81625
S/181/60/002/06/13/050
B122/B063

24.3950

AUTHOR: Zholkevich, G. A.

TITLE: Optical and Photoelectric Properties of Zinc Selenide and Telluride

PERIODICAL: Fizika tverdogo tela, 1960, Vol. 2, No. 6, pp. 1115 - 1117

TEXT: The article under review describes the following experiment: A layer of zinc is sputtered onto a quartz backing, and the zinc foils were added to the corresponding quantities of Se and Te, and subjected to 600°C in sealed ampoules. The thickness of the specimens ranged from 0.2 μ to some microns. Absorption spectra of the specimens were taken by means of an СФ-2М (SF-2M) spectrometer at room temperature and 77°K (Fig. 1). The bands of ZnSe shifted by 0.7 A/deg and those of ZnTe by 0.9 A/deg, depending on the temperature. Dark resistance and photosensitivity were observed according to the conditions of crystallization for the preparation of the layer. Examination of the spectral distribution of the photocurrent showed that the photoconductivity of ZnSe was independent of its content of excess Se and other impurities. The peak at 460 mμ is related to the

Card 1/2

Optical and Photoelectric Properties of Zinc Selenide and Telluride

81625
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B122/B063

absorption edge. In the long-wave region, however, there was a relationship between photoconductivity and the content of Se which formed new centers of photoconductivity. Similar but less marked effects were observed in the case of ZnTe. Experiments with specimens doped with Hg or Cd indicated that Hg and Cd penetrated into the lattice where they formed inclusions and intermediate layers. Electron diffraction pictures of these specimens showed two structures: Besides ZnSe and ZnTe, respectively, there were also HgSe, CdSe, and/or HgTe and CdTe. There are 2 figures and 4 references: 3 Soviet.

ASSOCIATION: Vologodskiy gosudarstvennyy pedagogicheskiy institut (Vologoda State Pedagogical Institute)

SUBMITTED: July 13, 1959

Card 2/2

S/181/60/002/010/021/051
B019/B056

9,4177 (also 1143)

AUTHOR: Zholkevich, G. A.

TITLE: The Problem of the Mechanism of Negative Photoconductivity

PERIODICAL: Fizika tverdogo tela, 1960, Vol. 2, No. 10, pp. 2480-2483

TEXT: The exact production of polycrystalline zinc-selenide samples with negative photoeffect is described elsewhere by the authors (Refs. 7,8). The samples had the shape of a photoresistor with a 0.5 - 1 cm electrode gap. The adsorption on the surface was found to affect the negative photoconductivity. The effect of oxygen was the most marked. After evacuation of oxygen, the conductivity of the sample and the negative photoconductivity were found to increase. In Fig. 1 the spectral distributions of the negative and the "normal" photoconductivities of ZnSe are graphically represented. In the case of the existence of an electric field ZnSe is graphically represented. In the presence of an electric field of some ten volts, an increase of the negative photoconductivity is observed. The fact that the spectral distributions

Card 1/2

The Problem of the Mechanism of Negative Photoconductivity

S/181/60/002/010/021/051
B019/B056

of the negative photoeffect and the photo-emf are very similar to each other is examined more closely. Attention is drawn especially to the fact that the more similar are the method of producing the photocell and the photoresistor, the larger is the similarity of the spectral distributions. Further, in comparison to the ordinary photoconductivity, the two effects mentioned are characterized by shorter times of growth and decay, and by the lack of the decisive part played by the electrons in the formation of this effect. From the discussion of the results obtained here, which the author carried out on the basis of the energy band scheme shown in Fig. 3, it follows that the increase of the resistance in the polycrystalline layer during illumination is possible if in the n-type semiconductor photoelectrons are produced. During their recombination, they increase the height of the intercrystalline contact barrier. There are 3 figures and 8 references: 7 Soviet and 1 US.

ASSOCIATION: Vologodskiy gosudarstvennyy pedagogicheskiy institut (Vologda State Pedagogical Institute)

SUBMITTED: July 13, 1959 (initially), January 9, 1960 (after revision)

Card 2/2

EWT(1)/EWT(m)/EWP(b)/EWP(t) IJP(c) AT/JD

ACC NR: AP6001722 SOURCE CODE: UR/0020/65/165/004/0786/0789

AUTHOR: Gol'dman, A. G. (Academician AN UkrSSR); Zholkevich, G. A.; Lazar', N. P.

ORG: Institute of Physics, Academy of Sciences UkrSSR (Institut fiziki Akademii nauk UkrSSR)

TITLE: Stimulated currents and electroluminescence in sublimated zinc sulfide films at 77K

SOURCE: AN SSSR. Doklady, v. 165, no. 4, 1965, 786-789

TOPIC TAGS: zinc sulfide, electroluminescence, thin film circuit, volt ampere characteristic, electric conductivity, uv irradiation

ABSTRACT: This is a continuation of earlier work by the authors (DAN, v. 159, no. 1, 43, 1964) dealing with electroluminescent slit cells with sublimated zinc-sulfide cells. The present article reports briefly tests of these cells at 77K, obtained by applyin a dc voltage (from 100 to 2500 v) and measuring the photolum nescence with a photomultiplier. The slit cell consists of a sublimated ZnS film on a glass substrate. The results showed that when the voltage is raised to a critical value, the cell becomes a negative resistance. Reduction of the voltage after going through the critical value establishes a new state of the cell with stimulated conductivity, which in some cases exceeds the conductivity at room temperature by a factor or 50. The stimulated state is stable over a long time and its volt-ampere characteristic is reversible. The stimulated state can also be established by preliminary ultraviolet

Card 1/2

UDC: 539.293 : 535.376.2

L 14859-66

ACC NR: AP6001722

irradiation of the cell at 77K. It can be eliminated by heating and re-established by one of the indicated methods. In the stimulated state, as in the normal state, the current is proportional to approximately the seventh or eighth power of the voltage. The electroluminescence brightness in stimulated states increases more rapidly than linearly with current, being proportional to almost the square of the current. The brightness obtained in the stimulated state is many times larger than at room temperature. The experimental results are described in some detail. Unlike the results obtained by C. W. Litton and D. C. Reynolds (Phys. Rev. v. 125, no. 5, 516, 1962 and v. 133, no. 2A, A 536, 1964) for CdS, the luminescence was obtained in both unstimulated and stimulated state, and the volt-ampere characteristics are reversible in the present experiment. Orig. art. has: 4 figures.

SUB CODE: 20/ SUBM DATE: 09Jun65/ ORIG REF: 001/ OTH REF: 005

Card 2/2

L 26494-66 EWP(k)/EWT(l)/EWT(m)/ETC(f)/EWG(m)/T/EWP(t)/ETI/EWP(e) IJP(c) RDW/
ACC NR: AP6013058 RM/JD SOURCE CODE: UR/0048/66/030/004/0593/0598

AUTHOR: Gol'dman, A. G.; Zholkovich, G. A.; Lanar', N. P.; Dudnik, V. P.

