

FILIP. Zdenek

Economic arbitration and the leather industry. Kozarstvi 13
no.5:166 My '63.

FILIP, Zdenek

Chromatographic determination of oleoresins. Chem prum 13
no.5:Supplement:Makromolekularni latky, 13 10.5:278 '63.

FILIP, Z., dr.

Standards of industrial safety. Strojirenski 13 no.6:471-472
Je '63.

FILIP, Z., dr.

New Czechoslovak Standards. Strojirenstvi 13 no.10:794 0
'63.

FILIP, Z., dr.

Industrial safety in vertical conveying. Strojirenstvi 13
no. 12: 964 D '63.

FILIP, Zdenek, inz.

Protection of the quality of food products. Prum potravín
14 no.2:73-75 F '63.

FILIP, Zdenek

Industrial safety and the use of unloading cranes. Listy
cukrovar 79 no.5:120-121 My '63.

FILIP, Zdenek

Safety in handling materials. Listy cukrovar 79 no.9:236-
237 S'63.

FILIP, Zdenek

New Czechoslovak standards. Listy cukrovar 79 no.10:
267-268 0 '63

FILIP, Zdenek

Technical standards on switches. Listy cukrovar 79 no.11:
298-299 N'63.

FILIP, Zdenek

"Standardization of material composition" by Vladimir Libal.
Reviewed by Zdenek Filip. Chem prum 13 no.6:320 Je '63.

1. Ceskoslovenska akademie ved.

FILIP, Z., dr.; CHARUZA, J., inz.

New Czechoslovak ~~standards~~. Strojirenstvi 13 no.8:633-634 Ag '63.

FILIP, Zdenek, dr.

Economic arbitration and food production. Prum potravin
14 no.11:591-592 N°63.

FILIP, Zdenek, dr.

Protection against dangerous effects of static electricity.
Drevo 18 no. 7: 3 of cover J1 '63.

FILIP, Zdenek

Connection of electric apparatus and appliances. Listy
cukrovar 79 no. 6: 145-146 Je '63.

FILIP, Zdenek, dr.

Operation and maintenance of steam boilers. Sklar a keramik 14
no. 6:169 Jb '64.

Минск, Минск

Electric bridge cranes. Маты суковат 80 н.п.п.п. 1964

FILIP, Z.

Control devices for cranes and other equipment. Listy
cukrovar 80 no.5:131-132 My '64.

FILIP, Zdenek

Operation and maintenance of steam boilers. listy cukrovar 80
no. 6:166-167 Ja '64.

FIILP, Z., dr.

The new law on Technical Standardization. Strojiřenski
14 no.10:743 O '64.

FILIP, Z.

Maintenance and operation of steam boilers. Pt.3. Listy
cudrovar 80 no.9:254-255 S '64.

FILE, 2.

Remarks on the Law on Technical Standardization. Listy dokyument
80 no.10:275-276 0 '64.

FILIP, Z.

Mobile conveyers and the industrial safety. Mistry rukovnatel 81
no.2:40-41 F '65.

Cable channels and galleries and industrial safety. Ibid.,
41-42 F '65.

FILIP, Z.

Safety of electric equipment operation under special conditions according to Czechoslovak Standard 34 1070. Listy cukrovar 81 no.4:87-88 Ap '65.

Placement of boilers. Ibid.:88-89

Operation of stable pressure vessels and its safety. Ibid.: 89-90

Industrial safety and conveyers. Ibid.:90-91

FILIP, Zdenek

The new criminal law and industrial production. Chem prum 12 no.4:198-199 Ap '62.

1. Urad pro normalizaci.

FILIP, Zdenek

Importance of industrial safety and health protection.
Chem prum 12 no.5:255-256 My '62.

1. Urad pro normalizaci.

FILIP, Zdenek

Spatial arrangement of crane runways in chemical plants. Chem prum
13 no.3:141-142 Mr '63.

FILIP, Zdenek

New Czechoslovak standards. Chem prum 13 no.3:142-143 Mr '63.

FILIP, Zdenek

The Czechoslovak standard on technical Formalin. Chem prum 13 no.4:
196 Ap '63.

FILIP, Zdenek, dr.

The new Law on Technical Standardization. El tech obzor 53 no.10:
578-579 0 '64.

FILIP, Zdenek, JUDr.

Remarks on the new Law on Technical Standardization. 1964
potravin 15 no.12:641-642 D '64.

FILIP, Zdenek, dr.

Remarks on Czechoslovak Standard 26 3260: Traveling Conveyers.
Sklár a keramik 14 [i.e. 15] no.1:29 5a '65.

L 31076-66

ACC NR: AP6022539

SOURCE CODE: CZ/0002/65/000/003/0442/0446

AUTHOR: Filip, Zdenek

16
B

ORG: none

TITLE: Lumber research and developing countries

SOURCE: Ceskoslovenska akademie ved. Vestnik, no. 3, 1965, 442-446

TOPIC TAGS: forestry, forest product

ABSTRACT: The development of proper forestry methods in under-developed countries requires the study of: climatic conditions that influence cultivation of selected timber species; study of the locally developed forest growths; creation of a suitable supervisory and advisory service in the developing country; study of the local requirements for the protection of woods against insects and weeds; steady afforestation of denuded areas; development of a suitable law to protect timber stands; securing the required financial resources for the realization of the plans. Industries that will be based on the lumber supply when it becomes available must be developed. Industrial and technological bases for the utilization of the wastes of the lumber industry must be developed. Suitable labor laws for the industry must be passed. [JPRS]

SUB CODE: 02 / SUBM DATE: none

Card 1/1

no 11

0547

FILIP, Zdenek, dr.

Some problem of tropicalization. Drive 20 no.2:75-76 F 165.

FILIP, Zdenek

Once more on the problems of climatotechnology. Vestnik CSAV
72 no.5:631-635 '63

FILIP, Zdenek, dr.

Symposium on complex research in underdeveloped countries.
Drevo 19 no.7:266-267 J1 '64.

1. Czechoslovak Academy of Sciences, Prague.

FILIP, Zdenek

Operation and maintenance of steam boilers. Listy cukrovar 80
no. 7:195-196 J1 '64.

