TALEV, Risto, inz. (Skoplje, Lenjinova 65)

Determining data for the construction of combined, so-called carbogen curves on the basis of their similarity to circular and transition curves, known as clthoids. Tehnika Jug 17 no.8:Suppl.: Saobracaj 9 no.8:1589-1592 Ag '62.

1. Vodeci projektant Projektantskog biroa "Pelagonija", Skoplje.

TALEV, Risto, ing. (Skopje, Lenjinova 65)

Analytical and graphical methods for the determination of data for making simple and double (S) curves on the basis of similarity of circular and transitional curves in the form of a reversed curve. Tehnika Jug 17 no.4:658-662 Ap '62.

1. Vodeci projektant Preduzeca "Projektant", Skopje.

TALEV, Risto, inž.(Skoplje, Lenjinova 65)

Tabumer X, a pattern for determining data and construction of any circular and transition clothoid curvature. Tehnika Jug 18 no.9:Suppl.:Gradevinarstvo 17 no.9:1648-1652 S '63.

1. Vodeci projektant projektantskog preduzeca "Projektant", Skoplje.

TALEYSNIK, S.L.

Case of total rachischisis. Vopr.neirokhir. 23 no.2:32 Mr-Ap '59. (MIRA 12:4)

1. Kafedra gospital'noy khirurgii Karagandinskogo meditsinskogo instituta i 1-ya gorodskaya klinicheskaya bol'nitsa Karagandy.
(SPINE--ABNORMITIES AND DEFORMITIES)

TALEYSNIK, S.L.

Histamine content of the blood in patients during the acute period of closed cerebrocranial trauma. Zhur. nevr. i psikh. 61 no.9:1342-1345 '61. (MKRA 14:9)

1. Stalinskiy nauchno-issledovatel'skiy institut travmatologii i ortopadii (dir. - kand.med.nauk T.A.Revenko).
(HISTAMINE) (BRAIN--WOUNDS AND INJURIES)

TALEYSNIK, S.L.; TYUPIN, V.M.

Case history of osteogenesis imperfecta tarda. Nov.khir.arkh. no.4:70-72 '62. (MIRA 15:5)

1. Donetskiy nauchno-issledovatel'skiy institut travmatologii i ortopedii.

(OSTEOPSATHYROSIS)

TALEYSNIK, Ye. D.

TALEYSNIK, Ye. D. -- "Effect of the Mentor on the Growth and Winter Resistance of Hybrid Cherry Trees." Sub 29 Dec 52, Inst of Plant Physiology Imeni K. A. Timiryazev. (Dissertation for the Degree of Candidate in Biological Sciences).

SO: Vechernaya Moskva January-December 1952

TALEYSNIK, Ye.D.

Influence of a mentor plant on the growth and winter hardiness of cherry hybrids. Trudy Inst.fiziol.rast. 9:153-202 '55. (MIRA 8:8)

1. Institut fiziologii rasteniy im. K.A.Timiryazeva Akademii nauk SSSR.

(Hybridization, Vegetable) (Cherry)

TALEYSNIK, Ye.D.

Structural characteristics of cover tissues in some early-blossoming Far Eastern plants with reference to their resistance to sunburns. Dokl. AN SSSR 134 no.3:721-723 S '60. (MIRA 13:9)

1. Gorno-tayezhnaya stantsiya im. V.L. Komarova Dal'nevostochnogo filila Sibirskogo otdeleniya Akademii nauk SSSR. Predstavleno akademikom A.L. Kursanovym.
(Maritime Territory--Plants, Effect of heat on)
(Plant cells and tissues)

TALEYSNIK, Ye.

Type diversity in the Sakhalin cherry. Bot.zhur. 46 no.6:869-872 Je '61. (MIRA 14:6)

1. Gornotayezhnaya stantiya imeni V.L.Komarova Dal'nevostochnogo filiala AN SSSR, g. Ussuriysk.
(Cherry)

L 06197-67 ESS-2/EWT(1)/EWP(v)/EWP(t)/ETI/EWP(k) DS/JD/HM

ACC NR: AP6032489 SOURCE CODE: UR/0413/66/000/017/0030/0030

INVENTOR: Alekseyev, F. A.; Balashov, V. A.; Gershonok, M. I.; Grachev, I. M.; Yegorov, B. A.; Kobyl'nitskaya, M. I.; Kozlov, D. A.; Lifshits, A. I.; Mondrus, D. B.; Parshin, N. A.; Rashevskiy, A. L.; Rivkin, A. E.; Tal'gren, A. A.; Khansuvarov, A. A.

ORG: none

TITLE: Device for high frequency soldering of lead-acid storage batteries. Class 21, No. 185368

SOURCE: Izobreteniya, promyshlennyye obraztsy, tovarnyye znaki, no. 17, 1966, 30

TOPIC TAGS: metal soldering, storage battery

ABSTRACT: An Author Certificate has been issued for a device for high-frequency soldering of lead-acid storage batteries. The device contains an h-f generator with an external tank circuit, a multiloop inductor with open ferrite magnetic circuits, a conveyor with a lifting table, a control desk, and an assembling-soldering former equipped with a magnetic screen fastened on a non-magnetic base. Orig. art. has: 1 figure.

Card 1/2 UDC: 621.352.2:621. 791.357:621.3. 029.5

L 06197-67
ACC NR: AP6032489

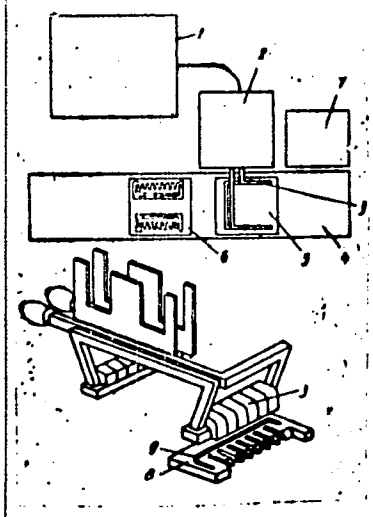

Fig. 1. 1 - H-f generator; 2 - external tank circuit; 3 - inductor; 4 - conveyor; 5 - lifting table; 6 - control desk; 7 - former; 8 - screen; 9 - base.

SUB CODE: 10,13 / SUBM DATE: 24 Mar 65

Card 2/2 afs

TALI, V. S.

"Pharmacognostic Study of Tanacetum Vulgare." Cand Pharm Sci, Tartu State U, Tartu, 1955. (KL, No 10, Mar 55)

SO: Sum. No. 670, 29 Sep 55--Survey of Scientific and Technical Dissertations Defended at USSR Higher Educational Institutions (15)

Tsai, V.

POLAND/USSR

Periodical: SOVJETSKA LEKARNA, Vol. 14, no. 1, Jan. 1959

Title: Tanacetum vulgare L. as a remedy against intestinal worms. p. 12.

Monthly List of East European Accessions (EEAI) LC, Vol. 8, No. 5, May 1959, Unclass.

[illegible], V.[illegible]

[illegible] passage of alkali and aluminum [illegible] into the solid phase during the desilicification of potassium and sodium aluminate solutions. Izv. AN Arm. SSR. Khim. [illegible] 14, no. [illegible] '61. (MIRA 18:6)

1. Yerevanskiy nauchno-issledovatel'skiy institut Khimii.

MANVELYAN, M.G.; KHANAMIRYAN, A.A.; BAKHCHISARAYTSEVA, S.A.; TALIASHVILI, B.A.; MKRTCHYAN, N.T.

Desiliconizing pure potassium aluminate solutions. TSvet. met. 35 no.7:45-51 Jl '62. (MIRA 15:11)
(Potassium aluminate)

MANVELYAN, M.G.; KHANAMIRYAN, A.A.; MKRTCHYAN, N.T.; BAKHCHISARAYTSEVA, S.A.; TALIASHVILI, B.A.

Desiliconization of pure potassium aluminate solutions in presence of chemical additives. TSvet. met. 35 no.11:66-74 N '62. (MIRA 15:11)

(Potassium aluminate) (Silicon)

MANVELYAN, M.G.; KHANAMIRYAN, A.A.; TALIASHVILI, B.A.; NIKOGOSYAN, B.V.
OLOBIKYAN, L.G.; STEPANYAN, M.G.

