

SHISHIKIN, YE. A.

Bee Culture - Queen Rearing

New Method for forming attendant colonies in queen rearing.
Pchelovodstvo 29, no. 8, 1952.

9. Monthly List of Russian Accessions, Library of Congress, November 1952. UNCLASSIFIED.

1. YE. A. SHISHIKIN

2. USSR (600)

4. Bee Culture

7. New ways of wintering bees. Pchelovodstvo 30 no. 1953.

9. Monthly List of Russian Accessions, Library of Congress, April 1953, Uncl.

Shishikin, Y. A.

USSR/ Agriculture - Apiculture

Card 1/1 Pub. 86 - 23/39.

Authors : Shishikin, Y. A.

Title : ~~Shishikin, Y. A.~~
Azerbaijan apiculture

Periodical : Priroda 44/3, 113 - 114, Mar 1955

Abstract : A description is given of the rather primitive methods (which vary from region to region) of apiculture in Azerbaijan. The possibility of greater development of this industry is discussed in view of the fact that the natural facilities for the gathering of honey are particularly favorable.

Institution :

Submitted :

BOLE, Yu. [Bolf, J.]; KUBACHEK, L. [Kubacek, L.]; MARTINY, S.;
SHISHKA, K. [Siska, K.]; GUBKA, M. [Hubka, M.]

Experimental methods for the study of fluid flow curves. Eksper.
khir. i anest. no.1:3-11 '65. (MIRA 18:11)

TEPLENKO, V.G.; KUDINOVA, K.G.; SHISHKHANOV, T.S.

Technology of preparing titanium and calcium hydrides. Sbor.
trud. TSNIICHM no.43:135-139 '65. (MIRA 18:10)

Rubber Abst.
Vol. 31
Dec. 1953
Synthetic Rubber
and Like Products

4987. Role of peroxides in processes of polymerization of vinyl compounds. M. F. SHOSTAKOVSKII, V. P. SHISHIKOV, and V. A. NETPRYAN. Khim. i. Fiz Khim. Vysokomolekul. Soedinenii, Doklady 7-oi Konf. Vysokomolekul. Soedineniyam 1952, 28-34; Chem. Abs., 1953, 47, 7819. Three general classes of vinyl monomers are distinguished according to the mechanism of their polymerisation. The action of benzoyl peroxide is discussed, and the relation between activity of monomer, copolymer activity, and the polymerisation reaction described. Various experiments on the action of benzoyl peroxide were carried out. Examples relate to methacrylates, vinyl esters, vinyl chloride, and the like, in solution or emulsion.

3S12

BAI KHIA, K. Ing., A. KHIA, A., SHASHA, C. K.

Construction Industry

Experience in economizing materials in construction work. Za ekon. mat. no. 2, Sept. 1952

Monthly List of Russian Accessions, Library of Congress, December 1952. Unclassified.

SHISHIMOROV, M., brigadir kamenshchikov.

[Ways of reducing building costs] Puti snizhenia stoimosti stroitel'stva.
[Moskva] Profizdat, 1953. 47 p. (MLRA 6:8)

1. Moskovskiy zhilishchno-stroitel'nyy trest.
(Efficiency, Industrial) (Building)

7(4),7(5),24(7)

AUTHORS:

Dzhelepov, B. S., Ivanov, R. B.,
Nedovesov, V. G., Shishin, B. P.

SOV/48-23-7-2/31

TITLE:

The α -Spectrum of U^{233} (α -spektr U^{233})

PERIODICAL:

Izvestiya Akademii nauk SSSR. Seriya fizicheskaya, 1959,
Vol 23, Nr 7, pp 788-791 (USSR)

ABSTRACT:

The introduction mentions a paper by F. Asaro who detected three α -groups of U^{233} by means of a magnetic α -spectrometer of the sector type. In the following L. L. Gol'din et al. showed in an exact investigation of the α -spectrum of U^{233} that it is composed of five lines. These lines are indicated, and it is ascertained that the last three of these lines cannot be calculated by the known formulas for the intensity of the α -transitions. In 1958, the authors carried out investigations of the α -spectrum of U^{233} by means of the α -spectrometer described in the first paper of this issue; these investigations permitted a more accurate determination of the intensity of these three weak lines. Electrochemically plated U^{233} on platinum was used as a source. The measured

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The α -Spectrum of U^{233}

SOV/48-23-7-2/31

values are compiled in two diagrams (Figs 1 and 2); tables 1 and 2 compare the values with those obtained by other authors. The results show that if there is an α_4 -line this is very weak. The α_5 -line is formed by a transition to the 316 kev level, and its intensity shows that this is a transition of a single-particle excited level. The quantum numbers of these transitions are dealt with in detail, and finally a scheme of the decay of U^{233} and of the levels Th^{229} is given (Fig 3). The authors thank Yu. T. Puzynovich and V. N. Delayev for their help in the measurements, and L. K. Peker for the discussion of the results of their work. There are 3 figures, 2 tables, and 9 references, 6 of which are Soviet.

