and 1.75  $\text{\AA}$ ) are given. Yu. N. Shuvalov is mentioned. There are 4 figures and 6 references: 3 Soviet and 3 German.

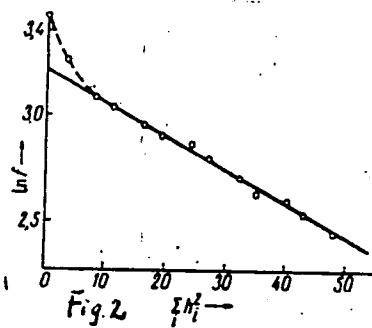
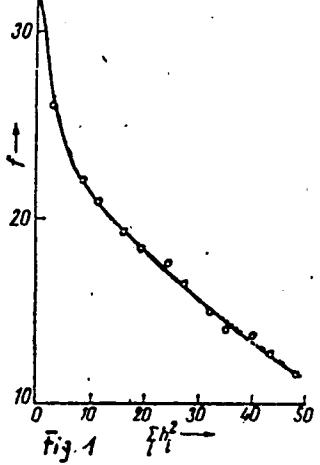
ASSOCIATION: Otdel fiziki tverdogo tela i poluprovodnikov Akademii nauk BSSR (Department of Solid-state Physics and Semiconductor Physics of the Academy of Sciences BSSR)

SUBMITTED: September 10, 1960

Card 2/4

86843

S/020/60/135/005/034/043  
B004/3075



Card 3/4

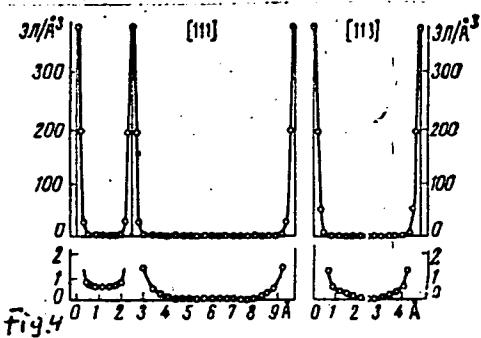


fig.4

S/020/60/135/005/034/043  
B004/B075

Legend to Fig. 4: Distribution of electron density toward [111] and [113] in the (110) plane of the germanium elementary cell.  $3\text{J}/\text{\AA}^3$  - electron density.

Card 4/4

S/020/62/147/006/017/034  
B104/B180

AUTHORS: Sirota, N. N., Academician AS BSSR, Sheleg, A. U.

TITLE: Diamagnetic susceptibility and electron density distribution in grey tin

PERIODICAL: Akademiya nauk SSSR. Doklady, v. 147, no. 6, 1962, 1344-1347

TEXT: The aim was to determine experimentally the atom-scattering f of grey tin at room temperature and at -100°C and to find the electron density distribution in the crystal from it. The grey tin was obtained from high-purity white tin by recrystallization between -10 and -20°C. The  $\text{CuK}_\alpha$ -radiation reflexions from powder compact samples, were taken on a YPC-50M (URS-50I) apparatus with GM counters. Results: From the graph  $\ln f_{\text{Sn}}$  as function of  $\sum_i h_i^2$ , where  $h_i$  is the lattice index, it follows that f is a Gaussian curve, if  $h_i^2 > 16$ . Using a method given by N. N. Sirota, A. U. Sheleg and N. M. Olekhnovich (DAN, 132, no. 1, (1960)) the

Card 1/3

Diamagnetic susceptibility ...

S/020/62/147/006/017/034  
B104/B180

electron density distribution  $\varrho = \varrho_1 + \varrho_2$  in plane (110) of the grey tin crystal lattice is calculated. For the parameters A and  $\alpha$  in the relation  $\varrho_1 = A \exp(-\alpha r^2)$  the values  $A = 406,31$  and  $\alpha = 15.708$  were obtained for room temperature and  $A = 571,98$  and  $\alpha = 19.637$  for  $-100^\circ$ . The  $\varrho_2$  distribution was obtained by summation of a three-dimensional Fourier series. Results: As with diamond, silicon and germanium, in grey iron there is a "bridge" with density of 0.37 electrons/ $\text{\AA}^3$ , lying in the [111] direction between neighboring atoms with coordinates 000 and  $1/4, 1/4, 1/4$ . Temperature changes hardly touch this value. In the sites  $1/2, 1/2, 1/2$  and  $3/4, 3/4, 3/4$  electron density minima, 0.05 electrons/ $\text{\AA}^3$  and 0 respectively, were found. A temperature drop raises the maxima and lowers the minima. The diamagnetic susceptibility  $\chi = 38 \cdot 10^{-6}$  calculated from the electron density distribution according to N. N. Sirota (DAN, 142, no. 6 (1962)) agrees satisfactorily with experimental data. There are 4 figures.

ASSOCIATION: Otdel fiziki tverdogo tela i poluprovodnikov Akademii nauk BSSR (Division of Solid State and Semiconductor Physics of the Academy of Sciences BSSR)

Card 2/3

Diamagnetic susceptibility ...

S/020/62/147/006/017/034  
B104/B180

SUBMITTED: June 22, 1962

Card 3/3

SIROTA, N.N., akademik; SHELEG, A.U.

Magnetic susceptibility of semiconducting elements of the 4th group  
as determined by X-ray diffraction analysis. Dokl. AN SSSR 152  
no.1:81-83 S '63. (MIRA 16:9)

1. Otdel fiziki tverdogo tela i poluprovodnikov AN BSSR. 2. AN  
BSSR (for Sirota).

(Semiconductors--Magnetic properties)  
(X-ray diffraction examination)

L 6772-65 EWT(1)/EPA's)-2/EWT(n)/DND(q)/DNP(d) - Pt-10 - 3P(c)/ASD(p)-5/SD  
AS(mp)-2/ASD(a)-5/AFWL/ESD(gs)/ESD(t)/RAEM(t) JD  
ACCESSION NR: AP4044585 S/0201/64/000/002/0051/0057

AUTHOR: Sheleg, A. U.

TITLE: Dynamic displacement, magnetic susceptibility, and electron density distribution in elements of group IV of the periodic table as obtained from x-ray diffraction analysis data

SOURCE: AN BSSR. Izvestiya. Seriya fiziko-tehnicheskikh nauk, no. 2, 1964, 51-57

TOPIC TAGS: x ray diffraction study, group IV element, coefficient of thermal expansion, electron density, diamagnetic susceptibility, paramagnetic susceptibility

ABSTRACT: The author determines the characteristic temperatures, the mean square dynamic displacements, the coefficients of linear expansion, and the distribution of the electron densities at different temperatures in silicon, germanium, and gray tin. An x-ray dif-

Card 1/2

L 6772-65

ACCESSION NR: AP4044585

fraction method is used. The data obtained on the electron density distributions are used to calculate the diamagnetic and paramagnetic components of the magnetic susceptibility of these elements. It is shown on the basis of the experimental data that the energy of the interatomic interaction decreases with increasing atomic number of the elements in the series C-Si-Ge-aSn. "I am deeply grateful to Academician AN BSSR N. N. Sirota for interest in the work." Orig. art. has: 3 figures, 8 formulas, and 3 tables.

ASSOCIATION: None

SUBMITTED: 00

ENCL: 00

SUB CODE: EM, NP

NR REF Sov: 016

OTHER: 007

Card

2/2

L 7924-66 EWA(k)/EWT(1)/EWT(m)/EPF(n)-2/EPA(w)-2/EWA(m)-2/EWA(h) LIP(c) LHR/AT  
ACC NR: AP5027929 SOURCE CODE: UR/0363/65/001/010/1673/1683

AUTHOR: Sirota, N. N.; Gololobov, Ye. M.; Sheleg, A. U.; Olekhovich, N. M.