Desilicification of sodium-potassium aluminate solutions.
Izv.AN Arm.SSR.Khim.nauki 17 no. 3:283-289 '64. (MIRA 17:7)

1. Institut khimii Gosudarstvennogo komiteta tsvetnykh i chernykh metallov pri Gosplane SSSR.

TALIBI, M. A.

6
4E2c
4E4j

The application of photoresistance in the registration of changes of the intensity of x-ray beams.[2] M. A. Talibi. *Trudy Inst. Fiz. i Mat. Akad. Nauk Azerbaidzhan. S.S.R., Ser. Fiz.* 8, 29-42(1956)(in Russian).—The expts. were conducted with mono- and polycrystals of CdS.[2] The radiation was mostly Cu[2] or Mo[2] radiation. It was found that for the polycrystals linear relations can be obtained, which make CdS suitable for application in registration devices, i.e. where the current increase will be a linear function of the intensity of the incident x-ray beam. W. J.

Talibi, M. A.

4

4E4j

Calculation of radial distribution functions for liquid toluene. K. P. Mamedov and M. A. Talibi. *Trudy Inst. Fiz. i Mat., Akad. Nauk Azerbaidzhan. S.S.R., Ser. Fiz.* 9, 75-88 (1956)(in Russian).—Theoretical-math. The radial distribution or probability function for electron d. was calcd. by Fourier analysis, involving a 64-coeff. improvement and modification of the method of Danielson and Lanczos (C.A. 36, 3729[1]). The calcns. for toluene yield peaks at 1.45, 2.4, and 4.4 A. leading to a coördination no. of seven (~7.3).

Franz H. Ruthmann

TALIBI, M.A.

19

The effect of γ- and x-rays on the photoconductivity of polycrystalline cadmium selenide. M. A. Talibi, G. B. Abdullaev, and Z. A. Aliyarova. *Izvest. Akad. Nauk Azerbaidzhan. S.S.R.* 1956, No. 12, 8–14(in Russian).—The exposure of Cd selenide to the γ-rays of Fe and Co radioactive isotopes; x-rays of Mo radiation at 18–50 kv. and 4–16 ma.; and visible light 4050, 5460, 5790 A. shows the linear increase of the current with increase of v^2; the resistance exponential drops with potential. The deviation from law of Ohm is related to the increase of mobility and concn. of free electrons. M. Charmandarian

1-RMP
1-JWM

RMP for MT

TALIBI, M.A

Action of γ- and x-rays on selenium rectifiers. G. B. Abdullaev and M. A. Talibi. *Doklady Akad. Nauk Azerbaidzhan. S.S.R.* 12, 435-8(1956)(in Russian).—Irradiation of Se rectifier material with γ- or x-radiation (max. energy of quanta 1.313 m.e.v.) results in direct transformation of at. energy into elec.; the cells prepd. by deposition of Se on Al are covered by vacuum sputtering of CdS which forms the top electrode of the cell. Irradiation of this with γ-radiation from Co^{60} results in development of e.m.f., with the CdS electrode becoming negatively charged. Curves relating the photocurrent to external resistance in such cells are shown. The system is also very sensitive to x-radiation.

G. M. Kosolapoff

Spec Sci

2

1-emk

Spec Doc

SXL

PBS. Rmk

[illegible], P.A., Cand Fiz-Mat Nauk --(Kiev) " Study of effect of [illegible] on ~~Photoelectron~~ X-ray in certain semiconductors and semiconductor systems." Baku, Publishing House of Acad Sci AzSSR, 1959. [illegible] (Min of Higher Education USSR. Azerb State Univ im S.M.Kirov). [illegible] (KL, 59-[illegible], 22)

69398
SOV/137-59-4-8426

Translation from: Referativnyy zhurnal, Metallurgiya, 1959, Nr 4, p 156 (USSR)

24.2600

AUTHOR: Talibi, M.A.

TITLE: Experimental Check-Up on the Applicability of Formulae for Valve Photo-emf to CdS - Se and CdSe - Se Systems

PERIODICAL: Izv. AS Azerb. SSR Ser. fiz-tekhn. i khim. n., 1958, Nr 4, pp 31 - 41 (Azerb. résumé)

ABSTRACT: The author measured photo-emf and short-circuit photocurrent I_{ph} for CdS - Se and CdSe - Se rectifier systems; the barrier layer was illuminated by γ-radiation, light and X-ray radiation. Investigations were carried out into conventional systems with artificial barrier layer and into back plate systems. Experimental data were used to check-up the applicability of the formula on the correlation between photo-emf, short-circuit photo-current I_{ph} and saturation current I_o (in p-n-transition under valve element conditions): $\varphi = kT/e \ln (I_{ph}/I_o + 1)$; the formula was derived on the basis of the diode theory. Theoretical and experimental kT/e values are compared. Most satisfactory agreement of such data was observed in the narrow range of back voltage of 4-50 mv.

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69398

SOV/137-59-4-8426

Experimental Check-Up on the Applicability of Formulae for Valve Photo-emf to CdS - Se and CdSe - Se Systems

corresponding to the saturation current. It was thus established that the formula for the valve photo-emf can be used within a limited range. It is also supposed that the effective charge of charge carriers in the investigated systems is equal to the free photo-electron charge, at least within the range of application of the valve-photo-emf theory. This statement is also justified in the case of equal back-voltage values for any wavelengths and for any radiation intensity, exciting the valve photo-emf.

A.A.

Card 2/2

BAKIROV, M.Ya.; TALIBI, M.A.; ABDULLAYEV, G.B.

Effect of the electroforming, thermo-and electrochemical processing on physical processes occurring in selenium photoelectric cells [in Azerbaijani with summary in Russian]. Izv. AN Azerb. SSR. Ser.fiz.-tekh. i khim.nauk no.6:43-53 '58. (MIRA 12:2)
(Photoelectric cells) (Selenium) (Electrochemistry)

82143
SOV/81-59-6-18324

Translation from: Referativnyy zhurnal. Khimiya, 1959, Nr 6, p 35 (USSR)

24 7700

AUTHOR: Talibi, M.

TITLE: The Action of Gamma- and X-Rays on the Electrical Properties of Cadmium Sulfide and Selenide

PERIODICAL: Tr. In-ta fiz.i matem. AS AzerbSSR, 1958, Vol 9, pp 10-19 (Azerbaydzhanian; Russian summary)

ABSTRACT: The results are cited of an investigation of the action of γ-radiations of radioactive Co and the X-ray radiation of a tube with Mo-anticathode on the electric conductivity of CdS and CdSe. The volt-ampere, lux-ampere and other characteristics were studied and also the inertia of the electric conductivity of the studied objects under the action of X- and γ-rays. The results of the work prove that the effect of the radiations on the electric conductivity of semiconductors in the case of high-energy quanta as well as visible light is determined mainly not by the character of the ionization process proper, but by the behavior of the charge carriers liberated in the substance as a result of internal ionization.

R. A.

Card 1/1

TALIBI, M.A.; ABDULLAYEV, G.B.

Determining the electromotive force and resistance of selenium rectifier cells subjected to radiation. Dokl. AN Azerb. SSR 14 no.1:3-7 '58. (MIRA 11:2)

1. Institut fiziki i matematiki AN Azerbaydzhanskoy SSR.
(Selenium cells) (Photoelectricity)

TALIBI, M.A.; ABDULLAYEV, G.B.

Calculating the efficiency coefficient and quantum yield of barrier-layer photocells produced upron the incidence of penetrating radiations. Dokl. AN Azerb. SSR 14 no.3:201-205 '58. (MIRA 11:4)

1. Institut fiziki i matematiki AN AzerSSR.
(Photoelectric cells) (Gamma rays) (X rays)

TALIBI, N.A.; ABDULLAYEV, G.B.

Applicability of the theory of the barrier-layer photoelectromotive force to selenium cells. Dokl. AN Azerb. SSR 14 no.6:425-428 '58. (MIRA 11:7)

1. Institut fiziki i matematiki AN AzerSSR.
(Selenium cells)

S/058/62/000/008/089/134
A062/A101

AUTHORS: Talibi, M. A., Abdullayev, G. B.