ASSOCIATION: Radiyevyy institut im. V. G. Khlopina Akademii nauk SSSR
(Radium Institute imeni V. G. Khlopin of the Academy of Sciences, USSR)

Card 2/2

TATISHCHEV, S.V., prof.; SLAVINSKIY, V.A., inzh.; SHISHIN, I.I., inzh

Improvement of the main sections of a furnace with a ~~g~~abbler plank.
Energetik 10 no.2:5-6 F '62. (MIRA 15:2)
(Furnaces)

SHISHIN, M.M.

Use of a hemostatic biological antiseptic tampon in obstetrics and
gynecology. Akt.vop.perel.krovi no.7:150-152 '59. (MIRA 13:1)

1. Institut akusherstva i ginekologii AMN SSSR.
(HEMOSTATICS) (GYNECOLOGY)

SHISHIN, S.

Promoters of advanced methods. Grazhd.av. 18 no.9:5-6 S '61.
(MIRA 14:9)

1. Nachal'nik Glavnoy rayonnoy dispoacherskoy sluzhby
aeroporta, Rostov-na-Donu.
(Airplanes--Dispatching)

PROKHONCHUKOV, A.A.; SHISHINA, M.A.; PANIKAROVSKIY, V.V.

Changes in phosphorus and calcium metabolism during the development of experimental dental caries in rats of the "August" strain; a radioisotopic investigation. Stomatologiya 42 no.4: 18-25 J1-Ag'63 (MIRA 17:4)

1. Iz kafedry patologicheskoy fiziologii (zav. - chlen-korrespondent AMN SSSR prof. N.A. Fedorov) i nauchno-issledovatel'skoy laboratorii (zav. - starshiy nauchnyy sotrudnik A.A. Prokhonchukov) Moskovskogo meditsinskogo stomatologicheskogo instituta.

L 01804-67 EWT(m)/EWP(j) IJP(c) RM

ACC NR: AP6030604 (4N) SOURCE CODE: UR/0413/66/000/016/0092/0093

INVENTOR: Golubeva, A. V.; Yeremina, Ye. N.; Sivograkova, K. A.;
Bezborodko, G. L.; Kitner, I. P.; Shishina, V. P.

ORG: none

TITLE: Method of obtaining shock-resistant plasticized rubber. Class 39,
No. 185056

SOURCE: Izobreteniya, promyshlennyye obraztsy, tovarnyye znaki, no. 16, 1966,
92-93

TOPIC TAGS: butadiene styrene rubber, copolymerization, rubber, plasticized
rubber

ABSTRACT: An Author Certificate has been issued for a method of obtaining a
shock-resistant plasticized rubber from a styrene copolymer, acrylnitrile, and
butadieneacrylnitrile rubber by means of suspension copolymerization of the proper
monomers and rubber. To increase the light stability and heat resistance of
plasticized rubber, the process is carried out in the presence of butylacrylate
rubber, which is taken in amounts of 2-5%. [Translation] [NT]

1/1 SUB CODE: 11/ SUBM DATE: 13Apr62/ • UDC: 678.746.22-139

Cord

SHISHINA, Yu. [Shyshyna, IU.]; SHILLER, N.

Ampullae of life. Nauka i zhyttia 12 no.10:12-13 0 '62.
(MIRA 16:1)

(BLOOD—TRANSFUSION)

SHILLER, N.; SHISHINA, Yu.

Immunity in reverse. Znan.-sila 37 no.7:31-33 JI '62.

(HRA 15:9)

(TRANSPLANTATION OF ORGANS, TISSUES, ETC.)

SHISHINA, Yu., vrach

So that others would not catch the grippe... Sov. profsoiuzy
19 no.1:30 Ja '63. (MIRA 16:1)

(Influenza)

SHISHINA, Yu., vrach

There is also a fungus like this... Sov.profsoluzny 19 no.5:30
Mr '63. (MIRA 16:2)
(DERMATOMYCOSIS) (FOOT—DISEASES)

SHISHINA, Yu., vrach

Living conditions, health and occupation. Sov. profsoiuzy 19
no.10:32-33 My '63. (MIRA 13:7)
(Air, Ionized—Therapeutic use)

SHISHINA, Yu.