ORG: Institute of Solid State Physics and Semiconductors, Academy of Sciences, BSSR, Minsk  
(Institut fiziki tverdovo tela i poluprovodnikov Akademii nauk BSSR)

TITLE: Potential and limitations of the use of x-ray diffraction methods for studying the nature of chemical bonding in crystals

SOURCE: AN SSSR. Izvestiya. Neorganicheskiye materialy, v. 1, no. 10, 1965, 1673-1683

TOPIC TAGS: x-ray diffraction analysis, neutron diffraction, electron density, electron diffraction analysis, chemical bonding, crystal structure analysis

ABSTRACT: The experimental determination of electron density distribution in crystals involves measurement of the intensities of x-ray scattering peaks, finding of structural amplitudes, calculation of the form factors of ions, reduction of the values obtained to absolute zero temperature, and summation of three-dimensional Fourier series. Each of these operations is discussed in detail. X-ray diffraction methods make it possible to give quantitative experimental expressions to the wave functions of electrons in crystal lattices. Of great significance to the study of chemical bonding is the possibility of estimating the electron density distribution over the electron shells. For example, the use of form factors obtained by neutron and x-ray scattering has permitted the determination of the distribution of all electrons, including those with unpaired spins, in the 3d shell in the lattice of ferromagnetics and

Card 1/2

UDC: 541.57:548.19

L 7924-66

ACC NR: AP5027929

antiferromagnetics. However, X-ray-, electron-, and neutron-diffraction methods cannot as yet solve problems involving electron distribution at low densities or when the density changes are slight (not exceeding  $0.02 - 0.05 \text{ e}1/\text{A}^3$ ). For example, it is not possible at the present time to determine by x-ray diffraction the number of electrons which migrate from the valence band to the conduction band under the influence of thermal motion or photo-electric effects in semiconductor crystals. Despite such limitations, these methods are of paramount importance for studying electron density distributions in crystals. Orig. art. has: 7 figures.

19 /  
SUB CODE: SS, GC, IC / SUBM DATE: 05Jul65 / ORIG REF: 019 / OTH REF: 011

PC

Card 2/2

SHELEG,M., pensioner-santarka

Gratitude for attention and care. Zdrav. Bel. 9 no.8195 Ag'63  
(MIRA 17:3)

1. Borisovskiy Dom rebenka.

## PHASE I BOOK EXPLOITATION

SOV/4893

Vsesoyuznoye soveshchaniye po fiziko-khimicheskim svoystvam  
ferritov i fizicheskim osnovam ikh primeneniya. Izd. Minsk, 1959  
Ferrity, fizicheskiye i fiziko-khimicheskiye svoystva.  
(Ferrites: Physical and Physicochemical Properties. Reports)  
Doklad  
Minsk, Izd-vo AN BSSR, 1960. 655 p. Errata slip inserted.  
4,000 copies printed.

Sponsoring Agency: Nauchnyy sovet po zashchite AN SSSR. Otdel  
fiziki tverdogo tel i poluprovodnikov BSSR.

Editorial Board: Resp. Ed.: N. N. Sirota, Academician of the  
Academy of Sciences BSSR; K. P. Belov, Professor; Ye. I. Rondot-  
skiy, Professor; K. M. Polivarov, Professor; R. V. Telsanin, Pro-  
fessor; O. A. Smolentsev, Professor; N. N. Shat's'ka, Candidate of  
Physical and Mathematical Sciences; Z. M. Smolyarenko, and  
L. A. Bashkirov, Ed. of Publishing House; S. Kholyavskiy, Tech.  
Ed.: I. Volokhanovich.

PURPOSE: This book is intended for physicists, physical chemists,  
radio electronics engineers, and technical personnel engaged in  
the production and use of ferrimagnetic materials. It may also  
be used by students in advanced courses in radio electronics,  
physics, and physical chemistry.

COVERAGE: The book contains reports presented at the Third All-  
Union Conference on Ferrites held in Minsk, Belarusian SSR.  
The reports deal with magnetic transformations, electrical and  
galvanomagnetic properties of ferrites, studies of the growth  
of ferrite single crystals, problems in the chemical and physi-  
cochemical analysis of ferrites, studies of ferrites having  
rectangular hysteresis loops and multicompONENT ferrite systems  
exhibiting spontaneous rectangular hysteresis, problems in magnetic  
attraction, highly coercive ferrites, magnetic spectroscopy,  
ferromagnetic resonance, magnetooptics, physical principles of  
using ferrite components in electrical circuits, anisotropy of  
electrical and magnetic properties, etc. The Committee on Mag-  
netism, AS USSR (S. V. Vonnovskiy, Chairman) organized the con-  
ference. References accompany individual articles.

SOV/4893  
Ferrites (Cont.)

Bondarev, D. Ye. The Selection of Ferrites With Rectangular  
Hysteresis Characteristics For Quick-Acting Systems 637  
Skuratov, V. V., Sh. Yu. Ismailov, and L. P. Korchenko.  
Pulse Generator for Studying Ferrites 643  
Il'yushenko, L. P., and M. U. Shegala. The Ferrite-Based  
Memory Device of the Electronic Computer of the Academy  
of Sciences, Belarusian SSR 645  
AVAILABLE: Library of Congress (TK53.V75)

Card 18/18  
②  
very similar to T-140000.k.o.JA/drk/08  
5/2/61

9.7140

30106  
S/194/61/000/007/010/079  
D201/D305

AUTHORS: Il'yushenko, L.F. and Sheleg, M.U.

TITLE: Ferrite memory of the electronic computer of the  
AS Belorussian SSR

PERIODICAL: Referativnyy zhurnal. Avtomatika i radioelektronika,  
no. 7, 1961, 15, abstract 7 B98 (V sb. Ferrity. Fiz.  
i fiz.-khim. svoystva, Minsk, AN BSSR, 1960, 645-652)

TEXT: The magnetic memory of the computer described utilizes the linear number selection method (method z). The ferrite memory cores perform not only the function of memorizing binary information, but are used as impulse sampling and pulse registration forming circuits. The duration of one cycle is 8 microseconds. The memory control circuit consists of standard computer circuits (trigger, gate) and of the basic following circuits gate-producing read-out pulses, storage gate, amplifier for the read-out signal which excites the magnetic decoder, produces recording of information, amplification

Card 1/2

Ferrite memory...

30106  
S/194/61/000/007/010/079  
D201/D305

of read code pulses and code regeneration. The basic circuits use pulse transformers with ferrocarr cores and cores in the shape of rings of rectangular hysteresis loop ferrites. The characteristics are given of five types of transformers as used in the memory control circuit. The amplitude of the signal at the amplifier output ~ 30 V. 5 figures. 3 references. *[Abstracter's note: Complete translation]* ✓

Card 2/2

L 26075-66 EWT(m)/EWA(d)/EWP(t) IJP(c) JD/GS  
ACC NR: AT6015373

SOURCE CODE: UR/0000/65/000/000/0188/0191

35

AUTHOR: Il'yushenko, L. F.; Sheleg, M. U.; Kostyuk-kul'gavchuk, L. P.

B+1

ORG: none

TITLE: The influence of a constant applied magnetic field during the electro-deposition process on the coercive force and anisotropy field of a permalloy film

SOURCE: AN BSSR. Institut tekhnicheskoy kibernetiki, Vychislitel'naya tekhnika (Computer engineering), Minsk, Nauka i tekhnika, 1965, 188-191

18 18

TOPIC TAGS: magnetic thin film, magnetic coercive force, magnetic anisotropy

ABSTRACT: To investigate the influence of an applied magnetic field on the magnetic properties of permalloy films during film formation by electroplating, fields ranging from 0 to 500 oe were utilized. Films were made by plating 80% Ni—20% Fe on 0.07—0.08 mm polished copper foils in a sulfuric acid solution. The film thickness was 2000 Å. The fields, created with Helmholtz coils, were parallel to the films. The electrolyte current density was 1.1 amp/dm<sup>2</sup>, and the pH factor was 2.7—3. In the range of applied magnetic fields, the coercive force and the field of anisotropy did not exhibit any correlation with the magnitude of the applied field. Changing the pH factor of the electrolytic solution had no effect on the coercive field and field of anisotropy. It was noted that the axis of easy magnetization did not depend on the direction of the applied field but was colinear with the direction

Z

Card 1/2

L 26075-66

ACC NR: AT6015373

in which the copper foils were drawn in the rolling operation during manufacture. To exclude the influence of copper substrate texture on experimental results, new substrates were carefully polished and used in the next series of tests with films 3000 Å thick. Again no correlation could be found between the magnitude of applied field and coercive force and field of anisotropy. However, the axis of easy magnetization in this case aligned itself with the direction of the applied field. Orig. art. has: 2 figures.