TITLE: Investigation of the effect of γ-rays, X-rays and neutrons on the electric properties of CdS-Se and CdSe-Se rectifying systems (Theses)

PERIODICAL: Referativnyy zhurnal, Fizika, no. 8, 1962, 31, abstract 8E227 (In collection: "Fotoelektr. i optich. yavleniya v poluprovodnikakh", Kiyev, AN USSR, 1959, 401)

TEXT: Results are given of investigations in a study of the effect of light, γ- and X-rays on certain electric properties of CdS-Se, CdSe-Se semiconductor rectifying systems and of their components. It has been shown that the p-n junctions of the given system are sensitive to X- and γ-rays. The dark conductance and the photoconductivity of CdSe polycrystals show a linear variation with the increase of the voltage applied to the sample, independently of the kind of the operating irradiation. Identical characteristics were obtained (volts vs amperes, lux vs amperes, etc) independently of the kind of the irradiation operating on the CdS, CdSe, CdS-Se and CdSe-Se samples. The possibility was ascertained of applying

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S/058/62/000/008/089/134
A062/A101

Investigation of the effect of...

MOM-3 with a CdS- and CdSe-crystal for recording the γ-rays and the X-rays.

O. Shustova

[Abstracter's note: Complete translation]

Card 2/2

TALIBI, M.A.

24(4) [illegible]

Akademiya nauk Ukrainskoy SSR [illegible]

Fotoelektricheskie i [illegible] poluprovodnikakh; trudy pervogo [illegible] fotoelektricheskim i opticheskim [illegible] Kiyev, 20-26 noyabrya 195[illegible] (Photoelectric and Optical Phenomena in Semiconductors; Transactions of the First Conference on Photoelectric and Optical Phenomena in Semiconductors...) Kiyev, 1951. 403 p. 4,000 copies printed.

Additional Sponsoring Agency: Akademiya nauk SSSR. Prezidium. Komissiya po poluprovodnikam.

Ed. of Publishing House: E. V. Klulna; Tech. Ed.: A. A. Matveychuk; Resp. Ed.: V. Ye. Lashkarev, Akademician, Ukrainian SSR, Academy of Sciences.

PURPOSE: This book is intended for scientists in the field of semiconductor physics, solid state spectroscopy, and semiconductor

Card 1/10

Photoelectric and optical [illegible] SOV/140

devices. The [illegible] students in universities and institutes of higher technical training specializing in the physics and technical application of semiconductors.

COVERAGE: The collection contains reports and information bulletins (the latter are indicated by [illegible]) read at the First All-Union Conference on Optical and Photoelectric Phenomena in Semiconductors. A wide scope of problems in semiconductor physics and technology are considered: photoconductivity, photoelectromotive forces, optical properties, photoelectric cells and photoresistors, the actions of hard and corpuscular radiations, the properties of thin films and complex semiconductor systems, etc. The materials were prepared for publication by E. I. Rashba, O. V. Snitko, K. B. Tolpygo, A. F. Lubchenko, and M. K. Sheynkman. References and discussion follow each article.

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Card 2/10

Photoelectric and Optical Phenomena (Cont.) SOV/3140

Opening Word by V. Ye. Lashkarev, Chairman of the Conference Organizational Committee, AS UkrSSR

PHOTOCONDUCTIVITY AND OPTICAL PROPERTIES OF SEMICONDUCTORS

I. Semiconductors of the CdS Type

Card 3/16

4. Other Semiconductors

THE ACTION OF HARD AND CORPUSCULAR RADIATIONS ON SEMICONDUCTORS

Photoelectric and Optical Phenomena (Cont.) SOV/3140

Talibi, M. A., and G. V. Abdullayev. Investigation of the Effect of γ-Rays, X-Rays and Neutrons on the Electrical Properties of CdS-Se and CdSe-Se Rectifier Systems (Theses) 401

AVAILABLE: Library of Congress

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2-8-60

Card 16/16

ABDULLAYEV, G.B.; BAKIROV, M.Ya.; TALIBI, M.A.

Effect of the area and material used in the upper electrode on the photoelectric properties of selenium photoelectric cells [in Azebaijani with summary in Russian]. Izv. AN Azerb. SSR. Ser. fiz.-tekh. i khim. nauk no.1:7-10 '59. (MIRA 12:6)
(Photoelectric cells)

TALIBI, M.A.; ABDULLAYEV, G.B.

Studying the effect of gamma radiation on the semiconductor systems CdS - Se and CdSe - Se. Izv.AN Azerb.SSR.Ser.fiz.-mat.i tekh.nauk no.4:23-34 '59. (MIRA 13:2)
(Gamma rays) (Semiconductors)

BAKIROV, M.Ya.; ABDULLAYEV, G.B.; NASIROV, Ya.N.; TALIBI, M.A.

Studying the effect of certain factors on the characteristics of selenium photocells. Izv. AN Azerb. SSR. Ser. fiz.-mat. i tekh. nauk no.5:65-74 '59. (MIRA 13:3)
(Selenium cells)

BAKIROV, M.Ya.; ABDULLAYEV, G.B.; NASIROV, Ya.N.; TALIBI, M.A.

Effect of the degree of crystallization of selenium on the characteristics of photoelectric cells. Izv. AN Azerb. SSR Ser. fiz.-mat. i tekh. nauk no.5:93-99 '59. (MIRA 13:3)
(Selenium cells)

8 (0) SOV/112-59-1-139

Translation from: Referativnyy zhurnal. Elektrotekhnika, 1959, Nr 1, p 14 (USSR)

AUTHOR: Talibi, M. A.

TITLE: Use of Photoresistors in Recording Intensity Variations of X-Rays

PERIODICAL: Tr. In-ta fiz. i matem. AS AzerbSSR, 1956, Vol 8, pp 29-43 (Summary in the Azerbaydzhan language)

ABSTRACT: Bibliographic entry.

Card 1/1

L 2730-66 EWT(m) GS

ACCESSION NR: AT5023798 UR/0000/62/000/000/0189/0193

33
B+1

AUTHOR: Abdullayev, G. B.; Talibi, M. A.

TITLE: Method of using cadmium sulfide photoresistances in a recording x- and gamma-ray dosimeter 19

SOURCE: Soveshchaniye po probleme Deystviye yadernykh izlucheniy na materialy. Moscow, 1960. Deystviye yadernykh izlucheniy na materialy (The effect of nuclear radiation on materials); doklady soveshchaniya. Moscow, Izd-vo AN SSSR, 1962, 189-193

TOPIC TAGS: cadmium sulfide, photoresistance, radiation dosimeter, x ray measurement, gamma detector

ABSTRACT: The article describes a possible method of using cadmium sulfide photoresistances as sensing elements in a recording x- and gamma ray dosimeter including an MOM-3 tube megohmmeter. Single-crystal photoresistances produced by the Institut fiziki AN USSR (Institute of Physics, AN Ukr. SSR) were employed in the experiments. The dosimeter circuit permits a continuous successive recording of the intensities or rates of radiations directed on the working surface of each individual photoresistance. The proposed

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L 2730-66
ACCESSION NR: AT5023798

dosimeter was tested with a large number of photoresistances on URS-70, GUT-S0-400-1, and RUM-3M units; the dose rate varied from 3 to 2000 roentgen/min. The use of CdS crystals in combination with MOM-3 as the dosimeter presents a number of advantages, since the calibrated resistances of the instrument cover a wide range. This permits measurements over a wide radiation intensity range and the plotting of calibration curves for various photoresistances but the same MOM-3. The recalibration of the scale of MOM-3 from resistance units to dose rate units is discussed in terms of the relationship between the resistance and the intensity of the current passing through an x-ray tube with various anodes (tungsten, molybdenum, iron, copper). Orig. art. has: 4 figures, 1 table, and 2 formulas.

ASSOCIATION: None

SUBMITTED: 18 August 62 ENCL: 00 SUB CODE: NP

NO REF SOV: 007 OTHER: 002

Card 2/2

30420

S/058/61/000/009/042/050
A001/A101

9.4177 (1114,1138)

AUTHOR: Talibi, M.A.