ORG: None

TITLE: Investigation of the electroluminescence of sublimated films /Report, Fourteenth Conference on Luminescence held in Riga, 16-23 September 1965/

SOURCE: AN SSSR. Izvestiya. Seriya fizicheskaya, v. 30, no. 4, 1966, 593-598

TOPIC TAGS: electroluminescence, electric conductivity, phosphor film, zinc sulfide

ABSTRACT: The paper gives the results of further investigation of sublimated copper-activated zinc sulfide films described by the authors earlier (Doklady AN SSSR, 159, No. 1, 48, 1964) and used for the preparation of slit type electroluminescent cells. The basic preparation procedure was developed by G.A.Zholkevich and V.P.Dudnik. The initial material was ZnS powder with about 10^{-3} g/g Cu. Sublimation from the crucible in a quartz tube began at 850-900°C and was continued for 1 to 2 hours, depending on the film thickness desired; in the process the furnace temperature rose to 1100-1200°C. Sublimates with blue emission were deposited in the 150 to 300° zone with any orientation of the substrate relative to the crucible. Condensation occurred not from a molecular beam, but from a "gaseous cloud" of appreciable density, so that all angles of incidence were equally probable. The operating vacuum was 10^{-4}-10^{-5} mm Hg. The

Card 1/3

reproducibility of the films was good. The advantages of the technique are described and it is noted that it can be used not only for slit type cells but also for cells of the sandwich type. Electroluminescence with a brightness of up to 30 nl could be satisfactorily excited by either ac or dc. The emission peak is located at about 475 mμ. In the case of slit type cells with an interelectrode gap exceeding 1 mm the electroluminescence is uniformly distributed over the interelectrode space. The brightness B is characterized by $B = B_0V^n$, where V is the voltage and n is an exponent that varies from 9 to 12 for the sandwich type cells and from 12 to 14 for the slit type. In fields stronger than 10^4 V/cm, the variation of brightness with the current is given by $B = CI^m$, where m is about 2; in weaker fields the values of m vary in the range from 4 to 9. The sublimated films in the form of slit type cells with aluminum electrodes (gap about 1 mm) were investigated at 77° K in fields of up to 20 kV/cm. A number of interesting facts were observed: upon increase of the voltage to a critical value the cell becomes a negative resistance; after going through the critical voltage the new state with stimulated conductivity (the value of this may be as high as 50 times the conductivity at room temperature) is stable (the current-voltage characteristics are reversible); the stimulated state can also be induced by UV irradiation at 77°K; the stimulated state can be destroyed by heating and re-established by either of the above-mentioned two procedures; in the stimulated state, as in the "ordinary" state, the current is proportional to the voltage to the 7-th or 8-th power; the brightness dependence in the stimulated state, as in the ordinary state, is proportional to the current to approximately the second power; owing to the high current values realiz-

ACC NR: AP6013058

4

able in the stimulated state in this state it is feasible to obtain brightnesses an order of magnitude higher than in the ordinary state. The authors also prepared CdS films 20-30 microns thick by vacuum sublimation onto conducting glass substrates heated to 350 to 450°; these were then drifted with gallium to obtain n-type films with a resistivity of 10^2-10^3 ohm cm. The CdS films were further coated (also by vacuum evaporation) with zinc telluride doped with silver and the combined film was annealed for 5-10 min at 520° to induce ordering. These double layer films also exhibited bright luminescence; the electroluminescence at liquid nitrogen temperature with the voltage in the "conducting" direction attained 10-15 nit, whereas with the voltage in the "blocking" direction the brightness was about an order of magnitude lower. Both the current and the voltage appear to be varying power functions of the voltage. Orig. art. has: 5 figures.

SUB CODE: 20/ SUBM DATE: 00/ ORIG REF: 002/ OTH REF: 005

Card 3/3 CC

L 31496-66 EWT(m)/EWP(t)/ETI IJP(c) JD

ACC NR: AP6013025 SOURCE CODE: UR/0051/66/020/004/0678/0684

56

AUTHOR: Zholkevich, G. A.; Dudnik, V. P. 55

ORG: none B

TITLE: Production and properties of blue-glow ZnS-Cu sublimate electroluminors

SOURCE: Optika i spektroskopiya, v. 20, no. 4, 1966, 678-684

TOPIC TAGS: zinc compound optic material, luminor, vacuum sublimation, light excitation, optic brightness, volt ampere characteristic

ABSTRACT: The authors describe a single-step method of obtaining a blue-glow luminor by sublimation from ZnS-Cu powder (brand FK-106). The sublimation was in a quartz tube 55 mm in diameter and 60 cm long (Fig. 1) in a vacuum 10^{-4}-10^{-5} mm Hg. The preparation of the samples for optical investigations is briefly described. The method offers good reproducibility and elimination of undesirable impurities through the use of relatively low temperature. Excitation of the luminor with a dc and ac field 2-5 x 10^4 v/cm yielded a blue glow throughout the luminor with a brightness of 30 nit and a spectral maximum near 475 nm. The brightness increased with the voltage much more steeply than the current. Microscopic observations have shown that the electroluminescence occurs through the entire volume of the sublimate. When excited with ac, the brightness was produced

Card 1/2 UDC: 535.376

L 31496-66
ACC NR: AP6013025

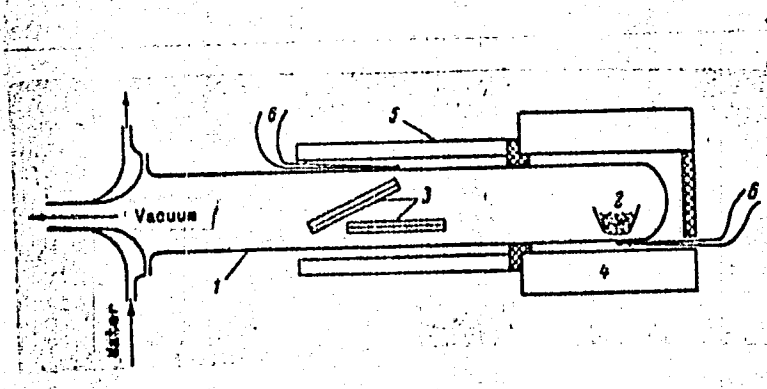


Fig. 1. Diagram of setup to sublimate the luminor. 1 - Quartz tube, 2 - crucible with sublimated luminor, 3 - substrate for the sublimate, 4 - high temperature oven, 5 - low temperature oven, 6 - thermocouples.

in peaks which were in phase with the voltage. In the case of dc, at medium and high brightness the dependence of the brightness on the current was quadratic. The authors thank A. G. Gol'dman for suggesting the topic and a discussion of the results. Orig. art. has: 7 figures.