[BD]

SUB CODE: 09/ SUBM DATE: 15Dec65/ ADD PRESS: 4253

Card 2/2 CC

L 06366-67 EWP(m)/EWP(t)/ETI IJ1(c) JD/HW/GD  
ACC NR: AT6015375

SOURCE CODE: UR/0000/65/000/000/0194/0197

AUTHOR: Il'yushenko, L. F.; Gribovskaya, I. G.; Sheleg, M. U.

39  
B4/

ORG: none

TITLE: The effect of alternating current on the properties of electrodeposited  
permalloy films

SOURCE: AN BSSR. Institut tekhnicheskoy kibernetiki. Vychislitel'naya tekhnika (Computer engineering). Minsk, Nauka i tekhnika, 1965, 194-197

TOPIC TAGS: magnetic thin film, ferromagnetic film, metal deposition, electrolytic deposition, thin film magnetic memory

ABSTRACT: The effect of ac superimposed on dc during the electrodeposition of magnetic thin films is reported. It is well known that the crystalline film structure in electrodeposited nickel and zinc films can be radically altered by superimposing alternating current on the direct current. The authors used the same technique for controlling the properties of permalloy magnetic thin films. The extensive experiments show that the greatest effect on the coercive force and anisotropy field can be achieved when the current density ratio of ac to dc is equal to 2 for the ac frequencies between 25 and 50 cps. It was noted that large alternating current densities produce a coarse crystalline film structure, which, according to Rother, corresponds to

Card 1/2

L 06166-97

ACC NR: AT6015375

a large coercive force. The experimental data confirms the desirability of using superimposed ac during magnetic film deposition. Description of experimental conditions and tabulated results are included in this paper. Orig. art. has: 1 table and 2 figures.

SUB CODE: 11/ SUBM DATE: 15Dec65/ ORIG REF: 000/ OTH REF: 000

Caro 2/2 *[Signature]*

L 26019-66 EWT(1)/EWT(m)/T/EWA(d)/EWP(t) IJP(c) GG/GS/JD

ACC NR: AT6015376

SOURCE CODE: UR/0000/65/000/000/0197/0200

AUTHOR: Sheleg, M. U.

ORG: none

TITLE: Dynamic properties of ferromagnetic films obtained by electrodeposition

SOURCE: AN BSSR. Institut tekhnicheskoy kibernetiki. Vychislitel'naya tekhnika (Computer engineering). Minsk, Nauka i tekhnika, 1965, 197-200

TOPIC TAGS: magnetic thin film, thin film circuit

ABSTRACT: Test results of research on the switching speed of thin permalloy electroplated films as a function of the switching field aligned with the axis of easy magnetization are presented. A study was also made of the relationship between the constant magnetic field applied in the hard axis and the switching speed and magnitude of the output signal. The films were plated on a copper substrate immersed in a sulfuric acid electrolyte and subjected to a 300-oe external magnetic field. The films varied in thickness from 1300 to 2400 Å, in coercive force from 2.4 to 4.2 oe, and in anisotropy fields from 4.3 to 6.8 oe. The test equipment was capable of generating switching pulses 300 nsec long with a 3 nsec risetime. To return the film to its initial state, 10-oe fields were set up by means of Helmholtz coils which were also used for creating a constant field applied in the hard direction. Figure 1a shows the dependence of switching time on the applied switching field. It exhibits

Card 1/3

38  
B7/

2

L 26019-66

ACC NR: AT6015376

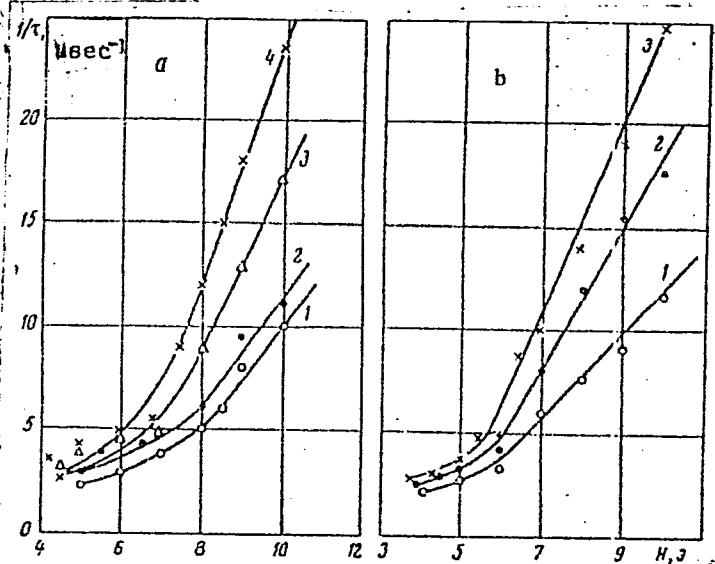


Fig. 1.  $1/\tau$  as a function of switching field  $H$ .

a: 1 - 2400 Å, 2 - 2000 Å,  
3 - 1500 Å, 4 - 1300 Å,  
b: 1 -  $H_{\perp} = 0$ , 2 -  $H_{\perp} = 0.25$  oe,  
3 -  $H_{\perp} = 0.5$  oe,

two regions which characterize the switching process (wall domain motion and rotation). The output signal was found to increase with increasing applied switching field.

Card 2/3

L 26019-06

ACC NR: AT6015376

Figure 1b shows the dependence of switching time on the magnitude of switching field for different values of the transverse field  $H_{\perp}$ . The presence of  $H_{\perp}$  enhances the switching process after a certain threshold is exceeded ( $H \geq 6$  oe). Orig. art. has: 2 figures.

[BD]

SUB CODE: 09 / SUBM DATE: 15Dec65 / ATI PRESS: 4255

Card 3/3 RR

SHELEG, P.M.

[Fattening swine on leading White Russian collective farms]  
Adkorm svinei u peradavykh knilhasakh Belaruskai SSR. Minsk,  
Dziarzh. vyd-va BSSR, 1956. 49 p. (MLRA 10:5)  
(White Russia--Swine--Feeding and feeding stuffs)

L 61412-65 EWT(d)/EWP(h)/EWP(1)

ACCESSION NR: AP5019108

UR/0286/65/000/012/0134/0135

AUTHORS: Afonin, A. N.; Yershova, G. I.; Ivanovskiy, K. Ye.; Ioffe, F. S.; Komashenko, A. Kh.; Kon'kova, T. F.; Lipovetskiy, V. A.; Mel'nikov, V. V.; Mishchenko, Yu. D.; Neverovich, A. M.; Paris-RevueIta, A. A.; Preobrazhenskiy, O. A.; Rikman, M. A.; Semenov, B. D.; Serenov, V. M.; Sukhanov, A. I.; Shelen, R. G.; Yaguzhinsky, S. M.

TITLE: Transmission device of an overhead thrust conveyor. Class 81, No. 172231

SOURCE: Byulleten' izobreteniy i tovarnykh znakov, no. 12, 1965, 134-135

TOPIC TAGS: overhead conveyor, transmission, crane

ABSTRACT: This Author Certificate presents a transmission device of a suspended thrust conveyor. The device contains spring-supported vanes set in a rotary motion by a star wheel meshing with the drive chain of the conveyor (see Fig. 1 on the Enclosure). To prevent the possibility of wedging the carriage during its transport, the device is provided with a two-armed spring-supported lever. One of the arms serves as a stopper for the carriage, and the other one (provided with a roller) interacts with a circular template fixed on the star wheel. The template has openings for receiving the roller which frees the carriage from the stopper.  
Card 1/3

L 61412-65

ACCESSION NR: AP5019108

3

Orig. art. has: 1 diagram.