I 31951-66 EWP(c)/EWP(k)/EWP(h)/EWP(f)/EWP(t)/EWP(l)/ETI IAP(c) AC
ACC NR: AP6026652 SOURCE CODE: RU/0017/66/000/001/0029/0030

AUTHOR: Stanomir, I. (Engineer); Filipan, I. (Engineer)

ORG: Motor Repair Shops, Brasov (Atelierele de reparat automotoare)

TITLE: Installation for granulating, transporting and siloing cupola slag

SOURCE: Metalurgia, no. 1, 1966, 29-30

TOPIC TAGS: slag, granule formation, metallurgic machinery, working condition, production engineering

ABSTRACT: The authors describe an installation which improved the working conditions of the cupola furnace operators, resulting in a 100-percent increase of the labor productivity in the slag removal operations. The device increases the mechanization of these operations. Orig. art. has: 1 figure. [Based on authors' Eng. abst.]
[JPRS: 36,646]

SUB CODE: 11, 13, 05 / SUBM DATE: none

Card 1/1

UDC: 621.745.563.23.004.4

09/6 23.29

FILIPAN, Tugomir, inz.; BRAVAR, Danica, dipl. farm.; VEBLE, Drago, inz.

Paper chromatography as a method in the quantitative determination of free amino acids in the production of oxytetracycline. Kem ind 12 no.6:440-446 Je '63.

1. Institut za stočarstvo i mljekarstvo, Poljoprivredni fakultet, Zagreb (for Filipan).
2. "Pliva", tvornica farmaceutskih i kemijskih proizvoda, Zagreb (for Bravar and Veble).

I 43895-66 EWT(1) CW

ACC NR: AT6011162

SOURCE CODE: UR/3197/65/000/002/0366/0375

AUTHOR: Filipas, S. F.

22
BT)

ORG: Far Eastern Geological Institute, AS SSSR (Dal'nevostochnyy geologicheskiy institut AN SSSR)

TITLE: Some patterns in the seismic activity in the northwestern Pacific Ocean

SOURCE: AN EstSSR. Institut fiziki i astronomii. Sovremennyye dvizheniya zemnoy kory. Recent crustal movements, no. 2, 1965, 366-375

TOPIC TAGS: seismicity, earthquake prediction, solar tide, lunar tide, earthquake survey/Kurile Islands, Hokkaido, Komandorskiy Islands, Sakhalin, Kamchatka

ABSTRACT: The article attempts to explain the pattern and cyclic character of the 2345 seismic events which have occurred in area bounded by the Kurile Islands, Hokkaido, the Komandorskiy Islands, Sakhalin, and Kamchatka in the northwest Pacific. Data used in the study were obtained between 1911 and 1963. The study revealed that the majority of the quakes took place in fall and winter, a fact which is attributed to changes in atmospheric pressure and in the sea level, and the effect of the moon and sun on tides. These data, together with meteorological

Card 1/2

L 4389E-66

ACC NR: AT6011162

and astronomical information are described as being useful in predicting earthquakes in any seismically active zone. Orig. art. has:
2 figures, 3 formulas, and 2 tables. [SI]

SUB CODE: 08/ SUBM DATE: none/ ORIG REF: 010/ OTH REF: 003

Card 2/2 mjs

ACC NR: AR6035270

SOURCE CODE: UR/0169/46/000/009/G010/G010

AUTHOR: Filipas, S. F.

TITLE: Some regularities of seismic activity in the northwestern part of the mobile belt of the Pacific Ocean

SOURCE: Ref. zh. Geofizika, Abs. 9G59

REF SOURCE: Sb. Vopr. geomorfol. i morfotekton. yuzhn. chasti Dal'n Vost. Vladivostok, 1965, 136-143

TOPIC TAGS: seismicity, earthquake, ground shock, sun, moon

ABSTRACT: An attempt is made to evaluate the influence of a series of outside factors on the seismicity of the region covering the southern Primor'ye area, the Hokkaido, Comandor and Kuril islands, and the Kamchatka Peninsula. The mechanism itself of the earthquakes is not examined. Data on earthquakes in the 1911—1963 period are used. An investigation is made of 2345 shocks differing in magnitude and depth (1047 of these shocks are destructive). The mean yearly number of destructive shocks is used as a criterium of the seismicity of the region.

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UDC: 550,341

ACC NR: AR6035270

Eleven such shocks occurred in the 1911—1950 period, and 23 in the 1951—1963 period. A regular periodicity is observed in the change in seismicity during the period investigated. Each cycle begins with a low seismicity period, followed by a yearly increase in the number of shocks, then by a drop in the shocks, and by a new three year increase of activity. Two cycles (1952 and 1954 and 1957—1959) are an exception, not being preceded by a yearly maximum activity. Distribution of shocks according to the months of the year reaches a maximum in the fall—winter months. This may be correlated to an increased number of cyclones in the region and to a greater amplitude of sea tides in this period of the year. An investigation is made of the part played by cosmic factors (magnitudes of the total tide-forming forces of the moon and the sun) in the development of seismic processes in the region. It is shown that all shocks in the rzygy zone may exceed by 164 percent the number of shocks in the quadrature zone, their predominance varying with the depth of the focus and the intensity of the shocks. O. Kedrov. [Translation of abstract]

[GC]

SUB CODE: 03, 08/

Card 2/2

FILIPAS, V.