Mathematics of the blood. Znan.-sila 38 no.5:39-41 May '63.
(MIRA 16:11)

BLOKHIN, Nikolay Nikolayevich; PARIN, Vasiliv Vasil'vevich; GAZENKO, Oleg Georgiyevich, kand.med.nauk; VERNOV, Sergey Nikolayevich; STAROSTENKOVA, M.M., otv.red.; SHISHINA, Yu.G., red.; NAZAROVA, A.S., tekhn.red.

[Medicine and cosmic flight] Meditsina i kosmicheskie polety; sbornik. Moskva, Izd-vo "Znanie," 1961. 30 p. (Vsesoiuznoe obshchestvo po rasprostraneniю politicheskikh i nauchnykh znaniy. Ser.8, Biologiya i meditsina, no.9)

(MIRA 14:6)

1. Prezident Akademii meditsinskikh nauk SSSR (for Blokhin).
 2. Deystvitel'nyy chlen Akademii meditsinskikh nauk SSSR (for Parin).
 3. Chlen-korrespondent AN SSSR (for Vernov).
- (SPACE MEDICINE)

SHISHINA, Yu.G.; STAROSTENKOVA, M.M., otv. red.; SAVCHENKO, Ye.V.,
tekhn. red.

[Scientists talk about cancer] Uchenye o rake. Moskva, Izd-
vo "Znanie," 1961. 31 p. (Vsesoiuznoe obshchestvo po raspro-
straneniю politicheskikh i nauchnykh znaniy. Ser.8, Biologiya
i meditsina, no.20) (MIRA 14:12)

(CANCER)

SHILLER, Natan Yefimovich; SHISHINA, Yuliya Grigor'yevna; PETROV, R.V.,
doktor biol. nauk, red.; SOROKO, Ya.I., red.; RAKITIN, I.T.,
tekhn. red.

[Barrier of incompatibility] Bar'ier nesovmestimosti. Pod nauchn.
red. R.V. Petrova. Moskva, Izd-vo "Znanie," 1963. 39 p. (Novoe
v zhizni, nauke, tekhnike. VIII Seriya: Biologiya i meditsina,
no.4) (MIRA 16:2)

(TRANSPLANTATION OF ORGANS, TISSUES, ETC.)

"APPROVED FOR RELEASE: 08/23/2000

CIA-RDP86-00513R001549530015-8

APPROVED FOR RELEASE: 08/23/2000

CIA-RDP86-00513R001549530015-8"

Semiconducting phases in the system $A_3^{II}B_2^{VI}-A_8^{II}B^{VI}$ (? - Sic.).
L. V. Kradinova, I. K. Polushina.

Anomalous scattering of x-rays in Ga_2Se_3 and its solid solutions.
A. A. Vaynolin and M. M. Markus.
(Presented by A. A. Vaynolin--25 minutes).

Papers not presented.]

Diffusion of impurities in gallium arsenide. B. I. Boltaks, V. I. Sokolov,
F. S. Shishyanu.

Influence of the impurities silver and gold on the electrical properties
of gallium arsenide. B. I. Boltaks, V. I. Sokolov, F. S. Shishyanu.

Report presented at the 3rd National Conference on Semiconductor Compounds,
Kishinev, 16-21 Sept 1963

BOLTAKS, B.I.; SHISHIYANU, F.S.

Diffusion and solubility of silver in gallium arsenide. Fiz. tver.
tela 5 no.8:2310-2316 Ag '63. (MIRA 16:9)

1. Institut poluprovodnikov AN SSSR, Leningrad.
(Silver) (Gallium arsenide) (Diffusion)

ACQUISITION NO.: AP4011785

S/0181/64/006/001/0328/0329

AUTHORS: Sokolov, V. I.; Shishiyanu, F. S.

TITLE: Diffusion and solubility of gold in gallium arsenide

SOURCE: Fizika tverdogo tela, v. 6, no. 1, 1964, 328-329

TOPIC TAGS: diffusion, solubility, gold, gallium arsenide, n-type gallium arsenide, mobility, concentration distribution, diffusion coefficient, impurity, hole

ABSTRACT: The authors used Au^{198} to study the diffusion of Au in n-type GaAs (with electron concentration of $5 \cdot 10^{17} \text{ cm}^{-3}$ and a mobility of about $3200 \text{ cm}^2/\text{v sec}$). The method of preparing the samples and of effecting the diffusion heating has been described previously by B. I. Boltaks and F. S. Shishiyanu (FTT, 5, 2310, 1963). The concentration distribution is illustrated in Fig. 1 on the Enclosure. In the temperature interval from 650 to 1055°C, the solubility of Au in GaAs increased from 10^{14} to $3 \cdot 10^{17} \text{ cm}^{-3}$. The temperature dependence for the solubility may be defined by the equation $c_s = A \exp\left(\frac{-6}{kT}\right)$, where $A = (6 \pm 4) \cdot 10^{22} \text{ cm}^{-3}$ and