ASSOCIATION: Vsesoyuznyy nauchno-issledovatel'skiy institut pod'yemno-transportnogo mashinostroyeniya (All-Union Scientific Research Institute of Hoisting and Conveying Machine Construction)

1/4 55

SUBMITTED: 12Aug63

ENCL: 01

SUB CODE: IX

NO REF Sov: 000

OTHER: 000

Card 2/3

SIMAT'KO, I.T.; SHELEGEPA, A.I., student

Echinoceosis of the spleen. Uch. zap. Stavr. gos. med. inst.  
8:110-118 '63  
(MIRA 17:7)

1. Kafedra obshchey khirurgii (zav. - doktor med. nauk Yu.S. Gilevich) Stavropol'skogo meditsinskogo instituta (rektor - zasluzhennyj deyatel' nauki, prof. V.G. Budylin).

KALIN, Nikolay Fedorovich; KARABANOV, Vasil'evich; SHLEGOV, Pavel  
Konstantinovich; SHUBIKOV, ... , editor; ZALVSEY, L.M.,  
Tekhnicheskij redaktor

[Survey of 3-11 kv varne electric lines] Izyskania vzdushnykh  
linii elektroperedachi 3-11 kv. Pod red. N.F. Kalina. Moskva, Gos.  
energizdat, 1957. 150 p.  
(MLRA 10:10)  
(Electric lines--Overhead)

Meteorological Abst.  
Vol. 4 No. 11  
Nov. 1953  
Soil Temperature

4.11-171

551.526.6:639.222.2(265:57)

Probatov, A. N. and Shelegova, E. K., K metodike predskazaniia srokov nachala neresta sel'di u zapadnogo poberezh'ia IUzhnogo Sakhalina. [On the methods of forecasting the beginning of herring spawning on the western coast of South Sakhalin.] Meteorologiya i Gidrologiya, No. 5:51-53, 1952. DLC—The water temp. observations for 16-18 years were used for investigation of relation between the time of herring spawning and the thermal state of sea. Correlation coefficient for Jan. (-0.09) showed no relation. For Feb. and March coefficients of  $r = -0.64$  and 0.62 were found. Thus for the forecasting of probable date of herring spawning the water temp. characteristics observed in Feb. can be used. The experimental forecasts established the date of spawning for 1949 as April 5 (the actual beginning of spawning was on April 6) and for 1950 between April 12-15 (the actual beginning was on April 12). Subject Headings: 1. Sea temperatures 2. Herring fisheries 3. Sakhalin, U.S.S.R.—N.I.Z.

SPELEKASOV, P.

Measures for the reduction and improvement of industrial administration in the People's Republic of China. Biul.nauch.inform.:  
trud i zar.plata no.6:57-60 '59. (MIRA 12:9)  
(China--Industrial management)

SHELEKASOV, P.

Wage increase and improvement of living standards of workers  
and employees in the Chinese People's Republic. Biul. nauch.  
inform.: trud i zar. plata no.10:59-63 '59. (MIRA 13:6)  
(China--Wages) (China--Cost and standard of living)

SHELEKASOV, P.

The management of the industrial enterprises of China without  
shop divisions. Sots.trud. + no.7:36-41 J1 '59.  
(MIRA 13:4)  
(China--Industrial organization)

SHELEKASOV, P.

Improving cultural and technological level of workers and  
employees in the Chinese National Republic. Biul.nauch.  
inform.: trud i zar.plata 3 no.4:47-49 '60.  
(MIRA 13:8)  
(China--Employees, Training of)

SHELEKASOV, P.

Improvement in the material welfare of workers and employees of  
the Chinese People's Republic. Biul.nauch.inform.: trud i zar.  
plata 3 no.5:52-55 '60. (MIRA 13:8)  
(China--Cost and standard of living)

KARAPETYAN, K.G.; SHELEKASOV, V.I., polkovnik zapasa, red.

[Hero of the Soviet Union IUrii Vasil'evich Smirnov] Geroi  
Sovetskogo Soiuza IUrii Vasil'evich Smirnov. Moskva, 1960.  
(MIRA 14:2)  
11 p.

1. Moscow. Tsentral'nyy muzeĭ Sovetskoy Armii.  
(Smirnov, IUrii Vasil'evich, 1925-1944)

ARSENIN, N.D.; AUDKOVSKIY, N.G.; BLOLOTIN, A.A.; BONARTSEVA, N.N.;  
BOGDANOVA, M.V.; GOLOVENKO, I.P.; IL'BITENKO, K.I.;  
KIRPICHNIKOV, Ye.M.; KAKAIETYAN, K.G.; KIRSANCOVA, I.A.;  
KUZNETSOV, A.L.; KORESHNIKOVA, N.F.; KONZHENEVSKAYA, T.I.;  
NEMIROV, N.G.; NIKONOVA, T.K.; MAZAROV, V.N.; PISAREVA, I.A.;  
POPOV, S.A.; PRONINA, N.A.; PAKHMAN, M.Ye.; REYPOLSKIY, S.N.;  
ROGACHEV, Yu.N.; SOSNINA, V.D.; STARSHINOV, B.M.; KHUDYAKOV,  
B.Ya.; SHELEKASOV, V.I.; PARKOV, V.P., podpolkovnik, red.;  
MURAV'YEV, A.I., polkovnik, red.; CHAPAYEVA, N.I., tekhn. red.

[Relics of military glory] Relikvii boevoi slavy. Moskva,  
Voenizdat, 1962. 166 p. (MIRA 15:8)

1. Nauchnyye sotrudniki TSentral'nogo muzeya Sovetskoy Armii  
(for all except Murav'yev, Chapayeva).  
(Military museums)

SVERISKSTEIN, A. V.

"Investigation of the Suction of Equipment Used for Treating Solid Materials."  
Grad Tech Sci, Belorussian Polytechnic Inst imeni I. V. Stalin, Min Higher Education  
USSR, Minsk, 1955. (KL, No 17, Apr 55)

SC: Sum. No. 704, 2 Nov 55 - Survey of Scientific and Technical Dissertations  
Defended at USSR Higher Educational Institutions (16).

SHELEKETIN, A. V., kandidat tekhnicheskikh nauk; KARPUSHINSKIY, N.S., inzhener.

Dust collectors for air purification. Metallurg no.2:26-27 F '56.  
(MIRA 9:9)

1.Ukrainskiy tsentral'nyy institut gigiyeny truda i profzabolevaniy  
(for Sheleketin).2.Aglomeratsionnyy tsekh zavoda "Zaporezhstal'" (for  
Karpushinskiy).  
(Air--Purification) (Zaporozhye--Industrial hygiene)

SHELEKETIN, A.V., kandidat tekhnicheskikh nauk; KARPUSHINSKIY, N.S., inzhener.

Hydraulic method of dust removal from multicyclone hoppers. Metallurg  
no.8:9-10 Ae '56. (MIRA 9:10)

1.Ukrainskiy TSentral'nyy Institut gigiyeny i profzabolenniy (for Sheleketin). 2.Starshiy energetik aglomeratsionnoe tsekh zavoda "Zaporozhstal'" (for Karpushinskiy).  
(Separators (Machines)--Attachments) (Zaporezh'ye--Ore dressing)

SHELEKETIN, A.V., kandidat tekhnicheskikh nauk; KARPUSHINSKY, N.S.  
inzhener.

Ventilation ducts in the return gallery. Metallurg no.11:11 N 156.  
(MLRA 10:1)

1. Krivorozhskiy institut gigiyeny truda i profzabolevaniy (for  
Sheleketin). 2. Agglomeratsionnyy tsekh zavoda "Zaporozhstal'" (for  
Karpushinsky).  
(Zaporozhye--Metallurgical plants--Heating and ventilation)

ШЕЛКОВИЧ, А. В.