SUB CODE: 20/ SUBM DATE: 08Feb65/ ORIG REF: 003/ OTH REF: 001

Card 2/2 mc

L 08134-67 EWT(1) IJP(c) AT

ACC NR: AP6033525 SOURCE CODE: UR/0185/66/011/010/1114/1117

AUTHOR: Hol'dman, O. H.--Gol'dman, A. G.; Zholkevych, H. O.--Zholkevich, G. A.; Lazar', M. P.--Lazar', N. P. 49 B

ORG: Institute of Physics, AN URSR, Kiev (Instytut fizyky AN URSR)

TITLE: Electroluminescence of ZhS crystals and electron emission in vacuum

SOURCE: Ukrayins'kyy fizychnyy zhurnal, v. 11, no. 10, 1966, 1114-1117

TOPIC TAGS: electroluminescence, electron emission, zinc sulfide, vacuum

ABSTRACT: A description is given of the conditions of formation, existence, and quenching of the electron emission in vacuum and of associated electroluminescence of the ZnS crystals. Orig. art. has: 5 figures. [Based on authors' abstract]

SUB CODE: 20/ SUBM DATE: 15Jul65/ ORIG REF: 001/ OTH REF: 003/

Card 1/1 nst

ACC NR: AP7001544 SOURCE CODE: UR/0020/66/171/003/0555/0558

AUTHOR: Gol'dman, A. G. (Academician AN UkrSSR); Zholkevich, G. A.; Lazar', N. P.

ORG: Physics Institute, Academy of Sciences UkrSSR (Institut fiziki Akademii nauk UkrSSR)

TITLE: Negative resistance and a stimulated condition in electroluminescent zinc sulfide films at 77K

SOURCE: AN SSSR. Doklady, v. 171, no. 3, 1966, 555-558

TOPIC TAGS: photoluminescence, zinc sulfide, electric measurement

ABSTRACT: The excited state of electroluminescent zinc sulfide films was studied at a temperature of 77K. This excited state was established either by ultraviolet irradiation or by application of electrical fields. The luminescence of the excited state was measured with the electroluminescent circuit placed in a liquid nitrogen cryostat. An FEU-17 photomultiplier connected either to an M-95 galvanometer or to an EPPV-60 automatic recorder was used to perform the measurements. The spectral measurements were made with an SF-4 spectrophotometer. The spectra of the excited and non-excited states practically coincided; the maximum was located at 465 mμ and the halfband width was 76 mμ. A more accurate determination of the stimulated state was made, and the possible effects of redistributing the voltage between the luminophor and the pre-electrode regions was eliminated by measuring the potential drop