38

159

1. "Mediology and its Importance in Pharmacology," Farm A. SCHEJDER, Farm Engr V. RIVYCI and Farm A. SPILNER; pp 193-201.
2. "Investigations in the Homocycliclylactone Class (VI). I. New Compounds in the Homocycliclylactone Class," Dr. CHRISTINA, Farm D. OPREAI, Farm Aurora IOBALT, Farm C. CRISTEA, and Prof. A. NAVICU, Dr. work performed at the Laboratory of Organic Chemistry (Laboratorul de Chimie Organica) of the School of Pharmacy (al Facultatii de Farmacie), Bucharest; English summary; pp 203-212.
3. "Contributions to the Study of the Stability of Chloral Hydrate and Soda Linalol Solutions," Engr Farm N. POREI, Farm Vasilia ARMESCU and Farm St. POISESCU; English summary; pp 213-215.
4. "On the Antituberculous Activity of Certain Hydrated Derivatives of the α -Benzoylaminoacetic Acid and Methylacetic Acid Series (Series II)," Prof. V. SCHEJDER, Prof. N. VANZEMAN, Conf. P. OPREAI, Dr. V. SCHEJDER, Chemist Victoria SAVAI, Chemist Garmila DECEANESCU, Dr. Dr. MARLESCU, Dr. Enr. POISESCU and Dr. A. IOVA; English summary; pp 219-227.
5. "Study of the Antituberculous Action of Certain New Fluorinated Derivatives in the Ethylaminoacetic Series," Conf. P. OPREAI, Dr. N. VANZEMAN, Chemist Victoria SAVAI, Dr. D. POISESCU, Dr. N. VALENTIN, Dr. V. SCHEJDER, Dr. N. VALENTIN, Dr. Engr. POISESCU and Chemist Rita SCHWARZ; English summary; pp 229-233.
6. "Study of Certain Excipients for Various Galenic Substances with a Prolonged Action," Prof. V. SCHEJDER, Farm I. BAI, Farm V. FRIBAC, Dr. I. VITAI and Dr. S. SCHEJDER. Work performed at the Organic Department (Catedra de Chimie) of the School of Pharmacy (Facultatea de Farmacie) of the University of Medicine (Universitatea de Medicina); pp 235-237.
7. "Contribution to the Study of the Copper Content of Bread Made of Various Flours," Farm V. ILIEA and Farm V. DOBROU; English summary; pp 239-242.

FILIPAS, V.

1. "Determinación de la Determinación de Yerosol", Prof. Dr. BUCHERSTI, PARACELSO, Vol. X, No. 5, May '62.
2. "Comparative Study of the Methods of Nitroting Determination as Applied in Toxicology", Prof. Dr. BUCHERSTI, PARACELSO, Revista de Farmacia y Quimica, No. 1, 1964, pp. 1-10.
3. "Study of Sulfamerazine in Indistinctive Oral Solutions (Note I)", Prof. Dr. BUCHERSTI, PARACELSO, Revista de Farmacia y Quimica, No. 1, 1964, pp. 1-10.
4. "The Identification, Determination and Synthesis of AMPHETAMINE, AMPHETAMINE and AMPHETAMINE (Note I)", Prof. Dr. BUCHERSTI, PARACELSO, Revista de Farmacia y Quimica, No. 1, 1964, pp. 1-10.
5. "Determination in Non-Aqueous Medium of the AMPHETAMINE and AMPHETAMINE in Various Salts", Prof. Dr. BUCHERSTI, PARACELSO, Revista de Farmacia y Quimica, No. 1, 1964, pp. 1-10.
6. "Contribution to the Use of Greens in the Drug Dispensing Pharmacy in the Clinic of Quil", Prof. Dr. BUCHERSTI, PARACELSO, Revista de Farmacia y Quimica, No. 1, 1964, pp. 1-10.

33

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MUNTEANU, Dan, FILIPASCU, Alexandru

Ornithologic observations at Cosna. Aquila 69/70.277-
278 '62-'63 [publ. '64].

FILIPASCU, Alexandru (Cluj, Rumania)

Waxwings in Cluj and its vicinity. Aquila 69/70:159-165 1962-1963
[publ. '64].

Sis - - - - - bird in the Maramaros and Radna Mountains.
Ibid.:205-207

Waxwings in the Radna Mountains. Ibid.:209

Data on the avifauna of Cluj. Ibid.:206

FILIPAVICHUS, V. V.

"Investigation of a Hydraulic All System Regulator." Cand Tech Sci,
Lithuanian Agricultural Academy, Min Higher Education USSR, Kaunas, 1955.
(KL, No 14, Apr 55)

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

FILIPCHENKOVA, E., C.Sc., zaslouzila lekarska DSISR

Organization of the "Center for the Control of Thromboembolic Diseases" in Leningrad. Cesk.zdravot. 8 no.10:561-566 0'60.

1. Hlavní internistka leningradskeho mestskeho zdravotnickeho odboru.

(THROMBOEMBOLISM prev & control)

FILIPCHENKO, A. S.

Galvanomagnetic properties of indium antimonide doped with elements from the first and second groups, in the temperature interval 4.2 to 500°K. K. I. Vinogradova, D. N. Nasledov, Yu. G. Popov, Yu. S. Smetannikova.

Electrical properties of doped crystals of indium antimonide in a wide range of temperatures and impurity concentration. V. V. Galavanov, D. N. Nasledov, A. S. Filipchenko.
(Presented by V. V. Galavanov--15 minutes).

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

ACCESSION NR: AP4041355

S/0048/64/028/006/0963/0968

AUTHOR: Galavanov, V.V.; Filipchenko, A.S.; Nasledov, D.N. (Doctor of physico-mathematical sciences)

TITLE: Electric properties of doped n-type InSb crystals in a wide range of temperature and impurity concentration [Report, Third Conference on Semiconductor Compounds held in Kishinev 16 to 21 Sep 1963]

SOURCE: AN SSSR. Izvestiya. Seriya fizicheskaya, v.28, no.6, 1964, 963-966

TOPIC TAGS: semiconductor, electric conductivity, Hall effect, Temperature dependence, indium antimonide

ABSTRACT: The electric conductivities and Hall constants of n-type InSb crystals doped with Se were measured in vacuo or in argon at temperatures from 78 to 770°K in an effort to elucidate the mechanism of conduction electron scattering. The crystals were pulled from the melt by the Czochralski method. Crystals having current carrier concentrations at 78°K from 4×10^{15} to $7 \times 10^{18} \text{ cm}^{-3}$ were obtained. Clamped tungsten electrodes were employed, and the Hall constants were measured in a 4000 Oe field. The conductivities and Hall constants of all the specimens were nearly independent of temperature below about 200°K. At higher temperatures the conducti-