TITLE: On origination of emf at bombarding p-n transitions in CdS-Se and CdSe-Se with fast electrons

PERIODICAL: Referativnyy zhurnal. Fizika, no. 9, 1961, 237, abstract 9E484 ("Izv. AN AzerbSSR. Ser. Fiz.-matem. i tekhn. n.", 1960, no. 4, 79-83, Azerb. summary)

TEXT: The p-n transitions CdS-Se and CdSe-Se were bombarded with 40-75 kev electrons. Dosimetric and inverse voltampere characteristics of specimens were investigated at the action of electrons and preliminary illumination with visible light. Within the range of the electron energies employed, the curves of dependence of short-circuit current on accelerating voltage and on the square of accelerating voltage (dosimetric characteristic) do not show any tendency to saturation. Linearity of dosimetric characteristics of the specimens makes it possible to use them for dosimetry of electrons. The author presents inverse voltampere characteristics of one of the CdS-Se specimens, operating in the photodiode manner,

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30420

On origination of emf ...

S/058/61/000/009/042/050
A001/A101

at the action of electrons and at the joint action of electrons and light. The behavior of current carriers originated under the action of electrons, light, and dark current carriers, is the same.

4

V. Patskevich

[Abstracter's note: Complete translation]

Card 2/2

S/081/61/000/022/014/076
B102/B108

AUTHORS: Manafly, Ye. I., Talibi, M. E.

TITLE: Some properties of native halenite from the Azerbaydzhanskaya SSR

PERIODICAL: Referativnyy zhurnal, Khimiya, no. 22, 1961, 89, abstract 22G49 (Izv. AN AzerbSSR. Ser. fiz. matem. i tekhn. n., no. 6, 1960, 69-75)

TEXT: Photosensitivity and some optical properties of native halenite samples were investigated. The samples contained Fe, Al, Ag, Mg, Si, Ba, Ca, Cu, Se, Zn, and Sr impurities which were detected by spectral analysis. The lattice constant was found to be 5.89 Å. [Abstracter's note: Complete translation.]

Card 1/1

31511 S/058/61/000/010/007/100
A001/A101

21.6000

AUTHORS: Talibi, M. A., Yusifov, A. G.

TITLE: On some specific features of the effect of X- and gamma-rays on electric resistivity

PERIODICAL: Referativnyy zhurnal. Fizika, no. 10, 1961, 57, abstract 10B171 (Izv. AN AzerbSSR, Ser. fiz. matem. i tekhn. n.", 1960, no. 6, 91-97, Azerb.summary).

TEXT: The authors investigated sensitivity of CdS to ionizing radiation with the purpose of constructing small-size dosimeters for X- and γ-rays. Variation of dark resistivity in dependence on intensity and wave composition of an operating short-wave resistance served as criterion of sensitivity. 20 specimens having almost equal sizes were investigated. Intensity of a dose was determined by means of an ionization chamber with walls of an air-equivalent material. The results obtained are represented by graphs. The measurements have shown that sensitivities of CdS sensors are different even for equal doses of radiation with different wave composition; therefore, every sensor should be calibrated individually.
[Abstracter's note: Complete translation]

Card 1/1

33677
S/058/61/000/012/046/083
A058/A101

9,4340 (1003, 1143, 1150)

AUTHORS: Talibi, M. A., Abdullayev, G.

TITLE: Concerning a correlation between the ionization-potential activation energy of impurities and the radius of the impurity atom in semiconductors

PERIODICAL: Referativnyy zhurnal, Fizika, no. 12, 1961, 337, abstract 12E459 (Dokl. AN AzerbSSR, 1961, v. 17, no. 2, 97 - 103, Azerb. summary)

TEXT: The effect of doping Se with Ga, Pb, Ag, Fe and Si on the electric properties of Se and of selenium p-n junctions was investigated. It was demonstrated that the higher the first ionization potential of the impurity (I) and the smaller its atomic radius (r), the lower is the temperature at which impact ionization appears. At constant temperature the lower I and the greater r, the lower is the voltage at which impact ionization appears. With decreasing atomic number and impurity concentration, the impurity activation energy ΔE rises (with the exception of Ga). ΔE is inversely proportional to the difference between I and r of Se and those of the impurity. According to the data in the literature the registered correlation extends to a number of impurities in Ge and Si, while in

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Concerning a correlation between...

S/058/61/000/011/046/083
A058/A101

binary semiconductor compounds of metals with elements of the same group. ΔE of the compound is directly proportional to the difference between [illegible] of the components. Binary compounds of the selenides and sulfides are an exception. They evince reverse proportionality between the same parameters. [illegible] correlation holds for a number of ternary semiconductor compounds.

V. Lev

[Abstracter's note: Complete translation.]

Card 2/2

S/249/62/018/007/001/001
D256/D308

AUTHORS: Talibi, M.A. and Abdullayev, G.B.

TITLE: A method of estimating the width of the forbidden band in some semiconducting 3-component compounds

PERIODICAL: Akademiya nauk Azerbaydzhan SSR, Doklady, v. 18, no. 7, 1962, 17-21

TEXT: The binary groups of the 3-component compounds investigated by Goodman (Goodman, C.H.L., Phys. and Chem. of Solids, 6, no. 4, 305, 1958) and obtained by substitution of one of the components by an element belonging to the same group of the periodic table, are considered. Following the previously reported observation by the authors (Abdullayev and Talibi, Trudy Vsesoyuznogo Soveshchaniya po P-n perekhodam v poluprovodnikakh, Tashkent, 1961, in print), that the difference of the ionization potentials and the atomic radii of the components can be useful for the estimation of the width of the forbidden band, it is shown that a direct correlation exists between the width of the forbidden band and the differ-

Card 1/2

ence of the ionization potentials. An attempt is made to estimate the widths of the forbidden bands in some analogue three-component compounds, assuming that the observed correlation does not depend upon the position of the substituted element in the periodic table.

ASSOCIATION: Institut fiziki (Institute of Physics)

SUBMITTED: January 12, 1962

TALIBI, M. A.

SOV/6176

PHASE I BOOK EXPLOITATION

Konobeyevskiy, S. T., Corresponding Member, Academy of Sciences USSR, Resp. Ed.

Devatviye vadernykh izlucheniy na materialy (The Effect of Nuclear Radiation on Materials). Moscow, Izd-vo AN SSSR, 1962. 383 p. Errata slip inserted. 4000 copies printed.

Sponsoring Agency: Akademiya nauk SSSR. Otdeleniye tekhnicheskikh nauk; Otdeleniye fiziko-matematicheskikh nauk.

Resp. Ed.: S. T. Konobeyevskiy; Deputy Resp. Ed.: S. A. Adasinskiy; Editorial Board: P. L. Gruzin, G. V. Kurdyumov, B. M. Levitskiy, V. S. Lyashenko (Deceased), Yu. A. Martynyuk, Yu. I. Pokrovskiy, and N. F. Pravdyuk; Ed. of Publishing House: M. G. Makarenko; Tech. Eds: T. V. Polyakova and I. N. Dorokhina.

Card 1/14

90

SOV/6176

The Effect of Nuclear Radiation (Cont.)

PURPOSE: This book is intended for personnel concerned with nuclear materials.

COVERAGE: This is a collection of papers presented at the Moscow Conference on the Effect of Nuclear Radiation on Materials, held December 6-10, 1960. The material reflects certain trends in the work being conducted in the Soviet scientific research orginization. Some of the papers are devoted to the experimental study of the effect of neutron irradiation on reactor materials (steel, ferrous alloys, molybdenum, avial, graphite, and nichromes). Others deal with the theory of neutron irradiation effects (physico-chemical transformations, relaxation of internal stresses, internal friction) and changes in the structure and properties of various crystals. Special attention is given to the effect of intense γ-radiation on the electrical, magnetic, and optical properties of metals, dielectrics, and semiconductors.

Card 2/14

8

SOV/6176

The Effects of Nuclear Radiation (Cont.)