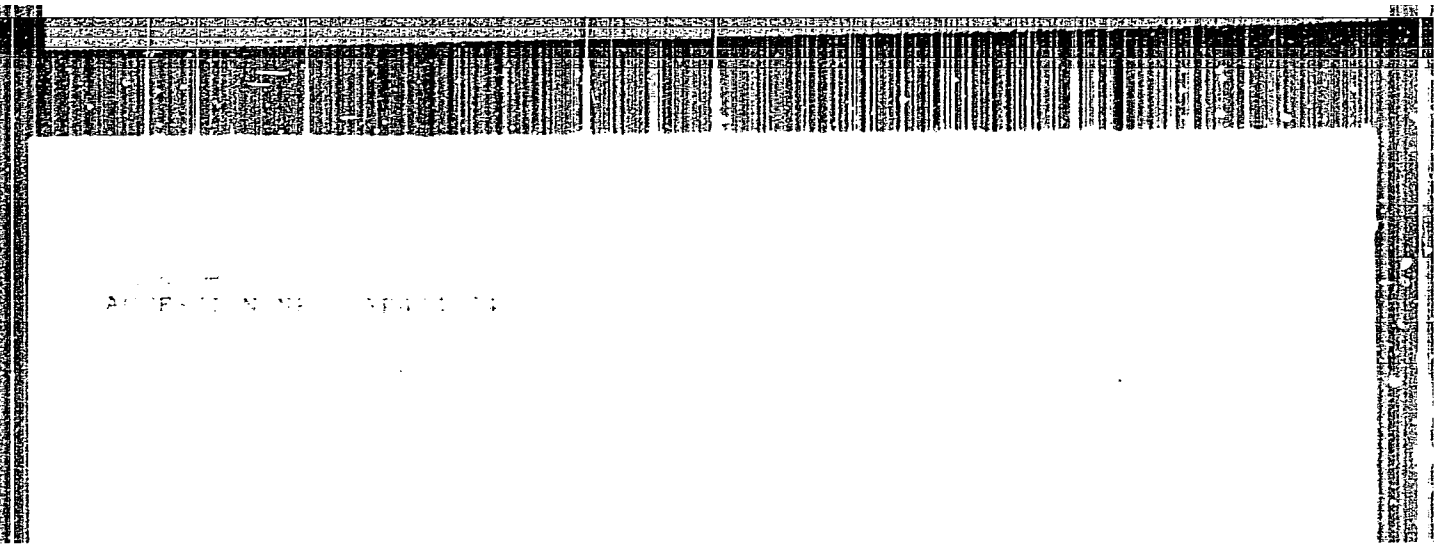
Card 1/2 UDC: 535.376+535.377+537.226.8

ACC NR: AP7001544

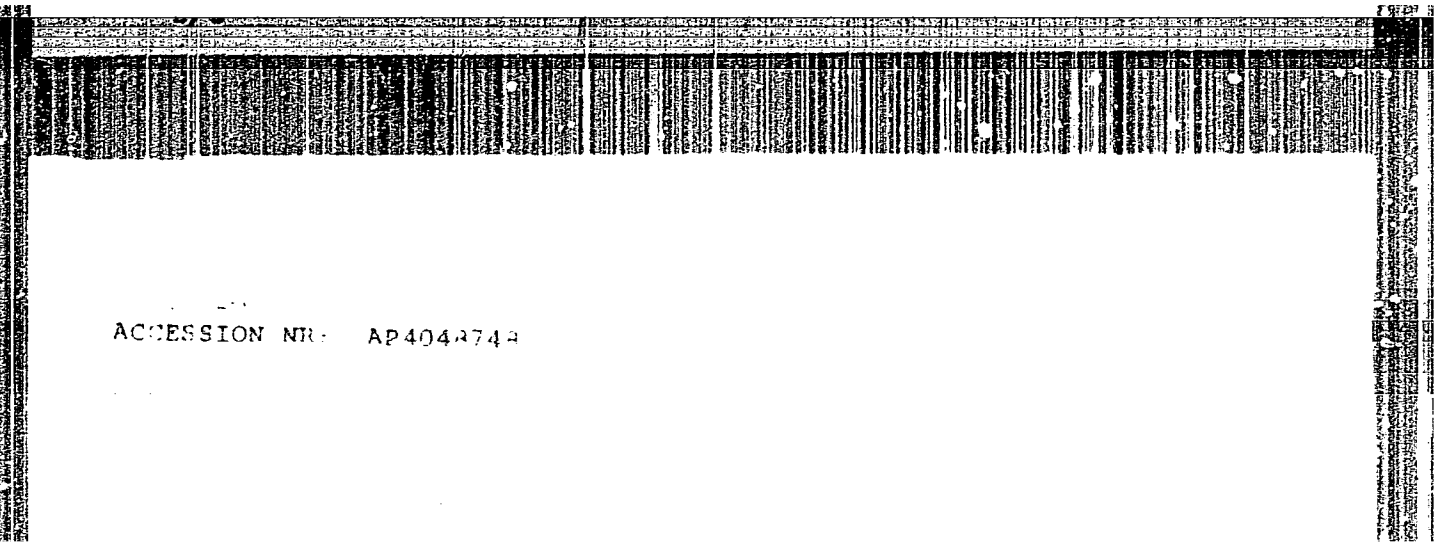
across the luminophor with probes. The electroluminescent film was made by depositing a layer of zinc sulfide 20—30 μ thick on glass; aluminum electrodes were vacuum deposited on the film. Measuring probes, made from tungsten wires 0.2 mm thick, were embedded in the film at a depth of ∿10 μ. The excited state was established by applying a critical voltage (428--640 v for electrodes placed 0.72 mm apart) across the electrodes. Ultraviolet irradiation as well as the critical voltage created a stable excited state that exhibited a several-fold rise in conductivity (at currents from 3×10^{-9} to 65×10^{-6} amp for probes placed 0.27 mm apart) and in electroluminescent brightness. The volt-ampere characteristics were identical and the thermoluminescence had equal peaks for both methods of excitation. Orig. art. has: 4 figures. [IV]

SUB CODE: 20/ SUBM DATE: 26Apr66/ ORIG REF: 002/ OTH REF: 005/
ATD PRESS: 5110

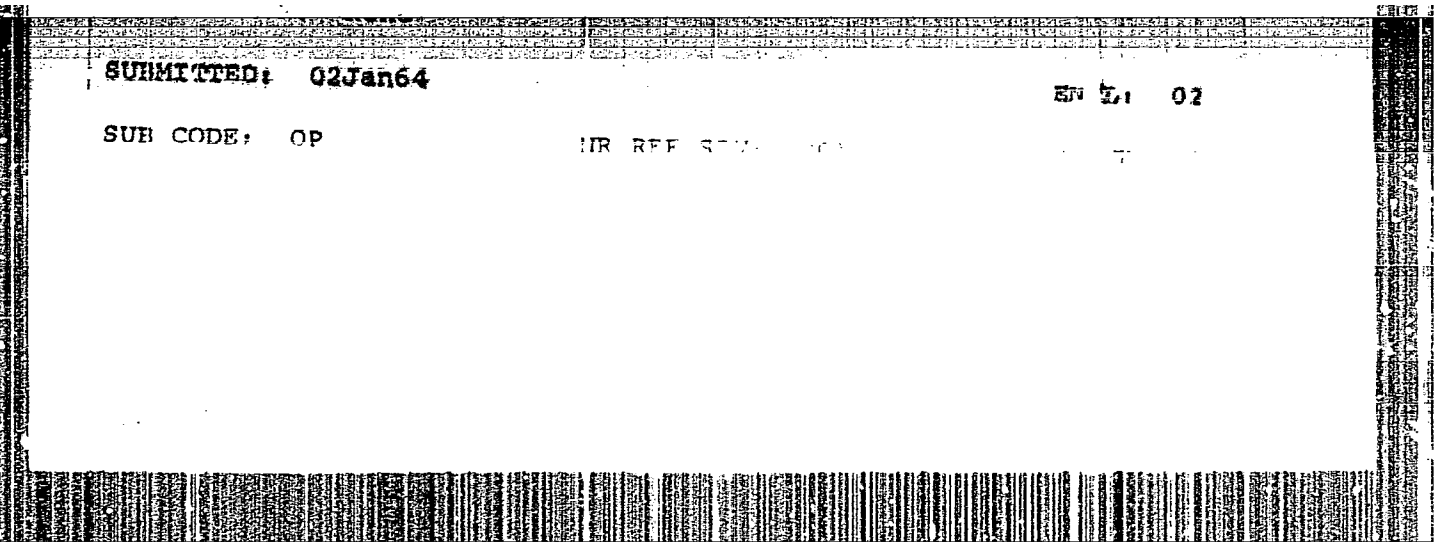
Card 2/2

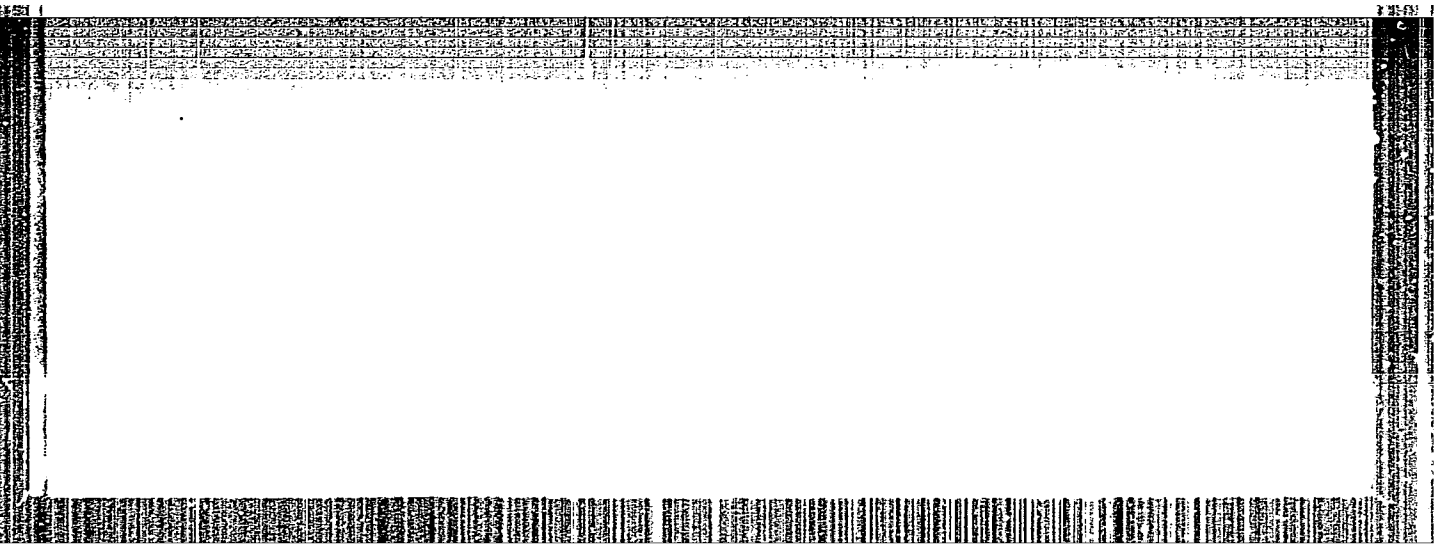


APPROVED FOR RELEASE: 09/19/2001 CIA-RDP86-00513R002064910004-5"



ACCESSION NR: AP4044748





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ZHOLKEVICH, G.A.