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ACCESSION NR: AP4041355

vities of the crystals with low impurity concentration increased and their Hall constants decreased exponentially with increasing temperature. For the specimens with impurity concentration greater than 10^{18} cm^{-3} , the conductivity decreased and the Hall constant increased with increasing temperature in the high temperature region. The low temperature Hall mobility decreased with increasing impurity concentration from $2 \times 10^5 \text{ cm}^2/\text{V sec}$ for the material with a carrier concentration of $4 \times 10^{15} \text{ cm}^{-3}$ to $8 \times 10^3 \text{ cm}^2/\text{V sec}$ for that with a carrier concentration of $7 \times 10^{18} \text{ cm}^{-3}$. All the Hall mobilities decreased with increasing temperature in the high temperature region. The mobility of the conduction electrons is calculated with scattering by impurity ions and optical lattice vibrations taken into account, and good agreement with the measured values is found. Arguments are presented which indicate that the scattering parameter (ratio of Hall to drift mobility) should be near unity over the entire temperature range investigated, but the authors do not find these entirely convincing and suggest that scattering from acoustic phonons may also contribute to the decrease of the mobility at high temperatures. The increase with increasing temperature of the Hall constant of the highly doped crystals is discussed, but no convincing explanation is found. The authors conclude that these questions require further investigation. Orig:art.has: 7 formulas, 4 figures and 1 table.

Card

2/3

ACCESSION NR: AP4041355

ASSOCIATION: Fiziko-tekhnicheskij institut im.A.F.Ioffe Akademii nauk SSSR (Physico-technical Institute, Academy of Sciences, SSSR)

SUBMITTED: 00

ENCL: 00

SUB CODE: SS,IC

NR REF SOV: 005

OTHER: 006

373

L 10771-65 EWP(m)/EWP(b) IJP(c)/AFWL/ESD(gs)/SSD/ESD(t)/AS(ep)-2/RAEM(a)/

ACCESSION NR: AP4044939

S/0181/64/006/009/2683/2688

AUTHORS: Galavanov, V. V.; Nasledov, D. N.; Filipchenko, A. S.

TITLE: Investigation of the mechanism of electron scattering in pure and doped InSb crystals

SOURCE: Fizika tverdogo tela, v. 6, no. 9, 1964, 2683-2688

TOPIC TAGS: indium antimonide, electron scattering, Hall coefficient, electrical conductivity, single crystal, conduction band, carrier mobility

ABSTRACT: Measurements of the electrical conductivity σ and the Hall coefficient R of n-type InSb single crystals containing $4 \times 10^{15} - 7 \times 10^{18} \text{ cm}^{-3}$ impurities were made in the temperature range 77--773°K. The properties of the samples, the method, and the results are given in an earlier paper of the authors (Izv. AN SSSR, ser. fiz., v. 28, 353, 1964). The results were in agreement with Kolodziejczak's

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L 10771-65

ACCESSION NR: AP4044939

theory (Bull. Acad. Polon. Sci., ser. math., astr., phys. v. 9, 293, 1961; Acta Physica Polonica v. 20, 379, 1961) which allows for the nonparabolicity of the conduction band. The mobility was calculated for electron scattering by impurity ions, optical and acoustical modes of the lattice vibrations, and holes. The mobility calculated ignoring scattering on the acoustical modes agreed with the experimental data. For the acoustical mode scattering to be important the deformation potential had to be between 10 and 30 V. The insufficient accuracy of the mobility calculations and some anomalies of the Hall coefficient at high temperatures in samples with $n > 10^{18} \text{ cm}^{-3}$ made it impossible to draw final conclusions about the acoustical-mode scattering. "The authors thank Polish scientists Prof. L. Sosnowski, Docent I. Kolodziejczak, and Dr. R. Kowalczyk for supplying tables of integrals." Orig. art. has: 3 figures, 1 table, and 6 formulas.

ASSOCIATION: Fiziko-tekhnicheskiiy institut im. A. F. Ioffe AN SSSR,

Card 2/3

L 10771-65

ACCESSION NR: AP4044939

Leningrad (Physicotechnical Institute, AN SSSR)

SUBMITTED: 31Mar64

ENCL: 00

SUB CODE: 89

NR REF SOV: 006

OTHER: 011

Card 3/3

GALAVANOV, V.V.; NASLEDOV, D.N.; FILIPCHENKO, A.S.

Mechanism of electron scattering in pure and alloyed InSb crystals.
Fiz. tver. tela 6 no.9:2683-2688 S '64.

(MIRA 17:11)

1. Fiziko-tekhnicheskij institut imeni Ioffe AN SSSR, Leningrad.

L 11838-65 EWT(m)/EWP(t)/EWP(b) IJP(c)/ASD(a)-5/SSD/AFNL/AS(mp)-2/
RAFM(a)/ESD(gs)/ESD(t) JI S/0181/64/006/011/3471/3473
ACCESSION NR: AP4048433

AUTHORS: Galavanov, V. V.; Nasledov, D. N.; Filipchenko, A. S.

TITLE: Mobility of electrons in InSb under a mixed scattering mechanism

SOURCE: Fizika tverdogo tela. v. 6, no. 11, 1964, 3471-3473

TOPIC TAGS: indium antimonida, electron mobility, Hall mobility, electron scattering

ABSTRACT: Supplementing earlier work (Izv. AN SSSR, ser. fiz. v. 40, 353, 1964 and FTT v. 6, 2683 1964) on the mobility of electrons in n-InSb crystals, the authors show that in the case when the electrons are scattered in the crystal by a mixed mechanism (scattering by the impurity ions and by the optical lattice vibrations) agrees within 10% with the simple formula

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L 14838-65

ACCESSION NR: AP4048433

$$\frac{1}{u_{i+o}} = \frac{1}{u_i} + \frac{1}{u_o} \quad (1)$$

(u -- mobility, i -- ion, o -- optical), which in turn agrees well both qualitatively and quantitatively with experimental results on the Hall mobility. Orig. art. has: 10 formulas and 1 table.