Card 9/14

L 11195-63 EWT(1)/EWG(k)/BDS/EEC(b)-2--AFFTC/ASD/ESD-3--
Pz-4--AT/IJP(C)
ACCESSION NR: AT3002973 S/2927/62/000/000/0012/0017

65
64

AUTHOR: Abdullayev, G. B.; Talibi, M. A.
21

TITLE: Correlation in semiconductors between the activation energy and the ionization potential and atomic radius [Report at the All-Union Conference on Semiconductor Devices, Tashkent, 2-7 October, 1961]

SOURCE: Elektronno-dy*rochny*ye perekhody* v poluprovodnikakh. Tashkent, Izd-vo AN UzSSR, 1962, 12-17

TOPIC TAGS: selenium rectifier, activation energy, ionization potential, atomic radius

ABSTRACT: Studying the effect of strong field on p-n transition in impurity-type selenium rectifiers is important as it may permit controlling the electrical and thermal characteristics of these rectifiers. The authors investigated reverse current-voltage characteristics of selenium rectifiers containing Ga, Pb, Ag, Fe, and Si as impurities at the liquid-nitrogen temperature. Also the effect of temperature (-80 to +200) on the cutoff current of the above rectifiers was determined. Experimental data is compared with the published data of other researchers, and the following conclusion is drawn: the closer ionization potential

Card 1/2

L 11195-63
ACCESSION NR: AT3002973

and atomic radius of the impurity to those of the semiconductor proper, the higher is the activation energy of the impurity in the semiconductor. Orig. art. has: 2 figures and 6 tables.

ASSOCIATION: Akad. nauk SSSR(Academy of Sciences SSSR); Akad. nauk UzSSR(Academy of Sciences UzSSR); Tashkentskiy gosuniversitet im. V. I. Lenina (Tashkent State University)

SUBMITTED: 00 DATE ACQ: 15May63 ENCL: 00

SUB CODE: 00 NO REF SOV: 010 OTHER: 006

ls/WW
Card 2/2

S/275/63/000/003/012/021
A052/A126

AUTHORS: Abdullayev, G.B., Manafli, E.I., Talibi, M.A.

TITLE: On the effect of some impurities on the impact ionization mechanism in selenium rectifiers

PERIODICAL: Referativnyy zhurnal, Elektronika i yeye primeneniye, no. 3, 1963, 22, abstract 3B137 (Tr. Soveshchaniya po udarn. ionizatsii i tunnel'n. effektu v poluprovodnikakh, 1960. Baku, AN AzerbSSR, 1962, 83 - 86)

TEXT: The effect of Ga, Pb, Ag, Fe and Si impurities on the inverse branches of volt-ampere characteristics of selenium valves was investigated in the temperature range from room temperature to -196°C. At low temperatures a "freezing" of thermal oscillations of the lattice takes place. A thermal background weakening makes it possible to investigate more accurately the physical processes conditioned by impurities. It is shown that in the negative temperature range the inverse current temperature dependence changes considerably with the change of the kind of impurity. The rate of inverse current growth with temperature and voltage is determined by the

Card 1/2

S/275/63/000/003/012/021
A052/A126

On the effect of some impurities ...

value of the 1st ionization potential of impurity atoms. The lower the value of the 1st ionization potential of the impurity atom the higher the rate of inverse current growth. The dependence of the conductivity of the sample on cutoff voltage is conditioned by impact ionization leading to the ionization of impurities. An increase of ionized impurity concentration in Se leads to a decrease of the p-n junction thickness. There are 6 references.

L.B.

[Abstracter's note: Complete translation.]

Card 2/2

ABDULLAYEV, G.B.; BAKIROV, M.Ya.; TALIBI, M.A.; GASYMOV, R.B.

Selenium photoelements with saturation current. Izv. AN Azerb. SSR.Ser. fiz.-mat. i tekh. nauk no.3:77-83 '63. (MIRA 16:11)

ABDULLAYEV, G.B.; ALEKPEROVA, Sh.M.; TALIBI, M.A.; BEKIROV, M.Ya.; GASYMOV, R.B.

Saturation currents in selenium p-n junctions. Dokl. AN Azerb. SSR 19 no.1:9-12 '63. (MIRA 16:4)

1. Institut fiziki AN AzSSR.
(Junction transistors)

ABDULLAYEV, G.B., doktor fiz.- matem. nauk; TALIBI, M.A., kand. fiz.-matem. nauk

Conference on the Study of Selenium and Tellurium, held in Baku. Vest. AN SSSR 33 no.10:113-114 O '63. (MIRA 16:11)

BAKIR V, Hamed Emin; TALIBI, Hamed Alekper

[Selenium photocells] Selen fotoelementleri. Baku, Azerbajchan SSR Elmler Akademijasy Neshrijjaty, 1964. (MIRA 18:5)
90 p. [In Azerbaijani]

L 17726-66 EWT(1)/EWT(m)/ETC(f)/EWG(m)/T/EWP(t) IJP(c) RDW/GG/JD/GS

ACC NR: AT6001331 SOURCE CODE: UR/0000/65/000/000/0037/0041

AUTHOR: Talibi, M. A.; Verdiyeva, T. M.

ORG: none

60
59
B+1

TITLE: The effect of certain factors on the surface of Se

SOURCE: AN AzerbSSR. Institut fiziki. Selen, tellur i ikh primeneniye (Selenium, tellurium and their utilization). Baku, Izd-vo AN AzerbSSR, 1965, 37-41

TOPIC TAGS: selenium, surface property, crystal growth, nucleation, illumination, etched crystal, metallographic examination, metal physics, pn transition

ABSTRACT: The effects of crystallization time, illumination and etching on the surfaces of selenium layers (50 to 70μ thick) were studied in an effort to clarify the mechanism underlying the growth of Se crystals. The Se films were obtained by vapor deposition of technical grade Se containing 0.03% Br impurity on aluminum substrates. The substrates were maintained at a constant temperature of 130°C; crystallization time varied from 5 to 60 min under illumination from a red bulb and a neon lamp as well as under zero illumination. The data (presented in the form of micrographs (100x)) illustrate the effects of the above variables on the nature of

Card 1/2

2

L 17726-66

ACC NR: AT6001331

the crystallization. In darkness spherulites of Se crystals were observed after only 15 min, while at longer times the diameters of the spherulites increased according to the following empirical relation:

$$d = 0.36t + d_0,$$

where d = diameter (mm), t = time of crystallization (min) and $d_0 = 0.2 \cdot 10^{-2}$ (mm). The increase in diameter was due to the increased growth rate which at 10-20 min was estimated to be 246 μ/hr. After 30 min at 130°C, the density of spherulites was 250 mm^{-3}. The results obtained for illumination and etching after 10 min of crystallization at 130°C (100x) were similar to the above; that is, the appearance and the dimensions of the spherulites did not change. The etch used was a 50/50 HNO_3/ /H_2SO_4. However, when the films were immersed in boiling water (after 10 min preliminary crystallization in the dark), changes in spherulite size and background were noted. These changes were caused by the reaction $SeO_2 + H_2O = H_2SeO_3$. The effects of the above surface changes were postulated to have an influence on the pn transition properties, however, further work in this area was planned. The authors express their gratitude to Professor G. B. Abdullayev for his interest in the work and for his discussion of the results. Orig. art. has: 2 figures, 2 formulas.

SUB CODE: 11, 20/ SUBM DATE: 10Mar65/ ORIG REF: 003/ OTH REF: 008

Card 2/2

L 17728-66
ACC NR: AT6001333

temperature coefficient of reverse current was a function of the type of impurities; the smallest change occurred for Si whose ionization potential was closest to Se. The capacitance decreased with temperature, again the smallest for Si, reaching a constant value of 1 $\mu f/cm^2$ at 125°C for 9v and for 25v--1 $\mu f/cm^2$ at 100°C. The Schottky formula $1/C^2 = 8\pi(U + U_d)/\varepsilon eN$ was used to calculate the concentration of ionization impurity centers (N_A-acceptors; N_D-donors) where C is the capacitance of the transition, U is voltage in the shut-off direction, ε is the dielectric constant and e is the electronic charge. Data showed that N_A and N_D for all cases decreased with temperature and the lower values at the higher temperatures (above 100°C) were caused by the filling up of deep defects in both Se and CdSe. According to the data, activation at the deeper levels resulted from the joint action of a strong field and temperature. The decrease in reverse current with temperature was the result of a decrease in N. A comparison of this work to other semiconducting systems was made. The formation of SiO, SiO_2 and Si_2O_2 and its effect on decreases in N was discussed. It was found that Si additions to Se raised the specific resistance by one order. An extensive literature survey of the effects of impurities on the electrical properties of Se-CdSe elements is appended. The authors

Card 2/3

L 17728-66
ACC NR: AT6001333

express their gratitude to Professor G. B. Abdullayev for discussion of the results and valuable advice. Orig. art. has: 7 figures, 1 formula.