Negative photoconductivity. Uch.zap.Ped.inst.Gerts.no.207:105-112 '61. (MIRA 16:5)

1. Vologorskiy gosudarstvennyy pedagogicheskiy institut.
(Photoconductivity)

ZHOLKEVICH, G.A.

Photoelectric properties of films of zinc selenide produced by evaporation in a vacuum. Uch.zap.Ped.inst.Gerts.no.207:250-251 '61.

(MIRA 16:5)

1. Vologodskiy gosudarstvennyy pedagogicheskiy institut.
(Zinc selenide) (Photoelectricity)

ZHOLKEVICH, G.A.

Optical and photoelectric properties of zinc selenide and telluride.
Uch.zap.Ped.inst.Gerts.no.207:251-252 '61.
(MICA 16:5)

1. Vologodskiy gosudarstvennyy pedagogicheskiy institut.
(Zinc selenide—Optical properties) (Zinc telluride—Optical properties)
(Photoelectricity)

A177B

S/194/62/000/008/048/100
D295/D308

AUTHOR: Zholkevich, G.A.

TITLE: Photoelectric properties of layers of zinc selenide obtained by evaporation in vacuum

PERIODICAL: Referativnyy zhurnal. Avtomatika i radioelektronika, no. 8, 1962, abstract 8-4-8 a (Uch. sap. Leningr. gos. ped. in-ta im. A.I. Gertsena, no. 207, 1961, 250-251)

TEZT: The properties of highly photo-sensitive layers of zinc selenide obtained by evaporating the compound in high vacuum are briefly described. The resistivity of the layers amounts to 10^{11} - 10^{12} Ω x cm. By illuminating with light of 100 lux the conductivity of the layers increases approximately 100 times. [Abstracter's note: Complete translation.]

Card 1/1

41004

24.2600, 9.4160

S/058/62/000/009/027/069
A006/A101

AUTHOR: Zholkevich, G. A.

TITLE: Negative photo-conductivity

PERIODICAL: Referativnyy zhurnal, Fizika, no. 9, 1962, 34, abstract 9E245 ("Uch. zap. Leningr. gos. ped. in-ta im. A. I. Gertsena", 1961, v. 207, 105 - 112)

TEXT: A method is described of obtaining ZnSe layers by means of direct Zn and Se interaction. This method makes it possible to produce layers which show negative photo-conductivity. Measurements were made of the spectral distribution of positive and negative photo-conductivity and of photo-emf. Spectral sensitivity ranges for all the three effects are equal, but sensitivity maxima of negative photo-conductivity and photo-emf are shifted to a shorter wavelength range as compared with the sensitivity maximum of positive photo-conductivity. The effect of the electric field and surface gas adsorption upon negative photo-conductivity was studied. A parallelism is noted between characteristics of negative photo-conductivity and photo-emf. A mechanism is suggested which ex-

Card 1/2

S/058/62/000/009/027/069
A006/A101

Negative photo-conductivity

plains the revealed peculiarities of negative photo-conductivity. It is supposed that under definite conditions of obtaining ZnSe layers, intercrystalline barriers may play a decisive part in photo-electric phenomena. Photo-carriers, recombining on the crystal surfaces, change the energy height of the barrier and consequently the magnitude of the layer conductivity.

V. Sidorov

[Abstracter's note: Complete translation]

Card 2/2

S/058/62/000/009/025/069
A006/A101

24.7700,
9.4177

AUTHOR: Zholkevich, G. A.

TITLE: Photo-electric properties of zinc selenide layers obtained by evaporation in a vacuum

PERIODICAL: Referativnyy zhurnal, Fizika, no. 9, 1962, 34, abstract 9E242 ("Uch. zap. Leningr. gos. ped. in-ta im. A. I. Gertsena", 1961, v. 207, 250 - 251)

√B

TEXT: The author investigated optical absorption, photoconductivity, the effect of impurities, and the dependence of dark current and photocurrent upon the magnitude of a field applied in amorphous ZnSe layers, which had been obtained by evaporation in a deep vacuum and had a resistance of up to $10^{11} - 10^{12}$ ohm·cm. To explain the peculiarities revealed, it is assumed that there is a great number of non-deep energy states through which the current carriers move in a "relay" way. It is shown that a series of selenide film properties are affected by internal polarization of the layers; a mechanism of such internal polarization of layers is proposed. The author notes the great resemblance of the

Card 1/2

S/058/62/000/009/025/069
A006/A101

Photo-electric properties of...

specimens investigated with photo-electrets.

V. Sidorov

[Abstracter's note: Complete translation]

Card 2/2

41003

S/058/62/000/009/026/069
A006/A101

9.4170

AUTHOR: Zholkevich, G. A.

TITLE: Optical and photo-electric properties of zinc selenide and telluride

PERIODICAL: Referativnyy zhurnal, Fizika, no. 9, 1962, 34, abstract 9E243 ("Uch. zap. Leningr. gos. ped. in-ta im. A. I. Gertsena", 1961, v. 207, 251 - 252)

TEXT: A method is proposed for obtaining pure and well-crystallized ZnSe and ZnTe layers. Spectral functions of the absorption coefficient and photo-conductivity of the layers were measured; the width of forbidden bands was determined (ZnSe - 2.66 and ZnTe - 2.26 ev). The temperature course of dark current and photocurrent in the layers corresponds to lower thermal activation energies than the width of the forbidden band. In ZnTe, infrared luminescence was revealed; its maximum of intensity at 90°K is located near 1.14 μ. It is assumed that the luminescence is "self-activated" by excessive amount of Te. The effect of alloying the specimens with a number of admixtures was investigated. In alloying with Hg and Cd the specimens show higher photo-sensitivity, extending up to 1 - 1.3 μ.

V. Sidorov

[Abstracter's note: Complete translation]

Card 1/1

ZHOLKEVICH, G.A.

Luminescent heterojunction film on a backing of CdS and ZnTe sublimates. Opt. i spektr. 18 no.5:892-893 My '65.
(MIRA 18:10)

ZHOLKEVICH, V. M.

ZHOLKEVICH, V. M. -- "Physiological Study of the Reaction of Certain Thermophilic and Cold-Resistant Plants to Low Temperatures Above 0°C." Sub 31 Dec 52, Inst of Plant Physiology imeni K. A. Timiryazev. Acad Sci USSR. (Dissertation for the Degree of Candidate in Biological Sciences.)