SERENKO, Aleksandr Semenovich, kand.tekhn.nauk; PROTSENKO, Galina  
Aleksandrovna; SHELKOVICH, Aleksandr Vital'yevich, kand.tekhn.  
nauk; GOL'MAN, A.B., otvetstvennyy red.; ANDREYEV, S.P., tekhn.red.

[Dust elimination in plants engaged in crushing, separating and  
concentrating iron ore] Obespylivanie vozdukha na dorbil'no-  
sortirovochnykh i obogatitel'nykh fabrikakh zheleznoi rudy.  
Khar'kov, Gos. nauchno-tekhn. izd-vo lit-ry po chernoi i tsvetnoi  
metallurgii, 1957. 162 p. (MIRA 11:4)  
(Dust--Removal) (Ore dressing)

NEDIN, V.V., professor, doktor tekhnicheskikh nauk.; SHELEKETIN, A.V., kandidat  
tekhnicheskikh nauk.

"Dust control during ore crushing" by L. A. Glushkov. Gor. zhur. no.1:  
78 Ja '57. (MLRA 10:4)  
(Crushing machinery) (Dust collectors)

LEVIN, A.I.; BABOV, D.M.; SHELEKETIN, A.V.

"Pneumoconiosis"; bibliographic index to Russian literature from  
1918-1955. Reviewed by A.I.Levin, D.M.Babov, A.V.Sheleketin. Gig.  
truda i prof.zab. 1 no.5:62-63 S-O '57. (MIRA 10:11)  
(BIBLIOGRAPHY--LUNGS--DUST DISEASES)

SHELEKETIN, A.V., kandidat tekhnicheskikh nauk; KARPUSHINSKIY, N.S., inzhener.

Device for the removal of atmospheric dust at a sintering plant. Metallurg 2 no.8:10-12 Ag '57. (MLRA 10:9)

1. Krivorozhskiy institut gigiyeny truda i profzabolevaniy (for Sheleketin). 2. Aglomeratsionnyy tsentral'nyy zavoda "Zaporozhstal'" (for Karpushinskiy).

(Sintering) (Dust--Removal)

NEJIK, V., professor, doctor of tehnicheskikh nauk; NEYKOV, G.D., gornyy  
inzhener, PhD, D.Sc., candiat tehnicheskikh nauk; BABOV,  
G.I., kandidat meditsinskikh nauk.

Vine dust removal with self-cleaning oil filters. Gor.zhur. no.6:66-69  
(1978) (PLA 10:2)

Krivorozhskiy gornozavodskiy institut i Krivorozhskiy institut  
of tsvetnoy metalloobrabotki.

(Vine dusts) (Filters and filtration)

130-8-4/20

AUTHORS: Sheleketin, A.V., Candidate of Technical Sciences, and Karpushinskiy, N.S., Engineer.

TITLE: Arrangements for Removing Dust from Sinter-Plant Air (Ustroystva dlya obespylivaniya vozdukh na aglofabrike)

PERIODICAL: Metallurg, 1957, No.3, pp. 10 - 12 (USSR).

ABSTRACT: The authors describe the moistening of limestone, ore and coke at the "Zaporozhstal'" Works sinter plant and an arrangement (Fig.1) for improving the sealing of bunkers. They describe how the dust which accumulates in the shells with which the strands at this plant are covered and which used to cause considerable operating trouble is removed, (Fig.2) and a device for depositing dust on to the centre of the conveyor belt. There are 3 figures.

ASSOCIATION: Krivoy Rog Institute of Labor, Hygiene and Occupational Diseases (Krivorozhskiy institut gigiyeny truda i profzabolevaniy) and the "Zaporozhstal'" Works (zavod "Zaporozhstal'" )

AVAILABLE: Library of Congress.

Card 1/1

SHELEKETIN, A.V., kand.tekhn.nauk

Dust extraction in coarse crushing shops. Bezop.truda v prom. 2  
no.9:8-10 S '58. (MIRA 11:9)

1.Kirvorozhskiy institut gi giyeny truda.  
(Ore dressing)

The market is all.

127-58-4-15/31

AUTHORS: Nedin, V.V., Doctor of Technical Sciences, Neykov, O.D., Mining Engineer, Sheleketin, A.V., Candidate of Technical Sciences

TITLE: The Elimination of Dust from the Jaw Crusher (Obespylivaniye shchekovoy drobilki)

PERIODICAL: Gornyy Zhurnal, 1959, Nr 4, pp 55-58 (USSR)

ABSTRACT: The authors describe a suction apparatus for the elimination of dust from the jaw crusher, constructed by the Laboratory for the Prevention of Silicosis of the Institute of Mining Works of the AS USSR and the Krivoy Rog Institute of Work Hygiene. There is 1 figure, 8 references, 5 of which are Soviet and 3 English.

ASSOCIATION: Laboratoriya po bor'be s silikozom Instituta gornogo dela AN SSSR (Laboratory for the Prevention of Silicosis at the Mining Institute of the AS UkrSSR)Krivorozhskiy institut gigieny truda (The Krivoy Rog Institute of Work Hygiene)

Card 1/1      1. Ore crushers - Safety measures    2. Ore crushers - Hazards    3. Silicosis - Preventive measures

SHELEKPIN, A.V., kand.tekhn.nauk

Determination of the volume of air for dust removal by suction  
in installations of a crushing and sorting plant. Bor'ba s sil.  
3:135-140 '59. (MIRA 12:9)  
(EXHAUST SYSTEMS) (ORE DRESSING)

SHELEKETIN, Aleksandr Vital'yevich; KARPUSHINSKIY, Naum Savvich;  
ZHILO, M.Ye., red.; ISL'KONT'YENA, P.G., tekhn.red.

[Improvement of working conditions at iron ore agglomeration  
factories] Ozdorovlenie uslovii truda na aglomeratsionnykh  
fabrikakh zheleznoi rudy. Moskva, Gos.nauchno-tekhn.izd-vo  
lit-ry po chernoi i tsvetnoi metallurgii, 1960. 117 p.

(MIRA 13:12)

(Sintering--Hygienic aspects)

0.0000

77-37  
SCV/130-60-1-20/22

AUTHOR:

Sheleketin, A. V. (Candidate of Technical Sciences)

TITLE:

Conference on Safety Engineering at Sintering Plants.  
Current Events

PERIODICAL:

Metallurg, 1960, Nr 1, p 42 (USSR)

ABSTRACT:

During March 27-28, 1959, a conference was held at Krivoy Rog on the elimination of dust and of other industrial hazards and also on safety engineering problems in the sintering plants. This conference was called through the initiative of the Central Committee of the Union of Workers of the Metallurgical Industry, and 130 representatives of the 48 industrial, planning, and scientific research establishments participated in it. After an introductory word by A. P. Rudnev, member of presidium of the Central Committee of the Union, several reports were read and discussed. V. V. Sinebryukhov of VNIIOchermet has recommended certain safety engineering measures for the sintering plants.

Card 1/3

Conference on Safety Engineering at Sintering Plants. Current Events

77-37

SOV/130-60-1-26/22

S. P. Chernavin of the Scientific Research Institute for Mechanical Concentration of Minerals of Ferrous Metallurgy MEKHANOBRrehermet reported on the experimental installation for pelletizing of concentrates and firing of pellets on a sintering machine. V. S. Orlov of Krivoy Rog Plant (Krivorozhskiy Zavod) spoke of shortcomings in the layout of the sintering plant. V. V. Dobroserdov of Magnitogorsk Metallurgical Combine (MMK) reported on the improved working conditions in MMK sintering plants. N. O. Romenskiy of Southern Mining and Ore Dressing Combine (YUGOK) reported on successful methods for dust elimination and better ventilation introduced at YUGOK sintering plants. N. S. Karpushinskiy of Metallurgical Plant imeni S. Ordzhonikidze in Zaporozh'ye ("Zaporozhnstal'") spoke of the new vacuum units for hopper dust removal, now under construction. During discussion, D. I. Uryupin of Scientific Research Institute for Mechanical Concentration of Minerals of Ferrous Metallurgy MEKHANOBR-

Card 2/3

Conference on Safety Engineering at Sintering Plants. Current Events

77437

SOV/130-50-1-26/22

chermet pointed out that in proper firing of sinters, the dust formation is considerably reduced. The conference resolved to ask the State Planning Committee of the Council of Ministers of the USSR (Gosplan SSSR) to instruct plants supplying machinery for the sintering industry, to include the antidust covers as part of their standard equipment. It was also resolved, that the experience gained in improvement of working conditions and in safety engineering be properly disseminated among the sintering industry.