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

SUBMITTED: 04Jun64

ENCL: 00

SUB CODE: SS

NR REF SOV: 004

OTHER: 002

Card 2/2

L 94735-65 EWT(m)/T/EWP(t)/EWP(b)/EWA(c) IJP(c) JD
ACCESSION NR: AP5014612

UR/0181/65/007/006/1904/1906

AUTHOR: Galavalov, V. V.; Nasledov, D. K.; Filipchenko, A. S.

25
22
B

TITLE: Temperature dependence of the effective mass of electrons in indium anti-
monide

27
SOURCE: Fizika tverdogo tela, v. 7, no. 6, 1965, 1904-1906

TOPIC TAGS: indium antimonide, effective mass, electron mobility, temperature de-
pendence

ABSTRACT: Continuing earlier work on the temperature dependence of the electron
mobility in alloyed crystals of InSb (Izv. AN SSSR, ser. fiz. v. 28, 953, 1964;
FTT v. 6, 2683, 1964), the authors have calculated the temperature dependence of
the effective mass of the electrons in crystals with different impurity concentra-
tions with strict allowance for the non-parabolicity of the conduction band; the
calculations are based on calculations of J. Kolodziejczak (Acta Phys. Polonica v. 21,
1962). The effective mass was calculated for three samples with intrinsic
conductivity and with electron density 2.5×10^{18} and 4×10^{18} cm⁻³. The results
are compared with experiments based on the measurement of the Faraday effect. Good

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L 54735-65
ACCESSION NR: AP5014612

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agreement was observed for the sample with the intrinsic conductivity and for the sample with the lower electron density, thus confirming the correctness of the band model proposed by E. O. Kane (J. Phys. Chem. Sol. v. 1, 249, 1957). Reasons are proposed for the disparity between the experimental and theoretical results for the sample with the higher electron concentration. "The authors thank Yu. I. Ukhancov and Yu. V. Mal'tsev for measuring the effective mass." Orig. art. has: 1 figure and 3 formulas. [02]

ASSOCIATION: Fiziko-tehnicheskii institut im. A. F. Ioffe, Leningrad (Physico-technical Institute)

SUBMITTED: 29Jan65

ENCL: 00

SUB CODE: SS, TD

NO REF SOV: 003

OTHER: 002

ATD PRESS: 4030

Card 2/2

L 21398-66 EWT(m)/EWP(t) IJP(c) JD

ACC NR: AP6003798

SOURCE CODE: UR/0181/66/003/001/0244/0247

AUTHORS: Galavanov, V. V.; Nasledov, D. N.; Filipchenko, A. S. ⁴⁵
ⓑ

ORG: Physicotechnical Institute im. A. F. Ioffe AN SSSR, Leningrad
(Fiziko-tekhnicheskiy institut AN SSSR) ²¹ ²¹

TITLE: Hall effect in singly doped n-type indium antimonide
crystals with mixed scattering mechanism

SOURCE: Fizika tverdogo tela, v. 8, no. 1, 1966, 244-247

TOPIC TAGS: Hall effect, indium alloy, antimonide, crystal
impurity, impurity scattering, crystal lattice structure

ABSTRACT: This is a continuation of earlier work by the authors
(FTT v. 6, 2683, 1964 and others) where it was shown that electrons
in indium antimonide are scattered by impurity ions as well as by
the optical vibrations of the lattice and by holes. In view of the
observed anomalous growth of the Hall constant of strongly doped
n-InSb crystals ($n > 10^{18} \text{ cm}^{-3}$) at high temperature ($T > 500^{\circ} \text{ K}$), the

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L 21398-66

ACC NR: AP6003798

authors show that one of the most probable causes of such a behavior of the Hall constant may be the incorrect value of the parameter A, used in the formula for it. They therefore recalculate the parameter for two crystals, with electron density $2.5 \times 10^{18} \text{ cm}^{-3}$ and $6 \times 10^{18} \text{ cm}^{-3}$. They show that in the crystal with the lower density the value of the parameter decreases rapidly with increasing temperature, up to about 400K, whereas in the sample with the higher density the variation is oscillatory. In no case is the parameter equal to unity, as is customarily assumed. The reason for this behavior of A in mixed scattering is attributed to the inapplicability of the Kane band model to crystals with such high electron densities, and to general deviations from the properties of the crystal lattice when the impurity concentration is greatly increased. Further research is necessary to clarify this question. Orig. art. has: 2 figures and 6 formulas.

SUB CODE: 20/ SUBM DATE: 15 Jul65/ ORIG REF: 003/ OTH REF: 005

Card

2/2 *ULR*

L 29958-66

ACC NR: AP6012481

SOURCE CODE: UR/0181/66/008/004/1176/1181

AUTHORS: Kesamanly, F. P.; Mal'tsev, Yu. V.; Nasledov, D. N.;
Ukhanov, Yu. I.; Filipchenko, A. S. 56
B

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

TITLE: Magneto-optical investigations of the conduction band of InSb

SOURCE: Fizika tverdogo tela, v. 8, no. 4, 1966, 1176-1181

TOPIC TAGS: indium compound, antimonide, magneto-optic effect, conduc-
tion band, Faraday effect, light reflection, dielectric constant

ABSTRACT: The authors investigated the optical reflection, transparency,
and location of the plane of polarization (Faraday effect) in the wave-
length interval from 2 to 25 μ at temperatures from 130 to 550K and
electron densities from intrinsic to $1.2 \times 10^{19} \text{ cm}^{-3}$, with an aim at
checking the validity of the theory proposed by E. O. Kane (Phys. Chem.
Sol. v. 1, 249, 1957). The apparatus used for the measurements was
described by the authors earlier (Izv. AN SSSR ser. fiz. v. 28, 989,
1964 and earlier papers). InSb single crystals doped with Se were drawn
from the melt by the Czochralski method. The reflection coefficient

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ACC NR: AP6012481

0
exhibited a slow decrease with increasing wavelength, a sharp minimum in the range between 10 and 17 μ (depending on the electron density), and a steep increase. The value obtained for the lattice dielectric constant is 16.0 ± 0.1 , which is in good agreement with published data. The effective mass of the electrons was found to be 0.071, 0.053, and 0.038 times the free electron mass (m_0) at electron concentrations 12, 6, and $2.6 \times 10^{18} \text{ cm}^{-3}$ when calculated from the plasma reflection and 0.018, 0.021, 0.027, 0.038, and $0.054 m_0$ for electron densities 2.5, 4, 7.5, 260, and $600 \times 10^{16} \text{ cm}^{-3}$ by using the Faraday effect. The experimental dependence of the energy on the wave number agreed with Kane's calculations up to electron densities $1.2 \times 10^{19} \text{ cm}^{-3}$. Some deviations from Kane's theory are observed at densities greater than $5 \times 10^{18} \text{ cm}^{-3}$, and call for a special analysis. Orig. art. has: 5 figures and 6 formulas.