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ACCESSION NR: APL011785

$\Delta Q = 1.7 \pm 0.1$ ev. If the coefficient of diffusion is measured in the first part of the curve (Fig. 1), it is found to be $2.7 \cdot 10^{-11} \text{ cm}^2/\text{sec}$, but from the second part of the curve the value obtained is $1.6 \cdot 10^{-8} \text{ cm}^2/\text{sec}$. The first value probably characterizes the filling of impurity holes near the surface layer. The second involves rapid diffusion between lattice points, and this is the part of the curve that should be used, therefore, for determining the coefficient of diffusion. "We take this opportunity to express our fervent gratitude to B. I. Boltaks for his constant guidance and valuable suggestions during the performance of this work." Orig. art. has: 2 figures.

ASSOCIATION: Institut poluprovodnikov AN SSSR, Leningrad (Institute of Semiconductors, AN SSSR)

SUBMITTED: 02Sep63

DATE ACQ: 14Feb64

ENCL: 01

SUB CODE: PH

NO REF SOV: 001

OTHER: 001

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S/0181/64/006/005/1511/1519

Shishiyani, P. S.

ACCESSION NR: APh034936

AUTHORS: Boltaks, B. I.; Dzhaferov, T. D.; Sokolov, V. I.;

TITLE: Diffusion and electrical transfer of zinc in gallium arsenide

SOURCE: Fizika tverdogo tela, v. 6, no. 5, 1964, 1511-1519

TOPIC TAGS: solid diffusion, semiconductor, semiconductor conductivity, metallographic examination, zinc diffusion, gallium arsenide

ABSTRACT: The test material consisted of single crystal samples of n-type GaAs with resistivity ranging from $8 \cdot 10^{-3}$ to $2 \cdot 10^{-2}$ ohm-cm and of p-type GaAs with resistivity of $5 \cdot 10^{-2}$ ohm-cm. Measurements were made by radioactive and electrical methods. It was found that the Zn distribution in both types of samples as well as the distribution of current carriers introduced by the diffusion, depends on the boundary concentration. When this value is low, the concentration curve is described by erfc function. At boundary concentrations greater than $4 \cdot 10^{19} \text{ cm}^{-3}$, the concentration profile is step-like. It was found that at high Zn

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concentrations the concentration of current carriers is but $1/5$ to $1/8$ the Zn concentration. The diffusion coefficient of Zn depends on the boundary concentration. Metallographic study has shown that when the concentration curve for n-type GaAs is step-like, polished sections show two transitions: $p^+ \rightarrow p$ and $p \rightarrow n$. In p-type GaAs, there is always but the one transition: $p^+ \rightarrow p$. The authors have found that in the temperature interval 830-1130C Zn is displaced in GaAs in the form of positive ions, the effective charge decreasing with rise in temperature. This decrease follows from the entrainment of ions by electrons. The diffusion mechanism is thought to involve three diffusion currents, due to negatively charged ions in vacancies, positively charged ions in interstices and neutral Zn ions. Orig. art. has: 7 figures.

ASSOCIATION: Institut poluprovodnikov AN SSSR, Leningrad (Institute of Semiconductors, AN SSSR)

SUBMITTED: 10Dec63

SUB CODE: EC

DATE ACQ: 20May64

NO REF SOV: 004

ENCL: 00

OTHER: 007

Card 2/2

SECRET

JAN 6 1970

ACCESSION NR: AF5010706

UR/0181/65/007/004/1021/1027

AUTHOR: Boltaks, B. I.; Shishiyanu, F. S.

p. 10. conversion of gelatin greenide

Plastika tverdogo tela, v. 7, no. 4, 1965, 1021-1027

TECHNICAL TERMS: gallium arsenide, thermal conversion, carrier density, Hall effect.