Card 3/3

SHELEKETIN, A.V., kand.tekhn.nauk; SHEVCHENKO, A.M.

In sintering plants of the Krivoy Rog Southern Mining and Ore Dressing Combine. Metallurg 6 no. 1:10-12 Ja '61. (MIRA 14:1)

1. Krivorozhskiy institut gigiyeny truda.  
(Krivoy Rog—Sintering)

SHELEKETIN, A.V.; AFANAS'YEV, I.I.

Dust removal from hammer mills. Metallurg 9 no.4:15 Ap '64.  
(MIRA 17:9)  
1. Krivorozhskiy filial Instituta gornogo dela imeni Fedorova.

SHELEKHN, A. I.; AFANAS'YEV, I. I.

Dust removal from four-roll crushers. Metallurg 9 no.12:15-16  
D '64. (MIRA 18:2)

1. NIIMetallurgventilyasiya.

SHEPELKIN, A.V.; MIKHEL'SON, M.L.; AFANAS'YEV, I.I.; MALEVICH, A.A.; NEMENALOV,  
G.S.

Condensation dust collectors for gas purification. Metallurg 10  
(MIRA 18:10)  
no.10:14-15 O '65.

i. NIIMetallurgventilyatsiya i Yuzhnyy gornoobogatitel'nyy kombinat.

SLUTSKIY, L.I.; SHELEKETINA, I.I.

Quantitative determination of collagen in pulmonary tissue. Vop.med.  
khim. 5 no.6:466-468 N-D '59. (MIRA 13:3)

l. Nauchno-issledovatel'skiy institut gigiyeny truda i profzabolevaniy,  
Krivoy Rog.

(COLLAGEN chem.)  
(LUNGS chem.)

POLEKHIN, Sergey Illarionovich; SHELEKHES, A.M., retsenzent; BOSOM, N.D.,  
retsenzent; KHERN, K.D., retsenzent; ANTONOV, A.I., otv.red.;  
KIRILLOV, L.M., red.; MARKOCH, K.G., tekhn.red.

[Theory of wire communications] Teoriia sviazi po provodam.  
Moskva, Gos.izd-vo lit-ry po voprosam sviazi i radio, 1960.  
461 p. (MIRA 13:7)  
(Telephone) (Telegraph)

VINNIK, M.M.; SHELEKHES, T.B.

Development of a rapid method for determining fluorine in boron superphosphates. [Trudy] NIUIF no.164:46-47 '59. (MIRA 15:5)  
(Fluorine--Analysis) (Boron phosphates)

KLUSHIN, D.N.; NADINSKAYA, O.V.; Prinimali uchastiye: BOGATINA, K.G.;  
SHELEKHES, T.N.; KUZNETS, T.P.; SAVINA, Ye.V.

Reaction between stannous and stannic oxide and ferric sulfide.  
Zhur.prikl.khim. 34 no.8:1668-1679 Ag '61. (MIRA 14:8)  
(Tin oxide) (Iron oxide)

L 22899-66 EWT(1)/EWT(m)/EWP(e)/EWP(t) IJP(c) JD/JG/AT/WH  
ACC N<sup>o</sup>: AP6006859 SOURCE CODE: UR/0181/66/008/002/0589/0591

AUTHOR: Shelekhin, Yu. L.; Votinov, M. P. Berkovskiy, B. P.

ORG: Leningrad Polytechnic Institute im. M. I. Kalinin (Leningradskiy politekhnicheskii institut)

TITLE: Concerning exchange interactions of pairs of paramagnetic Cr<sup>+3</sup> ions in a corundum lattice

SOURCE: Fizika tverdogo tela, v. 8, no. 2, 1966, 589-591

TOPIC TAGS: corundum, ruby, chromium, paramagnetic ion, crystal lattice, electron paramagnetic resonance, epr spectrum, nuclear spin, multiplet splitting

ABSTRACT: The authors indicate that when the concentration of Cr<sup>+3</sup> ions in ruby is high there is a finite probability that these ions will be located close to one another, thus giving rise to an isotropic spin-spin interaction, which in turn leads to splitting into spin multiplets. Since the levels corresponding to states with spin 1, 2, and 3 are paramagnetic, they can be observed by the EPR method, since the intensity of the EPR spectrum for the state S = 3 should exhibit a larger temperature dependence than for the states S = 1 and 2. This circumstance can be used to separate the lines belonging to the multiplet S = 3. Earlier ex-

Card 1/2

L 22899-66

ACC NR: AP6006859

periments did not disclose the lines corresponding to all the transitions belonging to the spin multiplet  $S = 3$ . The authors have therefore carried out measurements with parallel orientation at 9,188 Mcs, and observed four weak lines at 780, 1681, 2021, and 3473 oe. For perpendicular orientation they observed three similar lines with resonances at 2548, 2944, and 3289 oe. The exchange coupling constants for the spin Hamiltonian are evaluated on the basis of these lines, and the values of the parameters of the spin Hamiltonian are found to be in better agreement with the theoretical parameters of a pair oriented perpendicular to the crystal axis, than for parallel orientation. It is concluded that comparison of the theoretical and experimental parameters of the spin Hamiltonian makes it possible to determine the orientation of the axis of the pair relative to the crystallographic axis and that the observed transitions belong to the multiplet  $S = 3$  of the pair formed by the  $\text{Cr}^{+3}$  ions located at the nearest neighboring crystallographic axes. Orig. art. has: 2 figures and 11 formulas.

SUB CODE: 20/ SUBM DATE: 19Aug65/ OTH REF: 004

Card 2/2 BLG

L 20684-66 ENT(1)/ETC(m)-6 IJP(c) WW/JXT(Z)  
 ACC NR: AT6004861 SOURCE CODE: UR/2563/65/000/255/0162/0165

AUTHOR: Antuf'yev, V. V.; Votinov, M. P.; Shelekhin, Yu. L.

4/

6/

ORG: none \*

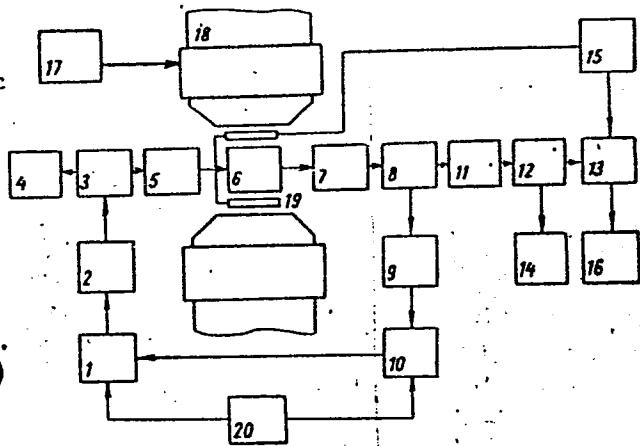
TITLE: Electronic paramagnetic resonant spectrometer for the millimeter band

SOURCE: Leningrad, Politekhnicheskiy institut, Trudy, no. 255, 1965.