SO: Vechernaya Moskva January-December 1952

ZHOLKEVICH, V.N.

Study of cellular physiological changes during the action of growth promoting substances on cell growth in the dilation phase. Trudy Inst.fiziol.rast. 8 no.2:215-228 '54. (MLRA 8:5)

1. Moskovskiy gosudarstvennyy universitet im. M.V.Lomonosova.
(Growth promoting substances) (Plant cells and tissues)

ZHOLKEVICH, V.N.

ZHOLKEVICH, V.N.

Effect of irrigation on the metabolism of spring wheat in relation to yield. Fiziol.rast.2 no.2:123-131 Mr-Ap'55. (MLRA 8:10)

1. Institut fiziologii rasteniy imeni K.A.Timiryazeva Akademii nauk SSSR, Moscow
(Wheat--Water requirements) (Plants--Metabolism)

ZHOLKEVICH,V.N.

Causes of plant destruction at low plus temperatures. Trudy Inst.fiziol.rast. 9:3-58 '55. (MLRA 8:8)
(Plants, Effect of temperature on)

ZHOLKEVICH, V.N., kandidat biologicheskikh nauk.

In the K.A.Timiriazev Institute of Plant Physiology (report of the French scientist, P.Prevot). Vest.AN SSSR 26 no.7:79-80 Jl '56. (MLRA 9:9)
(Minerals in plants)

ZHOLKEVICH, V.N.

PETINOV, N.S., professor, doktor biologicheskikh nauk, otvetstvennyy redaktor; ZHOLKEVICH, V.N., redaktor izdatel'stva; SHEVCHENKO, G.N., tekhnicheskiy redaktor

[Biological principles of irrigation farming] Biologicheskie osnovy oroshaemogo zemledeliia; sbornik statei. Moskva, 1957. 711 p. (MLRA 10:8)

1. Akademiya nauk SSSR. Institut fiziologii rastenii.
(Irrigation farming)

COUNTRY : USSR
CATEGORY : Plant Physiology. Respiration and Metabolism. I

ABS. JOUR. : RZhBiol., No. 6 1959, No. 24496

AUTHOR : Zholkevich, V. N.
INST. : Academy of Sciences, USSR
TITLE : Characteristics of Plant Metabolism Under Different Conditions of Water Supply.

ORIG. PUB. : Biol. osnovy. oroshayem. zemled., 1957, 519-535

ABSTRACT : The rate of respiration, translocation rate of assimilates from the leaf to the ear, activity of certain enzymes and carbohydrate content of irrigated and non-irrigated wheat were studied in conditions of Zavolzh'ye (Saratovskaya oblast'). In the non-irrigated wheat, assimilation of $C^{14}O_2$ was reduced and the translocation of assimilates from the leaf to the ear was slowed down. In the leaves of irrigated wheat, before the start of flowering

CARD: 1/3

I

COUNTRY :
CATEGORY :

ABS. JOUR. : RZhBiol., No. 6 1959, No. 24496

AUTHOR :
INST. :
TITLE :

ORIG. PUB. :

ABSTRACT : saccharose was synthesized more intensively than in the non-irrigated wheat; then the rate of synthesis was gradually reduced to zero and the rate of hydrolysis increased. In conditions of drought, the beginning of flowering gave rise to an outburst of synthetic activity, preceding the dying off of the leaf. In the leaves of non-irrigated wheat, the content of soluble carbohydrates (saccharoses and fructosans) not used by the plant and the intensity of respiration were

CARD: 2/3

1

COUNTRY :
CATEGORY :

I

ABS. JOUR. : RZhBiol., No. 6 1959, No. 24496

AUTHOR :
INST. :
TITLE :

ORIG. PUB. :

ABSTRACT : higher than in irrigated wheat. Hence, the energy liberated during respiration was used inefficiently and did not contribute to an increase of biosyntheses. It is assumed that this is connected with the breaking of the chain of ATF conversions which serves as a carrier of energy. Thus, reduction of harvests during drought is a result of disrupted coordination between the functioning of various physiological processes in the leaf apparatus and in the plant as a whole. Bibliography of 80 titles. --Yu. L. Tsel'niker.

CARD: 3/3

ZHOLKEVICH, V.N.; PRUSAKOVA, L.D.; LIZANDR, A.A.

Translocation of assimilates and respiration of conducting tissues as affected by soil moisture [with summary in English]. Fiziol. rast. 5 no.4:337-344 Jl-Ag '58. (MIRA 11:8)

1. Institut fiziologii rastoniy im. K.A. Timiryazeva AN SSSR, Moskva.
(Soil moisture) (Plants, Motion of fluids in) (Plants--Respiration)

AUTHOR: Zholkevich, V.N.

SOV/20-121-6-41/45

TITLE: On the Ratio Between Respiration Intensity and the Content of Phosphorylized Compounds During Drought (O sootnoshenii mezhdu intensivnost'yu dykhaniya i soderzhaniyem fosforilirovannykh soyedineniy pri zasukhe)

PERIODICAL: Doklady Akademii nauk SSSR, 1958, Vol 121, Nr 6, pp 1093 - 1096 (USSR)

ABSTRACT: In connection with the investigation of metabolism due to water supply of plants the author recognized that in the case of drought a relatively intensive respiration on the one hand does under certain conditions not correspond to the intensity of the physiological processes which are closely connected with respiration under normal conditions, on the other hand (Refs 1-3). The oppression of growth and of the processes of biosynthesis, the damage of the protoplasm structure as well as the slowed down metabolism in the case of intensive respiration lead to the conclusion that the oxidative reactions are partly eliminated from the whole metabolism and that the respiratory metabolism is disturbed. Analogue phenomena are also known under the influence of other unfavorable factors (Refs 5 - 17). A possibility of an

Card 1/4

"idle" respiration was proved and in this connection it was talked about "aerobic suffocation" (Refs 18-20). For 8 years the author carried out investigations on the above mentioned problem with sugar beet, wheat, cucumber and pumpkin. Apart from an inhibition of growth a reduced content of phosphorylated substances of the acid-soluble fraction (Table 2) corresponded to a more intensive respiration of the plants. Of course also photosynthetic phosphorylation has to take a certain place in the maintenance of the balance of these substances. As we know this phosphorylation decreases in the case of drought of the soil (Ref 29). Independent from the origin of the phosphorylated substances the final effect of their balance was less good. Thus, in the case of drought a more intensive respiration took place under a reduced supply of the compounds which have a leading part in energetic metabolism. For a physiological evaluation of this phenomenon the following facts have to be kept in mind: 1. The reduction of the content of glucose phosphoric ether was, in the investigations carried out by the author, always accompanied by an (often very considerable) accumulation of monosaccharides. This ratio may