Abstract: The purpose of the investigation was to study the kinetics of thermal compensation, especially the kinetics of diffusion propagation of thermoacceptors upon annealing of gallium arsenide, to acquire additional data on the nature of compensation processes, and to ascertain the possibility of extracting copper from gallium arsenide. The effect of annealing on the concentration and compensation level of acceptor impurities in n-type single crystals with initial concentration $\sim 10^{16}$ cm⁻³ and mobility ~ 3700 cm²/V-sec. The annealing temperatures range from 700 to 1000°C, the annealing duration was 7 hours. The compensation rate was 300-400 deg/sec. The kinetics of compensation was studied by observing the displacement of the p-region under the annealing upon annealing of n-type samples. The effect of annealing

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ACCESSION NR: AP5010706

on the carrier concentration and mobility is shown in Fig. 1 of the Enclosure. The results established that thermal conversion is the consequence of diffusion of thermoelectrons from clustering points (such as the surface or structural defects) into the volume of the crystal. The data obtained confirm the existing opinion that the cause of thermal conversion of gallium arsenide is the copper impurity. The carrier concentration in gallium arsenide with the aid of the method of the current-voltage characteristics of the carrier concentration was investigated. The carrier concentration decreased by several orders of magnitude after annealing at various temperatures. The results showed that the presence of a zinc layer on the surface hindered the thermal conversion of gallium arsenide. Similar results were obtained with cadmium. Orig. art. has: 6 figures.

ASSOCIATION: Institut poluprovodnikov AN SSSR, Leningrad (Institute of Semiconductors AN SSSR)

SUBMITTED: 01Sep64

ENCL: 01

SUB CODE: 03

NR REF SOV: 000

OTHER: 008

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L 52515-65

ACCESSION NR: AP5010706

ENCLOSURE: 01

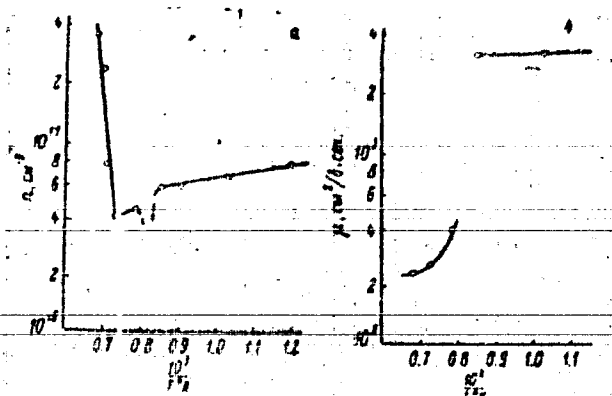


Fig. 1. Effect of annealing temperature on the concentration (a) and mobility (b) of the carriers.

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L 29961-66 ENT(m)/ENP(t)/ETI IJP(c) JD

ACC NR: AF6012520

SOURCE CODE: UR/0181/66/008/004/1312/1314

AUTHOR: Shishiyanu, F. S.; Boltaks, B. I.

ORG: Institute of Semiconductors, AN SSSR, Leningrad (Institut poluprovodnikov AN SSSR)

TITLE: Energy levels of Ag and Au in GaAs ^{v1}

SOURCE: Fizika tverdogo tela, v. 8, no. 4, 1966, 1312-1314

TOPIC TAGS: gallium arsenide, gold, silver, impurity level, forbidden band, temperature dependence, electric conductivity, Hall constant, *ENERGY BAND STRUCTURE*

ABSTRACT: This is a continuation of earlier work by the authors (FTT v. 7, 1021, 1965 and earlier) dealing with the diffusion and capture of Ag and Au in GaAs. The present study is devoted to the energy levels which are produced in the forbidden band of GaAs when doped with Ag or with Au. A series of experiments was made on the temperature dependence of the electric conductivity and the Hall constant, making it possible to determine the impurity levels of Ag and Au in GaAs. The measurements were made at the temperature range 77-770K. The doping reversed the conductivity of the single-crystal n-GaAs samples to p-type. Because of the low solubility of the alloying material in the host, it was necessary to investigate the electric properties of GaAs against the background of thermal conversion. In

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ACC NR: AF6012520

the case of Ag, an acceptor level was observed at 0.11 ± 0.01 ev above the top of the valence band, as compared with 0.15 ± 0.01 ev in a control sample subjected to thermal conversion by annealing. In the case of Au, the 0.15 level was observed in the control sample, as well as two acceptor levels in the doped samples, corresponding to 0.090 ± 0.005 and ~ 0.02 ev above the top of the valence band. It was also noted that when samples doped with Au and samples subjected to thermal conversion or doped with Cu are simultaneously annealed, the latter samples lose the 0.15 ev level and acquire 0.09 and ~ 0.02 ev levels. The shallow acceptor level (0.02 ev) is unstable and vanishes on subsequent annealing. To observe deeper Au and Ag levels it would be necessary to use purer GaAs samples. Orig. art. has: 2 figures and 2 formulas.

SUB CODE: 20/ SUBM DATE: 29Nov65/ ORIG REF: 003/ OTH REF: 001

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Reel # 511

Shishiyano, F.S.

END