Radioelektronika (Radio electronics), 1962-165

TOPIC TAGS: EPR spectrometer,  
spectrometry

ABSTRACT: The construction of a 36-Gc  
( $\lambda = 8 \text{ mm}$ ) EPR spectrometer (supple-  
menting an older 9-Gc type) is reported.  
The new spectrometer intended for  
analyzing the complex spectra of poly-  
crystals has been developed along the  
lines of the standard RE1301 type; it  
has a power detector and uses a  
"small" modulation of the magnetic field.  
Klystron 8-mm oscillator 1 (see figure)  
via attenuator 2, directional coupler 3,



Card 1/2

L 20684-66

ACC NR: AT6004861

and phase shifter 5 excites silver-plated brass resonator 6 (its  $Q = 8000$ ). After the resonator, the energy is detected by crystal detector 8. The klystron frequency is stabilized by an AFC system, which consists of a 10-kc reference-voltage oscillator 20, amplifier 9, and phase detector 10; the AFC system keeps the klystron frequency constant within 0.001%. The use of 10-kc frequency, instead of the conventional 460 kc, permitted reducing the modulation broadening of lines. The new spectrometer has a sensitivity of  $10^{13}$  unpaired electrons in the specimen. Spectral curves of T-900 and BaTiO<sub>3</sub> ceramics taken on both spectrometers clearly show the better resolution of the new instrument. Orig. art. has: 2 figures. [03]

SUB CODE: 20, 09 / SUBM DATE: none / ORIG REF: 002 / OTH REF: 002

ATD PRESS: 4223

Card 2/2

SEREBRYANIKOV, S.N.; SHELEKHINA, A.L.; STEPANOVA, M.I.

Determining the dielectric permeability of paint materials.  
Lakokras. mat. i ikh prim. no.4:54-55 '63. (MIRA 16:10)

SHELEKHOV, I.I.

Time saving aids in blackboard drawing. Geog.v shkole 23  
no.1:75-76 Ja-F '60. (MIRA 13:5)

1. 114-ya zheleznodorozhnaya shkola st. Petrovskiy zavod  
Zabaykal'skoy zheleznoy doz<sup>egi</sup>.  
(Blackboard drawing)

1. SHPELKHOV, M. I.
2. USSR (600)
4. Cotton Finishing
7. Internal potentialities of finishing factories. Tekst.prom. 12 no. 12, 1952
9. Monthly List of Russian Accessions, Library of Congress, March 1953, Unclassified.

SHELEKHOV, M.

Experience deserving attention of all textile workers. Sots.  
trud no.12:121-123 D '36. (MIRA 13:4)

1. Zamestitel' nachal'nika inspeksii po legkoy promyshlennosti  
Gosudarstvennogo Komiteta Soveta Ministrov SSSR po voprosam truda  
i zarabotnoy platy.  
(Moscow Province--Manufacture--Production standards)  
(Wages)

SHELEKHOV, M.

chedule with shorter night shifts. Sots.trud 4 no.7:108-111  
J1 '60. (MIRA 13:8)  
(Kaminskiy--Textile industry) (Hours of labor)

GRIBOEDENKO, N.; SHELEKHOV, N.

The help of the national economic council is needed. Mias.ind.  
SSSR 23 no.4:52 '57. (MLRA 10:7)  
(Ukraine--Cattle--Feeding and feeding stuffs)

KUTSEL', Ye.; SHELEKHOV, N.

Control slaughtering of cattle is indispensable. Mias. ind.  
SSSR 30 no.5:33 '59. (MIRA 13:1)

(Slaughtering and slaughter houses)

SHELEKHOV, S.A., inzh.; GLANTS, A.Ya., inzh.; MODZELEVSKIY, V.V., inzh.;  
ZYATITSKIY, A.Ya., inzh.; PANTYUKHOV, L.L., kand.tekhn.nauk

Series of AK electric motors for driving roll tables. Vest.  
elektroprom. 32 no.10:30-37 0 '61. (MIRA 14:9)  
(Metallurgical plants--Electric equipment)  
(Electric motors)

SHELEKHOV, S.A., inzh.

Standards for three-phase asynchronous roll train motors. Elektrotekhnika 34 no.12:52-53 D '63. (MIRA 17:1)

SHELFKHOV, V.; SHLEYYER, G.

The piecework bonus wage system and labor productivity. Sots.  
trud 8 no.8:95-99 Ag '63. (MIRA 16:8)

1. Nachal'nik Ekhirit-Bulagatskogo proizvodstvennogo kolkhozno-  
sovkhognogo upravleniya (for Shelekhov). 2. Nachal'nik planovogo  
otdela Ekhirit-Bulagatskogo proizvodstvennogo kolkhozno-  
sovkhognogo upravleniya (for Shleyyer)

(Erikhit-Bulagatskiy District--Agricultural wages)  
(Erikhit-Bulagatskiy District--State farms--Labor productivity)

TARNOVSKIY, I.Ya.; GANAGO, O.A.; BAGROV, I.N.; SHELEKHOV, V.A.; Prinimali  
uchastiye: MAKAYEV, S.V.; inzh.; RYABOKON', N.K., inzh.; KOTEL'NIKOV,  
G.V., inzh.; PUCHKOV, S.G., inzh.; STAROSELETSKIY, M.I., inzh.;  
BAKHAREV, V.P., tekhnik.

Developing a technology for the manufacture of lightweight railroad  
car wheels. Kuz.-shtam. proizv. l no.9:1-4 S '59.

(MIRA 12:12)

(Car wheels) (Forging)

SRELEKHOV, Vladimir Aleksandrovich; GANAGO, O.A., kand. tekhn. nauk,  
retsenzent; KON'KOV, A.S., dots., red.; DUGINA, N.A.,  
tekhn. red.

[Forging with presses] Shtampovka na pressakh. Pod red.  
A.S.Kon'kova. Moskva, Mashgiz, 1961. 60 p. (Nauchno-  
populjarnaja biblioteka rabochego kuznetsa, no.11) (MIRA 14:4)  
(Forging) (Power presses)

STRIZHOV, V.P.; SHELEKHOV, V.A.

In the technical and economic council of the Middle Ural Economic Council. Biul.tekh.ekon.inform.Gos.nauch.-issl.inst.nauch.i tekhn. inform. 1' no.10:89-90 0-12. (MIRA 18:4)

BOROVSKIKH, Afanasiy Andreyevich; SHCHUKIN, Aleksandr Grigor'yevich;  
VSHIVKOV, P.P., inzh., retsenzent; SHELEKHOV, V.A., inzh.,  
red.; DUGINA, N.A., tekhn. red.

[Operator of a hydraulic press] Mashinist gidravlicheskogo pres-  
sa. Moskva, Meshgiz, 1962. 111 p. (MIRA 15:10)  
(Hydraulic presses)

TARNOVSKIY, I.Ya.; MAKAYEV, S.V.; GANAGO, O.A.; STAROSELETSKIY, M.I.;  
SHELEKHOV, V.A.

Investigating the possibility of manufacturing railroad rails  
by drop forging in dies (without subsequent rolling). Kuz.-  
shtam.proizv. 4 no.12 sl-3 D '62. (MIRA 16:1)  
(Forging) (Car wheels)

ACC NR:

AM6009946

Monograph

UR/

Trubin, V. N. (Candidate of Technical Sciences); Shelekhov, V. A. (Engineer), eds.

Production of large forgings (Kovka krupnykh pokrovok), pt. 2. Moscow, Izd-vo "Mashinostroyeniye", 1965, 294 p. illus., biblio. Errata slip inserted. 2,500 copies printed.

TOPIC TAGS: metal, carbon steel, alloy steel, metal forging, metal heat treatment, high quality steel, material deformation

PURPOSE AND COVERAGE: This book presents the technology of the production of large forgings. The effect of forging and of deformation conditions upon the quality of forged pieces is described as taken from studies made by heavy machine construction factories of the Soviet Union. Practical recommendations are given for perfecting heat conditions and forging technology in order to increase the quality of forging and decrease labor expenditure. This book is recommended for technical engineers in forging plants, technological bureaus of heavy machine construction factories, and for those in research organizations. It can also be useful to students of higher education.