SUB CODE: 20/ SUBM DATE: 13Sep65/ ORIG REF: 003/ OTH REF: 011

Card

2/2 CC

L 02382-67 EWP(1)/ETI IJP(a) JD

ACC NR: AP6012913

SOURCE CODE: GE/0030/66/014/002/K195/K199

AUTHOR: Filipchenko, A. S.; Molodian, I. P.; Nasledov, D. N.; Sidorov, V. G.;
Emelyanenko, O. V.

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B

ORG: Joffe Physico-Technical Institute, Academy of Sciences, SSSR, Leningrad

TITLE: On the second conduction band in indium antimonide

SOURCE: Physica status solidi, v. 14, no. 2, 1966, K195-K199

TOPIC TAGS: indium compound, antimonide, conduction band, Hall effect, Fermi level,
electron transition

ABSTRACT: Data are presented to show the existence of a conduction band in InSb located about 0.5 ev above the bottom of the main conduction band (000). The rise in the Hall coefficient with temperature was measured in 14 indium antimonide samples doped with selenium or tellurium. The hypothesis that this rise is due to electron transitions to a second conduction was tested and the value of the gap determined. Orig. art. has: 1 table, 4 formulas.

SUB CODE: 20/

SUBM DATE: 09Mar66/-

ORIG REF: 004/

OTH REF: 005

Card 1/1

vmb

ACC NR: AP7003901

SOURCE CODE: GE/0030/67/019/001/0435/0439

AUTHOR: Filipchenko, A. S.; Nasledov, D. N.

ORG: A. F. Ioffe Physico-Technical Institute, Academy of Sciences of the USSR,
Leningrad

TITLE: The mixed mechanism of electron scattering in indium antimonide
crystals

SOURCE: Physica status solidi, v. 19, no. 1, 1967, 435-439

TOPIC TAGS: electron scattering, indium ^{compound,} antimonide ^{inorganic} crystal, Hall mobility, ~~weak~~
magnetic field, thermal emf, conduction band, electron mobility, ion, phonon

ABSTRACT: The purpose of the investigation was to compare the experimental data for indium antimonide on the Hall mobility of electrons and on the thermal emf in a weak magnetic field with theoretical data, consideration of the non-parabolicity of the conduction band. Equations are derived for the thermal emf and the electron mobility for the case of a mixed mechanism of electron scattering. The experimental data indicate that the electron scattering in doped indium antimonide crystals is due to the following mixed mechanism: of electron scatter-

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ACC NR: AP7003901

ing which involves impurity ions and both optical and acoustical phonons. The authors thank Dr. F. P. Kesamanly for processing the experimental data on the concentration dependence of the thermal electromotive force. Orig. art. has: 3 figures and 9 formulas. [Authors' abstract] [NT]

SUB CODE: 20/SUBM DATE: 17Oct66/ORIG REF: 002/OTH REF: 008/

Card 2/2

FILIPCHENKO, I.B., inzh.

Analysis of cutting forces in turning malleable cast iron. Vest.nash.
41 no.8:64-67 Ag '61. (MIRA 14:8)

(Turning)

FILIPCHENKO, I.B.

Surface smoothness in turning malleable cast iron. Stan.i instr.
33 no.1:35-36 Ja '62. (MIRA 15:2)
(Turning)

L 667u-85 EWT(1)/EWT(m)/EWT/P/EWP(1)/EWP(b)/EWP(b)-1 Ps-1/Pee-2 I/P(c)/
ACCESSION NR: AR4036006 S/0276/64/000/003/B106/B106

SOURCE: Ref. zh. Tekhnol. mashinostr. Sv. t., Abs. 3B531

76

AUTHOR: Rosenberg, Yu. A.; Filipchanko, I. B.

TITLE: Study of the process of cutting metal with the use of motion picture photography

CITED SOURCE: Izv. Tomskogo politekhn. in-ta, v. 107, 1963, 35-42

TOPIC TAGS: metalworking, metal cutting, lathe machining, plastic deformation, displacement, chip formation, photography, motion picture photography, high speed photography

TRANSLATION: Motion picture study of the process of cutting was made both during the machining of brittle metals (gray iron, malleable iron, and LS-53-1 bronze), and plastic metals (45 and 20 Kh steels, copper, and aluminum alloy) on a lathe. A type SKS-1 high-speed movie camera was used, which allowed photography at a speed of up to 5,300 frames/second. The lighting was made with three spotlights for photography on panchromatic film type DN with a film speed of 5,000-5,300 frames/second, with exposure time of 0.00004-0.000038 seconds. High-speed cutters with angle γ of from

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L 667D-65

ACCESSION NR: AR4036008

plus 30 to minus 11 degrees were used in the experiments. The width of the cut varied from 0.1 to 1 mm. The motion picture photography of the process of cutting aluminum alloy made it possible to determine an outcropping on the cutter, which had a peculiar form, and lowered the γ angle of the cutter, as a result of which, the force of cutting increased. High-speed motion picture photography was used to photograph the process of outcropping growth. The results of the experiment made it possible to determine that the process of chip-formation in machining brittle metals is a process of plastic deformation of displacement.

SUB CODE: MM

ENCL: CO

Card 2/2

FILIPCHENKO, I. M.

Strawberries

Degeneration of the strawberry vine. *Agrobiologia* No. 3, 1952.
Zherebkorskaya nauchno-issledovatel'skaya stantsiya polevodstva, Anan'yevskiy rayon,
Odesskoy oblasti

SO: Monthly List of Russian Accessions, Library of Congress, September 195², Uncl.