SUB CODE: 11 20/ SUBM DATE: 10Mar65/ ORIG REF: 027/ OTH REF: 022

Card 3/3

L 16505-66 EWT(1)/EWT(m)/ETC(f)/EWG(m)/EWP(t) IJP(c) RDW/JD/GS/AT

ACC NR: AT6001334 SOURCE CODE: UR/0000/65/000/000/0085/0094

AUTHOR: Abdullayev, G. B.; Bakirov, M. Ya.; Talibi, M. A.; Gasymov, R. B. 68 66 B+1

ORG: none

TITLE: Photoeffect in selenium pn transitions 27

SOURCE: AN AzerbSSR. Institut fiziki. Selen, tellur i ikh primeneniye (Selenium, tellurium and their utilization). Baku, AN AzerbSSR, 1965, 85-94

TOPIC TAGS: selenium, intermetallic compound, impurity conductivity, semicondicting material, spectrum analysis, temperature dependence, diffusion coefficient, metal physics

21,44,55

ABSTRACT: Photoelectric properties of selenium photocells containing Cd, Pb, Ga, In, Zn and Hg as contact films were studied. Diffraction analysis of the junctions showed that the selenide intermetallic compound formed in each case; these junctions exhibited *n*-type conductivity and caused photovoltaic effects due to pn transitions. Spectral characteristics are given for Se with CdSe, InSe and HgSe, showing primary and secondary maxima for relative photocurrent (%), the secondary maximum being dependent on the type of element. Photosensitivity showed a dependence on time, sample

Card 1/2

L 17729-66 EWT(m)/ETC(f)/EWG(m)/EWP(t) IJP(c) RLW/JD/GS
ACC NR: AT6001336 SOURCE CODE: UR/0000/65/000/000/0115/0121

AUTHOR: Abdullayev, G. B.; Manafli, E. I.; Talibi, M. A.

ORG: none

53
B+1

TITLE: The effect of certain impurities on the capacitance of transitions in Se-CdSe

SOURCE: AN AzerbSSR. Institut fiziki. Selen, tellur i ikh primeneniye (Selenium, tellurium and their utilization). Baku, AN AzerbSSR, 1965, 115-121

TOPIC TAGS: selenium, cadmium selenide, capacitance, impurity conductivity, temperature dependence, selenium compound, oxide, carrier mobility, diffusion transistor, metal physics

ABSTRACT: The changes in capacitance were given as a function of voltage displacement at both 20° and 80°C for Se-CdSe elements made with impurity additions of Ga, Fe, Pb, Ag and Si. The temperature dependence of capacitance was presented for these impurities and for constant voltage displacements of 9, 15 and 25 v. A sharp decrease in the temperature coefficient of capacitance was observed for the higher

2

Card 1/2

L 17729-66
ACC NR: AT6001336

voltages at about 100°C; above 100°C it became constant. An exception to this was Ga which made its transition at 125°C. These data were correlated with oxide formation, diffusion effects and ionization potentials. Because the ionization potential of Si was closest to Se it was least effective in raising the capacitance. However, increases in concentration (e. g., 0.0001% to 0.1% Fe) lowered the capacitance. The diffusive capacitance rose sharply with direct voltage at 20°C, whereas at 125°C it did so only for Ga and Fe; the temperature dependence of this effect was given for 0 and 0.3 v. A relation for this capacitance was given as follows:

$$C_q = (eI/2kT)\tau,$$

where e is the electron charge, k is Boltzmann's constant, T is absolute temperature, I is direct current and τ is the lifetime of carriers. The dependence of the effective lifetime τ_{ef} is given as a function of temperature and impurity content. For Ga and Fe τ_{ef} the dependence was weak compared to pure Se, Ag and Si and the values of τ_{ef} were calculated to be 10^{-5}-10^{-6} sec. Orig. art. has: 10 figures, 1 formula.

SUB CODE: 11, 20/ SUBM DATE: 10Mar65/ ORIG REF: 005/ OTH REF: 007

Card 2/2

L 17730-66 EWT(m)/ETC(f)/EWG(m)/EWP(t) IJP(c) RDW/JD/GS
ACC NR: AT6001337 SOURCE CODE: UR/0000/65/000/000/0122/0124

60
59
B+1

AUTHOR: Talibi, M. A.; Krutenyuk, Ye. G.

ORG: none

TITLE: The effect of a sodium impurity on certain properties in selenium components

SOURCE: AN AzerbSSR. Institut fiziki. Selen, tellur i ikh primeneniye (Selenium, tellurium and their utilization). Baku, AN AzerbSSR, 1965, 122-124

TOPIC TAGS: pn transition, selenium, cadmium selenide, semiconducting material, sodium, impurity conductivity

ABSTRACT: The effects of sodium impurities on pn transition properties Se-CdSe were studied. A literature review of the effect of sodium on electric and optical properties of selenium was presented; the sodium action decomposes the molecules of selenium and accelerates their crystallization. Experimental data were gathered for samples with up to 0.1 at % Na, the cadmium being deposited first (vapor) onto an aluminum cathode and the selenium with Na as an impurity deposited next. Some samples had 0.005% Cl while others had both 0.005% Cl and 0.1% Na. The components

Card 1/2

L 17731-66 EWT(m)/EWP(t) IJP(c) JD/GS
ACC NR: AT6001338 SOURCE CODE: UR/0000/65/000/000/0125/0128

AUTHOR: Abdullayev, G. B.; Talibi, M. A.; Mamedov, E. G.

39
B+1

ORG: none

TITLE: The effect of Mn impurities on the rectifying properties of transitions in Se-CdSe

SOURCE: AN AzerbSSR. Institut fiziki Selen, tellur i ikh primeneniye (Selenium, tellurium and their utilization). Baku, AN AzerbSSR, 1965, 125-128

TOPIC TAGS: selenium, cadmium selenide, temperature dependence, pn transition, manganese, metal physics

ABSTRACT: A study was made of the effects of Mn on trap formation for transitions in Se-CdSe. The Mn had an unfilled 3d shell and two 4s electrons. Static volt-ampere characteristics for one of the samples were given as a function of temperature; a typical Se inversion in the temperature dependence on reverse current was observed. For Se-CdSe junctions without additions and for additions other than Mn the saturation of reverse current occurred below 130°C; with Mn, saturation took place

2

Card 1/2

L 39587-66 EWT(m)/EWP(w)/ETC(f)/EWG(m)/T/EWP(t) IJP(c) RDW/JD/JD/GS

ACC NR: AT6001329 SOURCE CODE: UR/0000/65/000/000/0020/0026

22
21
B+1

AUTHOR: Abdullayev, G. B.; Tagiyev, K. K.; Talibi, M. A.

ORG: none

TITLE: Effect of sodium impurities on the optical properties of selenium

SOURCE: AN AzerbSSR. Institut fiziki. Selen, tellur i ikh primeneniye (Selenium, tellurium and their utilization). Baku, Izd-vo AN AzerbSSR, 1965, 20-26

TOPIC TAGS: selenium, ultra high purity metal, sodium, impurity conductivity, oxygen, optic transmission, radiation spectrum, crystallization, metal physics, absorption coefficient

ABSTRACT: The present work was undertaken owing to lacunae in the literature on the properties of high purity selenium and the effect of impurities on the dispersion of selenium. The experimental procedure was described in an earlier work. Formulas for the coefficients of absorption, refraction, transmission and reflection are given. The experiments were done on SF-10 and SF-4 spectrophotometers for samples with Na impurities and pure Se (99.9999%) at 300°K. Sample thickness (ranging from 1.4 to 2.5 μ) was carefully controlled since it was a primary variable in

Card 1/2

L 06196-67 EWT(m)/EWP(t)/ETI IJP(c) JD/JH

ACC NR: AP6032616 SOURCE CODE: UR/0233/66/000/002/0101/0106

58
56
B

AUTHOR: Talibi, M. A.; Verdiyeva, T. M.; Krutenyuk, Ye. G.