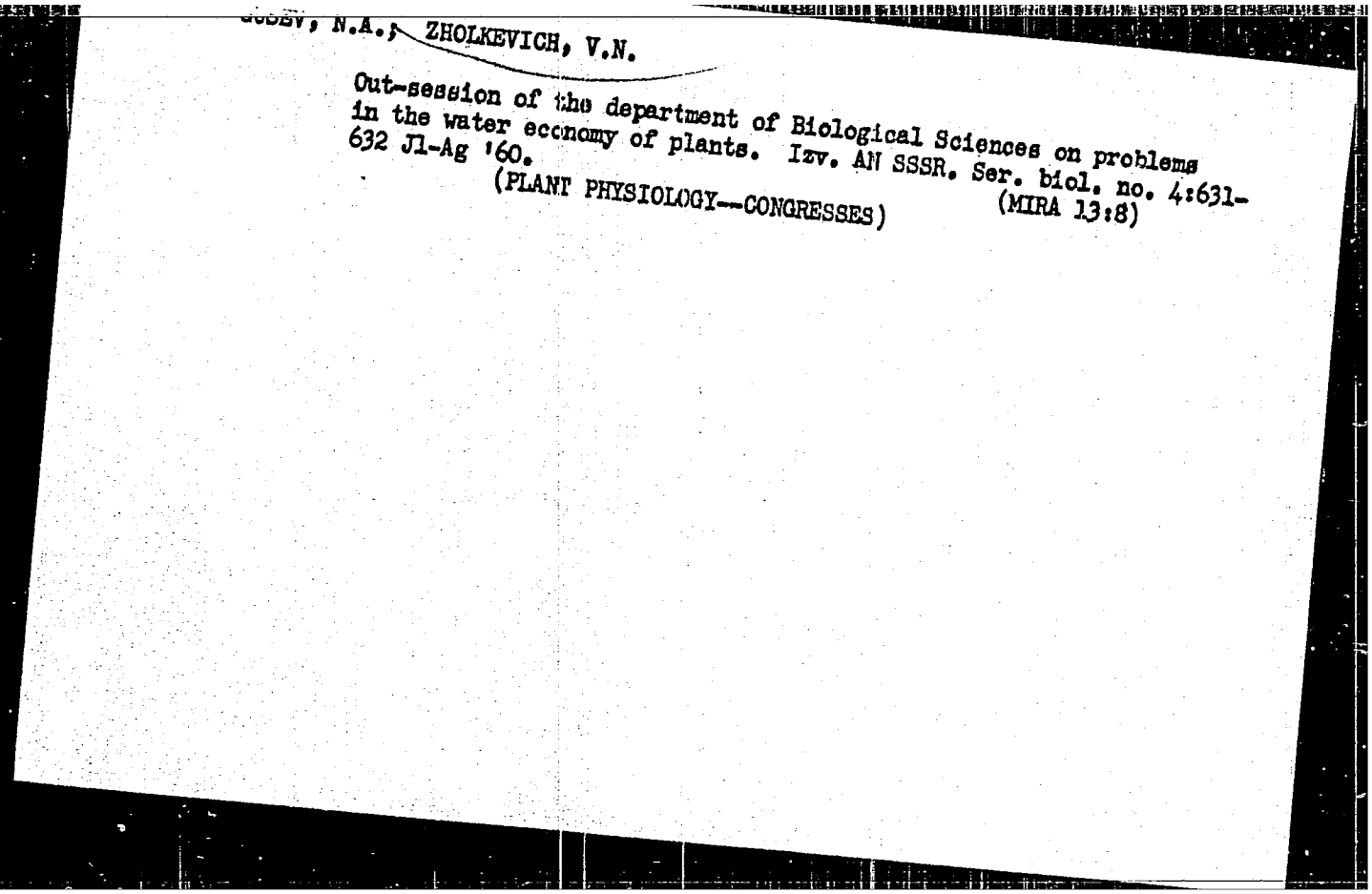
refer to a reduction of carbohydrate phosphorus metabolism (Ref 27). 2. Under optimum conditions of water supply young, growing leaves showed the most intensive respiration. At the same time they contained the highest amount of organophosphorous substances of the acid-soluble fraction. With growing age this amount was steadily reduced (Table 2, Fig 1). In the case of drought the content of phosphorylated substances decreased, particularly in the growing leaves. All these facts and considerations are in favor of the assumption that in the case of soil drought the oxidative reactions and the processes of accumulation and transformation of the produced energy are not so closely related, that means in this connection the effect of respiration is reduced. There are 1 figure, 2 tables, and 29 references, 26 of which are Soviet.

ASSOCIATION: Institut fiziologii rasteniy im. K.A. Timiryazeva Akademii nauk SSSR (Institute of Plant Physiology imeni K.A. Timiryazev, AS USSR)

ZHOLKEVICH, V.N.; KORETZKAYA, T.F.

Metabolism of pumpkin roots in dry soil. Fiziol.rast. 6 no.6: 686-698 N-D '59. (MIRA 13:4)

1. K.A.Timiriazev Institute of Plant Physiology, U.S.S.R. Academy of Sciences.
(Plants, Effect of aridity on)
(Roots (Botany))
(Plants--Metabolism)



GUSEV, N.A.; ZHOLKEVICH, V.N.

Out-session of the department of Biological Sciences on problems in the water economy of plants. Izv. AN SSSR. Ser. biol. no. 4:631-632 Jl-Ag '60. (MIRA 13:8)

(PLANT PHYSIOLOGY--CONGRESSES)

ZHOLKEVICH, V.N.

Session devoted to Professor D.A.Sabinin's 70th birthday.
Fiziol.rast. 7 no.3:381 '60. (MIRA 13:6)
(Sabinin, Dmitrii Anatol'evich, 1890-)

ZHOLKEVICH, V.N.

Eightieth anniversary of Academician N.A.Maksimov's birth. Fiziol. rast. 7 no.4:495-496 '60. (MIRA 13:9)
(Maksimov, Nikolai Aleksandrovich, 1880-1952)

ZHOLKEVICH, V.N., KHOLLER, V.A., KORETSHAYA, T. F., (USSR)

"Measurements of the Energy Balance of Plant Tissues at Different Water Saturation Levels."

Report presented at the 5th Int'l. Biochemistry Congress, Moscow, 10-16 Aug 1961.

ZHOLKEVICH, V.N.

Energy balance in respiring plant tissues under various water-supply conditions. Fiziol. rast. 8 no.4:407-416 '61.
(MIRA 14:11)

1. K.A.Timiriazev Institut of Plant Physiology, U.S.S.R. Academy of Sciences, Moscow.
(Plants—Respiration)

ZHOLKEVICH, V.N.; CHETVERIKOV, A.G.; ROGACHEVA, A.Ya.