SMIRNOV, Ye.L., dotsent, kand.tekhn.nauk; BLINNIKOV, M.Ye.;
FILIPCHENKO, V.G., aspirant

Taking into account gyrocompass errors in navigation. Sudovozhdenie
no.2:87-93 '62. (MIRA 17:4)

1. Kafedra sudovozhdeniya Leningradskogo vysshego inzhenernogo
morskogo uchilishcha im. admirala Makarova.

FILIPCHENKO, V.G., aspirant

Electronic navigation apparatuses. Reviewed by V.G.Filipchenko.
Sudovozhdenie no.2:40 '62. (MIRA 17:4)

SMIRNOV, Ye.L., dotsent, kand.tekhn.nauk; BLINNIKOV, M.Ye., inzh.;
FILIPCHENKO, V.G., aspirant

Influence of a ship's repeated maneuvers on the gyrocompass.
Sudovozhdenie no.3:53-64 '63. (MIRA 17:5)

1. Kafedra sudovozhdeniya Leningradskogo vysshego inzhenernogo
morskogo uchilishche imeni admiral. Makarova.

SMIRNOV, Yevgeniy Leonidovich; YAKUSHEENKOV, Andrey Andreyevich;
BLINNIKOV, Mikhail Yefimovich; FILIPCHENKO, Vladimir
Grigor'yevich; MESHKOV, O.I., red.

[Estimating gyrocompass errors in navigation] Uchet pog-
reshnostei girokompasa v sudovozhdenii. [By] E.L.Smirnov
i dr. Moskva, "Transport," 1964. 66 p. (MIRA 17:7)

OL'KHOVOY, A.I., starshiy nauchnyy sotrudnik; FILIPCHENKO, V.P.

System for automatic accounting of the passage of trains at
junction stations. Avtom., telem. i svyaz' 3 no.8:1-3 Ag '64.
(MIRA 17:10)

1. Ural'skoye otdeleniye Vsesoyuznogo nauchno-issledovatel'skogo
instituta zheleznodorozhnogo transporta Ministerstva putey soob-
shcheniya (for Ol'khovoy). 2. Starshiy inzh. Ural'skogo otdeleniya
Vsesoyuznogo nauchno-issledovatel'skogo instituta zheleznodorozh-
nogo transporta Ministerstva putey soobshcheniya (for Filipchenko).

FILIPCHENKO, V.P., inzh.

Selecting the system for the protection of information against transmission errors. Vest. TSNII MPS 24 no.4:60-63 '65.

(MIRA 1^o:7)

1. Ural'skoye otdeleniya Vsesoyuznogo nauchno-issledovatel'skogo instituta transportnogo stroitel'stva Ministerstva putey sobshcheniya, Sverdlovsk.

OL'KHOVOY, A.I., starsh'y nauchnyy sotrudnik; FILIPCHENKO, V.P.

Automation in obtaining operational information. Zhel. dor.
transp. 47 no.1:90-92 Ja '65. (MIRA 18:3)

1. Ural'skoye otdeleniye Vsesoyuznogo nauchno-issledovatel'skogo
instituta zheleznodorozhnogo transporta.

EDEL'SHTEYN, Il'ya Vladimirovich; FILIPCHENKO, Vladimir Vasil'yevich;
SKRIPNIK, P.S. [Skrypnyk, P.S.], red.; GULENKO, O.I.
[Hulenko, O.I.], tekhn. red.

[Establishing norms and planning the working capital of a
collective farms] Normuvannia i planuvannia oborotnykh ko-
shtiv kolhospu. Kyiv, Derzhsil'hospvydav URSR, 1962. 88 p.
(MIRA 16:12)

(Collective farms--Finance)

BAZHENOVA, K.M., kand.med.nauk; GARVIN, L.I., dotsent; KALASHNIKOV, B.P.,
prof.; KARASIK, V.M., prof.; K'YANDSKIY, A.A., prof.; KRISHOVA, N.A.,
prof.; LOPOTKO, I.A., prof.; MASHLAKOVA, P.V., vrach; MESSEL', M.A.,
kand.med.nauk; PUNIN, B.V., prof.; ROZHDESTVENSKIY, V.I., doktor med.
nauk; ROMANOVSKAYA, V.K., vrach; SOSNYAKOV, N.G., prof.; TUR, A.F.,
prof.; TUSHINSKIY, M.D., prof.; FILIPCHENKO, Ye.M., kand.med.nauk;
KHROMOV, B.M., prof.; TSURINOVA, Ye.G., doktor med.nauk; SHRAYBER, M.G.,
prof.; POLIKARPOV, S.N., dotsent; UDERMAN, Sh.I., dotsent, red.;
SHEVCHENKO, F.Ye., tekhn.red.

[Physician's handbook on first aid and emergency care] Spravochnik
vracha skoroi i neotlozhnoi pomoshchi. Leningrad, Gos.izd-vo med.
lit-ry Medgiz, Leningr.otd-nie, 1960. 230 p. (MIRA 13:8)
(MEDICINE--HANDBOOKS, MANUALS, ETC.)

FILIPCHENKO, Ye. M., kand. med. nauk

Work of the "Center for control of thromboembolic diseases"
in Leningrad. Terap. arkh. 33 no.5:112-115 My '61.
(MIRA 14:12)

1. Iz Leningradskoy stantsii skoroy pomoshchi (glavnyy vrach V. N.
Golyakov)

(EMBOLISM)

ANDREYEV, V.K.; IOMIZE, L.G.; LYUDMIRSKIY, V.I.; PELLIKHNIKOV, L.I.

Calculation of frequency conversion in high-speed ferrodynamic
microwave phase meters with delay lines. Radiotekh. i elektron.
10 no.11:2010-2020 N '65. (MIRA 18:11)

Filipchinski, A.

AUTHOR: Savchuk, A., Chief Engineer, SOV87/58/2/2/16
~~Filipchinski, A., Candidate of Technical Sciences~~
Polish Peoples' Republic

TITLE: The Supersonic Impulse Method of Controlling the
Quality of Concrete (Ul'trazvukovoy impul'snyy metod
kontrolya kachestva betona)
(A description of Polish investigations carried out on
concrete subjected to dynamic loading).