ORG: none

TITLE: Effect of crystallization and surface condition of Se on forming of p-n junctions of Se-CdSe and Se-CdS

SOURCE: AN AzerbSSR. Izvestiya. Seriya fiziko-tekhnicheskikh i matematicheskikh nauk, no. 2, 1966, 101-106

TOPIC TAGS: semiconductor device, photoelectric cell, semiconductor rectifier, selenium rectifier, PN JUNCTION, CADMIUM SELENIDE, SELENIUM, CRYSTALLIZATION

ABSTRACT: The article presents some results of an experimental investigation of the dependence of properties of selenium p-n junctions on the structure of the selenium surface. Rectifying cells made of Se-CdSe, Se-CdS, Se-CdSe photocells, and Se-layers were investigated. A bismuth coated aluminum base with a selenium layer (containing 0.03% Br) was used as a basic material for specimens. Specimens were crystallized under various conditions and then etched with nitric acid. Their surfaces were then studied on the basis of their reflection of monochromatic rays (420—780 mμ) using dial-beam microphotometer. Analysis of data indicates: 1) There are two stages of crystallization of selenium layers deposited on rough bismuth-coated aluminum bases: a) spherulitic cyrstallization b) crystallization caused by growth of intra- and inter-

Card 1/2

ACC NR: AP7002840 SOURCE CODE: UR/0233/66/000/004/0091/0095

AUTHOR: Talibi, M. A.; Lunev, P. A.; Kadymov, G. G.

ORG: none

TITLE: Selenium avalanche diodes

SOURCE: AN AzerbSSR. Izvestiya. Seriya fiziko-tekhnicheskikh i matematicheskikh nauk, no. 4, 1966, 91-95

TOPIC TAGS: semiconductor diode, selenium rectifier, voltage regulator

ABSTRACT: The voltage-regulating properties of selenium diodes were studied. The diode under study was connected in series with a ballast resistor (R_1) and the input voltage, and in parallel with a load resistor (R_2). The output voltage was measured across R_2. When R_2 = 10 kohm, the voltage-regulating properties of the diode sharply deteriorated for values of R_1 less than 1 kohm. The voltage-regulating properties were basically unchanged for values of R_2 between $\sim$0.6 and 10 kohm if R_1 = 10 kohm. In addition to single diodes, the voltage-regulating properties of 10 series- and 10 parallel-connected diodes in the above circuit were studied. For values of $R_1 = R_2$ = 10 kohm, stabilization of the output voltage began for input voltages of 8 and 5 v for the series and parallel-connected diodes. The quality factor of selenium diodes is

Card 1/2 UDC: none

1ST AND 2ND ORDERS

3RD AND 4TH ORDERS

PROCESSES AND PROPERTIES INDEX

BC

a-3

Naphthalene derivatives. I. Action of chlorostep on naphthalenesulphonic acids. V. V. Kozlov and D. [illegible] Zaitsev. J. Gen. Chem. Russ., 1939, 9, 1[illegible]—[illegible]. 1-$C_{10}H_7SO_3H$ and $KClO_3$ in aq. HCl at [illegible] 5 : 1- and 8 : 1-$C_{10}H_6ClSO_3H$. At 50—60°, 1 : 6-, 1 : 6-, and 1 : 8-$C_{10}H_6Cl_2$ are obtained, whilst at 100° the products are 1 : 5-, 1 : 6-, 1 : 7-, and 1 : 8-$C_{10}H_6Cl_2$. 1 : 6- and 1 : 7-$C_{10}H_6Cl_2$ undergo oxidation in these conditions, to yield 6-chloro-1 : 4-naphthaquinone, m.p. 106—107°. The products obtained similarly with 2-$C_{10}H_7SO_3H$ are 5 : 2- and 8 : 2-$C_{10}H_6ClSO_3H$ at 20—50°, and 2 : 6-, 1 : 6-, and 1 : 7-$C_{10}H_6Cl_2$ at 100°. R. T.

ASB-SLA METALLURGICAL LITERATURE CLASSIFICATION

BOBYLEV, I.P. (st.Aduy, Sverdlovskoy dorogi); ZYRYANOV, A.Ye. (st.Aduy, Sverdlovskoy dorogi); MELUZOV, V.G. (st.Aduy, Sverdlovskoy dorogi); SINTYURIN, F.T. (st.Aduy, Sverdlovskoy dorogi); TALIBULINA, R.G. (st.Aduy, Sverdlovskoy dorogi); FATKHALISLAMOV, G. (st.Aduy, Sverdlovskoy dorogi)

Inadmissible procedures. Put' put.khoz. 8 no.2:41 '64. (MIRA 17:3)

[illegible], N.S.; [illegible], G.M.; [illegible], A.A.; [illegible]

Obtaining acetylene from liquid hydrocarbons. Neft. [illegible] 7 no.[illegible]:40-43 '64. (MIRA 17:10)

TALIC, Alija Dr.

Director, Vet. Service Council of Agric. and Forestry, Prov. of Bosmia and Hercegovina
Director of the Vet. Service, admin. of all vet. activities within the Province of Bosmia and Hercegovina

MSA Booklet June 13, 1952

YUGOSLAVIA

A. TALIC [Affiliation not given.]

"Organization of the Veterinary Stations, Inspectorates and Funds in the People's Republic of Bosnia and Hercegovina."

Belgrade, Veterinarski Glasnik, Vol 17, No 5, 1963; pp 395-402.

Abstract : Relatively unstructured critical essay highlighting the reasons for lack of progress and inconsistencies in the performance of the veterinary services in this Yugoslav state: spasmodic and often obsolete legislation; paradoxical unemployment of young veterinarians due to selfish and narrow-minded attitudes and policies at the local level among veterinarians while there is need for at least 100 more veterinarians in the state; administrative and organizational absurdities. There are now 115 veterinary field stations and 25 extension offices employing between them 208 veterinarians, 50 technicians and 154 helpers. They could achieve much more if working efficiently; vague exhortations.

1/1

Am

TALIEFF (V. I.). Общая диагностика заболевания растений. [General symptomatology of plant diseases]—123 pp., 24 figs., Moscow & Leningrad, Госуд. С.-Хозяйств. Издат. [State Agric. Publications Office], 1930.

This is an elementary text-book on plant diseases and insect pests in Russia, dealing chiefly with the symptomatology of the troubles. Most of the illustrations are original.

G-2

TALIK, PLAZEK

POLAND / Organic Chemistry. Synthetic Organic Chemistry

Abs Jour : Ref. Zhur. Khimiya, No 3, 1958, 7970

Author : Talik, Plazek

Inst : Not given

Title : Nitration of 2-chloro-4-aminopyridine

Orig Pub : Roszn. chem., 1956, 30, No 4, 1139-1149

Abstract : 2-chloro-4-aminopyridine is easily nitrated with a nitrating mixture yielding 2-chloro-4-nitroaminopyridine (I) which when heated with concentrated H_2SO_4 breaks down into a mixture of two isometic compounds: 2-chloro-3-nitro-4-aminopyridine (II) and 2-chloro-4-amino-5-nitropyridine (III). The structures of both isomers are well-defined. II, when subjected to amonolysis, yields 2,4-diamino-3-nitropyridine (IV), while III, under the same conditions, yields 2,4-diamino-5-

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// ...scribed in

...g HNO_3 were added

Card 1/5

Ca.

POLAND / Organic Chemistry. Synthetic Organic Chemistry G-2

Abs Jour : Ref. Zhur. Khimiya, No 3, 1958, 7970

Abstract : 30 min) and the resulting precipitate 0.2 gm of IX, m.p. 145°C (in water with charcoal), were extracted with KOH; the solution after separating the precipitate was treated with an excess of 50% KOH and X was extracted with ether, yield 0.7 gm, m.p. 181-183°C (in water). In a manner analogous to the preparation of VII, XI was produced from IX, M.p. 225-227°C (in benzene). 0.5 gm of IX in 50 ml of water and 0.5 ml of H_2SO_4 were cooled to 0°C and 0.5 gm of $NaNO_2$ in 5 ml of water were added, the mixture was allowed to stand (20°C, 30 min and 0°C, 30 min) and XII was obtained, yield 83.3%, m.p. 220°C (in water).

Card 5/5

13

POLAND/Organic Chemistry. Synthetic Organic Chemistry. G

Abs Jour: Ref Zhur-Khimiya, No 21, 1958, 70842.

Author : Talik, Plazhek.
Inst :
Title : Synthesis of Certain Derivatives of the Hydrazide of Thiocyanacetic Acid.

Orig Pub: Rocz. Chem., 1957, 31, No 3, 1069-1070.