TABLE OF CONTENTS (abridged):

Preface -- 3

Card 1/2

UDC:621.73

ACC NR:  
AK6009946

- Ch. I. Forging ingots -- 5  
Ch. II. Heating of ingots and of billets while forging -- 28  
Ch. III. Effect of the mechanical conditions of forging upon the quality of the metal -- 57  
Ch. IV. Forging internal defects -- 93  
Ch. V. Effect of deformation on the quality of the metal while forging ingots of carbon steels -- 130  
Ch. VI. Changing the quality of a metal while forging ingots of alloyed steel -- 151  
Ch. VII. Changing the quality of a metal while forging ingots of a different form -- 184  
Ch. VIII. Perfecting the technological processes of forging large pieces -- 201  
Bibliography -- 289

SUB CODE : 13,11,20 / SUBM DATE : 112 AUG 65 / ORIG. REF : 065 / OTH REF : 002

Card 2/2

AM4017082

BOOK EXPLOITATION

S/

Ganago, O. A. (Candidate of Technical Sciences); Shelekhov, V. A. (Engineer);  
Balyasnyy, I. M. (Engineer)

Improvements in forging; generalization of the experience of Ural plants (Sovershenstvovaniye kuznechno-shtampovochnogo proizvodstva; obobshcheniye opyta Ural'skikh zavodov) Moscow, Mashgiz, 1963. 216 p. illus., bibliog. 3000 copies printed. Cover: B. I. Tyufiyakova; Editor of the publishing house: E. L. Kolosova; Technical editor: N. A. Dugina; Proofreader: N. K. Arsen'yeva.

TOPIC TAGS: forging, hot pressing, cold pressing, die forging, drop forging, heat treatment, stainless steel, carbon steel, alloy steel

PURPOSE AND COVERAGE: This book is intended for engineers, technicians, and scientific personnel connected with forging production. It has been compiled from material having the general theme of improvement in forging in plants in the Sverdlovsk and Chelyabinsk oblasts. Improvement in the organization of production and planning in forge shops, improvement in the technology of hot and cold pressing and die forging and in heating methods, and the mechanization and automation of

Card 1/5

AM4017082

forging and pressing operations are analyzed.

TABLE OF CONTENTS:

Foreword -- 3	
Ch. I. Organization of production in forge shops -- 5	
Paths of development of forging production in the Sredne-Ural economic region (O. A. Ganago, V. A. Shelekhov, P. P. Vshivkov, A. M. Sychev, I. S. Kata) - 5	
Group method of producing wrought and press forgings (Z. F. Neyshtadt, P. I. Mekhayeva, S. I. Koltun) -- 12	
Improvement in planning and record-keeping in forge shops: (O. P. Bogomolov, K. F. Dykhher) -- 26	
Literature -- 30	
Ch. II. Heating the metal -- 31	
Relation between the heating power and the productivity of heat-treatment furnaces (B. F. Zobnin, V. P. Markin) -- 31	
Improvement in the processes of heating metal in the forging shop of the Chelya- binskiy Traktornyiy Zavod (M. D. Shuster) -- 55	

Card 2/5

AM4017082

Literature -- 67

Ch. III. Die forging -- 69

Selection of appropriate technological processes for forging steel ingots (I. Ya. Tarnovskiy, V. N. Trubin, S. G. Puchkov) -- 69

Optimum degrees of deformation in the manufacture of forgings of the shaft type from ingots of carbon and alloy steel weighing up to 5 tons (V. N. Trubin, I. Ya. Chernikhova, A. V. Khrustaleva) -- 85

Experience in improving the technology of die forging with hammers and presses (A. M. Kazarinov) -- 96

Engineering method of calculating the technology of rolling forgings of the type of tires and wheels (I. Ya. Tarnovskiy, I. M. Balyasnyky) -- 104

Literature -- 127

Ch. IV. Hot volumetric stamping -- 129

Some trends in improving methods of volumetric stamping (O. A. Ganago, I. Ya. Tarnovskiy, V. I. Stepanenko) -- 129

Method of grooving forging rolls during forge rolling of billets in drop forging and pressing (I. Ya. Tarnovskiy, V. K. Smirnov, S. L. Kotsar, B. Ye. Khaykin, K. I. Litvinov) -- 141

Card 3/5

AL4017082

- Measuring forces when heading pipe on a hot-forging machine of 1250-ton force  
(V. N. Trubin, R. A. Vaysburd, S. D. Shalyagin) -- 172
- Literature -- 177
- Ch. V. Cold pressing -- 179
- Experience in pressing bottoms of stainless steels and bimetal (V. M. Potulov)  
-- 179
- Block-packet presses - progressive technology of equipping (A.A. Kozlov) -- 184
- Literature -- 189
- Ch. VI. Mechanization and automation in forging production -- 190
- Low-level mechanization in a forging shop (M. L. Borinskiy) -- 190
- Mechanization of loading and unloading an overhead conveyor at the section for  
pressing the links of tractor treads (V. V. Bassein, V. M. Geybey, V. F. Keras)  
-- 199
- Mechanization of transport in the forge shop of the Chebarkul'skiy Metallurgiches-  
kiy Zavod (Yu. A. Zhuravlev) -- 203
- Literature -- 214

Card 4/5

AN4017082

SUB CODE: ML

SUBMITTED: 13Feb63

NR REF Sov: 46

OTHER: 3

DATE ACQ: 10Dec63

Card 5/5

"APPROVED FOR RELEASE: 08/23/2000

CIA-RDP86-00513R001549010020-9

APPROVED FOR RELEASE: 08/23/2000

CIA-RDP86-00513R001549010020-9"

SEMLIKHOV, V.A.; STRIZHKOV, V.P.

In the technical and economic committee of the Middle Ural Economic Council. Publ. tekhn.-tekhn. inform. Gos. nauch.-issl. nauch. i tekhn. inform. 17 no.9:86-87 5 '84 (MIRA 18:1)

SHELEKHOV, V.M.; DENIS'YEV, V.I.

[Technical standardization and wages in logging] Tekhnicheskoe  
normirovanie i zarabotnaia plata na lesozagotovkakh, Moskva,  
Goslesbumizdat, 1954.  
(MLRA 8:1 D)

SHELEKHOV, Vasiliy Mikhaylovich; DENIS'YEV, Vsevolod Ivanovich; LOBOVIKOV,  
T.S., redaktor; MIKOLOEVA, I.I., redaktor izdatel'stva; KARASIK,  
N.P., tekhnicheskiy redaktor

[Establishment of technical norms and wages in logging] Tekhnicheskoe  
normirovaniye i zarabotnaia plata na lesozagotovkakh. Izd. 2-ee, perer.  
i dop. Moskva, Goslesbumizdat, 1956. 136 p. (MLRA 10:2)  
(Lumbering) (Wages)

SHCHEDRIN, Boris Yefimovich; SUKHANOVSKIY, Aleksey Il'ich; GOZHEV,  
Alekandr Alekseyevich; SHVEKHOV, V.M., red.; SHAKHOVA, L.I.,  
red.izd-va; BACHURINA, A.M., tekhn.red.

[Manual on technical and economic standards for production  
planning in lumbering enterprises] Spravochnik tekhniko-ekono-  
micheskikh normativov dlia planirovaniia proizvodstva lesozagoto-  
vitel'nykh predpriiatii. Moskva, Goslesbumizdat, 1960. 259 p.  
(MIRA 14:3)

(Lumbering)

GUL'DENBAL'K, V.V.; SHELEKHOV, V.V.

[Constructing and servicing electric power transmission lines of  
110-220 kw.; collection of study plates] Sooruzhenie i ekspluata-  
tsiya linii elektroperedachi 110-220 kv: Seriia uchebnykh plakatov.  
Moskva, Gos. energ. izd-vo, 1954. 14 plates. (MIRA 8:?)  
(Electric lines)