PERIODICAL: Beton i Zhelezobeton, 1958 Nr 2, pp 45-52 (USSR).

ABSTRACT: Investigation of the conductivity of concrete subjected to dynamic loading by high supersonic frequency showed that concrete could be regarded as an elastic viscous material. Under the influence of the supersonic impulse creating small deformations during high frequency of the dynamic impulse, the concrete behaves as an elastic body and the elasticity of supersonic waves does not depend on the magnitude of stresses appearing in the concrete due to the loading if they do not exceed 50-70% of the crushing strength. Figure 1 shows the relationship

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The Supersonic Impulse Method of Controlling the Quality of Concrete.

between the elasticity of the supersonic waves in a concrete test cube 200x200x1,000mm and the magnitude of stresses during compression. The advantage of this method is that it can be applied to test the quality of concrete in the erected concrete construction instead of according to test cubes in laboratories. Tests showed that supersonic impulses travel in concrete with a velocity which changes with the quality of the concrete. The better the concrete the higher the velocity of supersonic waves. A change in amplitude and the form of supersonic impulse after a certain length of passage in concrete could be detected as being caused by the quality of the concrete. It was possible to establish the existing relationship between the velocity of the supersonic waves and the strength of the concrete. Figure 2 illustrates the apparatus which registers the speed of a supersonic wave and Figure 3 the way in which the apparatus works. For the transformation of electrical frequencies and supersonic frequencies back into electrical frequencies, the apparatus illustrated in Figure 4 is used. Table 1 gives the approximate evaluation of the quality of concrete

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The Supersonic Impulse Method of Controlling the Quality of Concrete.

based on the velocity of the longitudinal waves. Characteristic relationship between the strength of concrete, velocity of longitudinal waves and the increase in the strength of the concrete is shown in the graph in Figure 5. Figure 6 is a graph showing the relationship of the coefficient 'P' (indicator of the degree of velocity of the wave) and composition of the concrete, its hardening and conditions of initial setting, also the quality of the aggregate. The Graph in Figure 7 illustrates the relationship of the strength of the concrete subjected to compression and the velocity of the wave. Figure 8 shows a graph of the relationship of the velocity of the wave and the strength of the concrete. Values of the velocity of longitudinal waves passing through non-uniform concrete are given in Table 2. Table 3 gives values for the strength of the concrete in kg/cm^2 found by the supersonic method. Graph in Figure 9 shows the relationship of the strength of the concrete and degree of consolidation of the concrete mix. An impulse which travelled through properly consolidated concrete is illustrated in the photograph in Figure 10 and an impulse which

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travelled through badly consolidated concrete is indicated in Figure 11. Figure 12 is a graph illustrating the quality of concrete in various parts of a bridge pier. There are 12 illustrations and 3 tables.

1. Concrete--Quality control
2. Concrete--Properties

Card 4/4

FILIPCHIK, V. I.

"Treatment of Cutaneous Lineal Myiasis with Camphor Salve and Ethyl Chloride,"
Vest. ven. i derm., No.2, 1952

FILIPONIK, V. I.

Warts

Pointed condyloma of the mamillary areola in the male. Vest. ven. i derm. No.
3 1952.

Monthly List of Russian Accessions, Library of Congress October 1952 UNCLASSIFIED

1. FILIPCHIK, V. I.
2. USSR (600)
4. Lice
7. Camphor-dust ointment therapy of pediculosis pubis. Vest. ven. i derm. no. 1
1953

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

FILIPCHIK, V.I.

Penicillin and echmolin therapy of diffused erythema exudativum. Vest.ven.i
derm. no.4:62 J1-Ag '53. (MIRA 6:9)

(Skin--Diseases) (Penicillin)

FILIPCHIK, V.I., (Minsk)

Phenol-fuchsin in dermatology. Vest. ven. i derm. no.3:52 My-Je
'55. (MLRA 8:10)

(PHENOLS) FUCHSIN) (SKIN--DISEASES)

FILIPCHIK, V.I., gvardii kapitan meditsinskoy sluzhby

Rating the results of compound treatment of sycosis vulgaris. Voen.-
med.shur. no.10:72 0 '56. (MIRA 10:3)
(SKIN--DISEASES)

FILIPCHIK, V.I., gvardii kapitan med. sluzhby; BOTVINNIK, L.M., kapitan med.
~~sluzhby~~

Evaluation of the prophylactic properties of Novikov's solution
in treating minor injuries. Voen.-med. zhur no.5:91 My '57 (MLRA 12:7)
(WOUNDS--TREATMENT) (SOLUTIONS(PHARMACY))

FILIPCHIK, V.I. (Minsk)

Treating epidermophytosis. Vrach.delo no.2:205 P '57. (MLRA 10:6)
(DERMATOMYCOSIS)

FILIPCHIK, V.I., SHEKHTMAN, N.M. (Minsk)

Successful vitamin B₁₂ therapy in Darier's erythema annulare centrifugum
Vest.derm. i ven. 32 no.3:82-83 My-Je '58 (MIRA 11:7)
(ERYTHEMA)
(CYANOCOBALAMINE)

FILIPCHIK, V.I., BOTVINNIK, L.M. (MINSK)

Congenital atrophy of the skin. Vest.derm. i ven. 32 no.4:77-78
Jl-Ag '58 (MIRA 11:10)

(SKIN--DISEASES)

~~FILIPCHIK, V.I.~~ (Minsk), BOTVINNIK, L.M. (Minsk).

Treating chronic ulcers of the leg with applications of wet
grated potato. Vest.derm. i ven. 32 no.5:72-73 S-o '58
(MIRA 11:11)

(LEG--ULCER)

(POTATOES--THERAPEUTIC USE)

FILIPCHIK, V.I.; SEMENYUK, A.Sh.

Use of ultraviolet irradiation in the over-all treatment of
exudative eczema in children. *Pediatrics* 36 no.11:76 N '58
(ECZEMA) (ULTRAVIOLET RAYS--THERAPEUTIC USE) (MIRA 12:8)