Abstract: For the purpose of preparing new antituberculosis agents, $SCNCH_2CONHN{=}CHR$ (I) were synthesized. From the action of $ClCH_2COCl$ upon $RCH{=}NNH_2$ in pyridine, $RCH{=}NNHCOCH_2Cl$ (II) was prepared, which with KCNS in acetone forms I.
The following were obtained: II, R = C_6H_5, m.p. 164°C.; II, R = 3-$NO_2C_6H_4$, m.p. 209°C.; I, R = C_6H_5, m.p. 251°C.; I, R = 3-$NO_2C_6H_4$, m.p. 278°C.

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TALIK, T.: PLAZEK, E.

Synthesis of hydrazides of pyridine sulfonic acid. Acta Poloniae pharm. 12 no.3:179-184 '53.

1. Katedra Chemii Organicznej Politechniki Wroclawskiej Kierownik: prof. dr. E. Plazek.
(PYRIDINES, preparation of,
pyridinesulfonic acid hydrazides)

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Syntheses of pyridine analogs of *p*-aminosalicylic acid. Tadeusz Talik and Zofia Talik. *Acta Polon. Pharm.* 11, 71-6(1954)(English summary).—By the Kolbe-Schmidt method, modified by Marasse (Ger. 73,279 and 78,708), 2-amino-6-hydroxy-5(?)- (I), and 3-amino-5-hydroxy-6(?)-pyridinecarboxylic acid (II) have been prepd. I is obtained in 78.5% yield by heating 2-amino-6-hydroxypyridine with anhyd. K_2CO_3 under a CO_2 atm. in an autoclave 3-4 hrs. at about 200°, treating the mixt. with hot H_2O, filtering, and pptg. the product with glacial AcOH; it is difficultly sol. in cold H_2O, alc., C_6H_6, $CHCl_3$, and acetone, and decomp. 165°. By the same procedure (reaction time 7-8 hrs.) 3-amino-5-hydroxypyridine yields II, isolated as the Cu salt, which with H_2S soln. gives 57% free II, m. 204-5°, sol. in hot H_2O, insol. in alc. and C_6H_6. Both acids are inactive against tubercle bacilli. Michael Dymicky

TALIK T.

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Syntheses of pyridinesulfohydroxamic acids. Z. Talik and T. Talik (Polytech., Wrocław, Poland). *Acta Polon. Pharm.* 12, 219–22(1955)(English summary).—2-,3- and 4-*Pyridinesulfohydroxamic acids* (I), (II), and (III), resp., prepd. by the reaction of the corresponding sulfonyl chlorides with hydroxylamine showed only a small tuberculostatic activity in experiments *in vitro*. Na (2 g.) is dissolved in 30 ml. abs. EtOH and added below 40° to 7 g. $NH_2OH.HCl$ (IV) in 5 ml. water. To the filtered soln., 2-pyridinesulfonyl chloride [obtained from 4 g. 2-mercaptopyridine (cf. *ibid.* 5–12)] is added in portions below 30° and the mixt. kept 10 min., the EtOH is distd. *in vacuo*, 5 ml. water added, the soln. heated with C at 90° and filtered, and the ppt. crystd. from water to give I, m. 129–30° (decompn.). II is obtained by adding 13 g. IV in 10 ml. of water to a soln. of 4.25 g. Na in 60 ml. abs. EtOH at 40°, filtering off the NaCl, adding 3-pyridinesulfonyl chloride to the filtrate, filtering off IV, evapg. the filtrate and recrystg. the residue from water; II m. 149–51° (decompn.). III is obtained similarly (no m.p. is reported).

R. Dowbenko

Chem

TALIK, TADEUSZ

The abnormal reaction of 2-chloro-4-aminopyridine with nitrous acid. Tadeusz Talik and Elwin Plazek (Polytech., Warsaw). ~~Roczniki Chem. 29,~~ 1019–28(1955).—2-Chloro-4-aminopyridine (I) reacts with HNO_2 abnormally because of the Cl in the 2-position. I was prepd. by reduction (Fe and Zn dust in presence of HgCl in glacial AcOH) of 2-*chloro-4-nitropyridine N-oxide*, m. 152–4° (from H_2O). Diazotized I gives by heating, 2-chloro-4-pyridol; by Sandmeyer reaction, 66.9% *2-chloro-4-iodopyridine*, 52.9% *2-chloro-4-bromopyridine*, m. 26–7° (from H_2O + acetone), 56.5% *2-chloro-4-thiocyanatopyridine*, m. 110° (from dil. alc.), and 64.7% 2-chloro-4-cyanopyridine (II), m. 49°; by coupling (*2-chloro-4-pyridylazo*)-*2-naphthol*, m. 195–7° (from alc.); and by reduction ($SnCl_2$) 67.1% *2-chloro-4-hydrazinopyridine*, m. 85–6° (from C_6H_6) [picrate, m. 175–6° (from alc.)]. 2-Chloro-4-pyridylhydrazone of BzH, m. 210–11° (from dil. alc.). II gives by hydrolysis (HCl) 2-chloro-4-pyridinecarboxylic acid. A. Sementsov

Talik, Tadeusz

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Reaction of 2-bromo-4-aminopyridine and of 2-iodo-4-aminopyridine with nitrous acid. Tadeusz Talik (Politechnika, Wrocław, Poland). *Roczniki Chem.* 31, 869-78(1957) (German summary).—2-Bromo- (I) and 2-iodo-4-aminopyridine (II) were prepd. by action of 23% H_2O_2 dissolved in $(Ac)_2O$, nitration, and reduction with $Fe(OH)_2$. I and II can be diazotized although the NH_2 groups are bound in the 4-position. By boiling the diazonium salts 2-bromo- (m. 172°) and 2-iodo-4-oxypyridine (m. 214-15°) were obtained. Sandmeyers reaction gave 2-bromo-4-iodo- (m. 61°), 2,4-dibromo- (m. 38.5°), 2,4-diiodo- (m. 74°), 2-iodo-4-bromo- (m. 46°), 2-bromo-4-cyano- (m. 77°) (III), and 2-iodo-4-cyanopyridine (m. 67°) (IV). Sapon. of III or IV in acidic medium gave 2-oxyisonicotinic acid. 2-Chloro-4-cyanopyridine gave under these conditions 2-chloroisonicotinic acid (cf. *C.A.* 50, 12045*f*). A. Krężlewski

TALIK, T

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4E2c

4E3d

2 (May)

On the reactions with nitrous acid of certain derivatives of 4-aminopyridine. substituted in position 2 or 2 and 6. III. Tadeusz Talik and Edwin Płażek (Politechnika, Wrocław, Poland). *Roczniki Chem.* 33, 387–96(1959)(German summary); cf. *C.A.* 52, 5407*b*.—It was established that 2-methyl-, 2,6-dimethyl-, and 2,6-dichloro-4-aminopyridine can be diazotized like aromatic compds., in spite of the fact that the NH_2 group is bound in the position 4. The following products of reactions of the diazonium salts were prepd.: 4-iodo- (m. 43°, yield 29.6%); 4-chloro-, (25.5%; picrate m. 203°); 4-bromo-, (37.7%, b. 180–1°; picrate m. 184°), and 4-cyano-2-methylpyridine (8.2%, b. 201° m. 45°; picrate m. 161°). 2-Methyl-4-pyridinocarboxylic acid (64.6%, m. 292°), 4-iodo- (19.6%, m. 99°; picrate m. 192°), 4-chloro- (21.5%; picrate m. 167°), 4-bromo- (42.6%, b. 194°; picrate m. 178°), 4-thiocyano- (17.85%, m. 63°; picrate m. 182°), and 4-cyano-2,6-dimethylpyridine (13.9%, m. 81°; picrate m. 174°). 2,6-Dimethyl-4-pyridinocarboxylic acid (m. 281°), 4-hydroxy- (65.4%, m. 196°), 4-iodo- (39.56%, m. 160°), 4-bromo- (35.84%, m. 95°), 4-cyano-2,6-dichloropyridine (m. 95°), and 2,4,6-trichloropyridine (30.1%, m. 32°). The substitution of diazonium by the CNS group was possible only in the case of diazonium salt of 2,6-dimethyl-4-aminopyridine. A. Kreglewski