Probable participation of free radicals in the biological processes of energy transfer. Fiziol. rast. 12 no.2:193-203 Mr-Ap '65. (MIRA 18:6)

1. Institut fiziologii rasteniy imeni Timiryazeva AN SSSR i Institut khimicheskoy fiziki AN SSSR, Moskva.

ZHOLKEVICH, V.N.; CHETVERIKOV, A.S.; ROGACHEVA, A.Ya.

Respiration efficiency and concentration of free radicals. Dokl. AN SSSR 165 no.1:234-236 N '65. (MIRA 18:10)

1. Institut fiziologii rastenly im. K.A.Timiryazeva AN SSSR i Institut khimicheskoy fiziki AN SSSR. Submitted December 31, 1964.

ZHOLKEVICH, V.N.; KHOLLER, V.A.; ROGACHEVA, A.Ya.

Correlation between respiration and heat loss in growing leaves. Dokl. AN SSSR 158 no.5:1213-1216 O '64. (MIRA 17:10)

1. Institut fiziologii rasteniy im. K.A.Timiryazeva AN SSSR i Moskovskiy gosudarstvennyy universitet im. M.V.Lomonosova. Predstavleno akademikom A.L.Kursanovym.

ZHOLKEVICH, V. N.

"On the two-phasic nature of plant reaction to dehydration."

report submitted for 10th Intl Botanical Cong, Edinburgh, 3-12 Aug 64.

AS USSR, Moscow.

KORETSKAYA, T.F.; ZHOLKEVICH, V.N.

Effect of dehydration on the capacity of tissues of Vicia faba for oxidizing glutamic acid. Fiziol. rast. 11 no.1: 87-92 Ja-F '64. (MIRA 17:2)

1. Institut fiziologii rasteniy imeni K.A. Timiryazeva AN SSSR, Moskva.

ZHOLKEVICH, V.N.

Some problems of bioenergetics. Izv. AN SSSR Ser. biol. 28 no.4:562-573 Jl-Ag'63 (MIRA 16:11)

1. Institute of Plant Physiology, Academy of Sciences of the U.S.S.R., Moscow.

ZHOLKEVICH, V.N. (Moskva); TSEL'NIKER, Yu.L. (Moskva)

Ol'ga Mikhailovna Trubetskova. Bot. zhur. 48 no.5:771-772 My '63. (MIRA 17:1)

PETINOV, N.S., doktor biol. nauk, prof., otv. red.; ALEKSEYEV, A.M., doktor biol. nauk, prof., red.; GENKEL', P.A., doktor biol. nauk, prof., red.; GUSEV, N.A., doktor biol. nauk, red.; ZHOLKEVICH, V.N., kand. biol. nauk, red.; KUL'TIASOV, I.M., red.izd-va; UL'IANOVA, O.G., tekhn. red.

[Water balance of plants as related to their metabolism and productivity] Vodnyi rezhim rastenii v sviazi s obmenom veshchestv i produktivnost'iu. Moskva, Izd-vo AN SSSR, 1963. 334 p. (MIRA 16:10)

1. Akademiya nauk SSSR. Institut fiziologii rasteniy.
(Plants--Water requirements)
(Plants--Metabolism)

ZHOLKEVICH, V.N.

Adsorption capacity of protoplasmic structures under the conditions of a moderate dehydration of plant tissues. Fiziol. rast. 10 no.2:195-203 Mr-Ap '63. (MIRA 16:5)

1. K.A. Timiriazev Institute of Plant Physiology, U.S.S.R. Academy of Sciences, Moscow.
(Plant cells and tissues) (Plants--Respiration)

ZHOLKEVICH, V.N.; ROGACHEVA, A.Ya.

Effect of water deficiency on changes in the acid-soluble organo-phosphorus compounds in plant tissues. Dokl. AN SSSR 151 no.2: 456-459 Jl '63. (MIRA 16:7)

1. Institut fiziologii rasteniy im. K.A.Timiryazeva AN SSSR. Predstavleno akademikom A.L.Kursanovym.
(Phosphorus organic compounds)
(Plants, Effect of aridity on)

ZHOLKEVICH, V.N.; KHOLLER, V.A.; KUSHNIRENKO, S.V.

Aftereffect of cooling on the effectiveness of respiration of cucumber leaves. Fiziol. rast. 9 no.3:353-358 '62. (MIRA 15:11)

1. K.A.Timiriazev Institute of Plant Physiology, U.S.S.R. Academy of Sciences, Moscow and Department of General Chemistry, Moscow State University.

(Plants—Respiration)
(Plants, Effect of temperature on)

ZHOLKEVICH, V.N.; ROGACHEVA, A.Ya.

Effect of 2,4-dinitrophenol on the oxygen consumption by wilting plants. Fiziol. rast. 11 no.4:662-666 Jl-Ag '64.
(MIRA 17:11)

1. Institut fiziologii rasteniy imeni Timiryazeva AN SSSR, Moskva.

USSR/Human and Animal Physiology - The Effect of Physical Factors. T
Ionizing Radiation.

Abs Jour : Ref Zhur Biol., No 3, 1959, 13393

Author : Zholkiver, K.I.

Inst : Kazakh Medical Institute

Title : Vasomotor Reflexes and Permeability of Blood-Carrying Capillaries as a Result of X-Ray Therapy

Orig Pub : Tr. Kafedry rentgenol. i radiol. Kazakshk. med. in-t, 1958, vyp. I, 46-69

Abstract : No abstract.

Card 1/1

ZHOLKIVER, K.I., Cand Med Sci — (diss) "Qualitative characteristics of the reaction of peripheral vessels ~~of the periphery~~ in Radiation therapy." Alma-Ata, 1959, 18 pp (~~United~~ Joint Scientific Council of Institutes of Physiology, ~~Biochem~~ Revised Pathology, Clinical and Experimental Surgery of Acad Sci KaSSR) 200 copies (KL, 34-59, 117)

BALMUKHANOV, S.B.; BELOSKURSKAYA, G.I.; ZHOLKIVER, K.I.

Vasomotor reactions in man during X-ray irradiation for therapeutic and diagnostic purposes. Med. rad. 8 no.8: 10-17 Ag '63. (MIRA 17:10)

1. Iz kafedry rentgenologii i radiologii Kazakhskogo meditsinskogo instituta i Instituta krayevoy patologii AN Kazakhskoy SSR.

BALMUKHANOV, Saim Balmukhanovich, prof.; ZHOLKIVER, Kurt Il'ich, kand. med. nauk;

[Megavolt radiation therapy] Megavol'tnaia lucheveia terapiia. Alma-Ata, Kazakhskoe gos. izd-vo, 1963. 286 p. (MIRA 17:8)

1. Kazakhskiy institut onkologii i radiologii(for both).

ZHOLKOV, S.; BEL'TSOVA, T., master-povar; KARPENKO, V.; OTRADNOV, V.; RKLITSKIY, M. (Yuzhno-Sakhalinsk); USPENSKIY, F.; BARSUKOVA, M.; LARIONOVA, T.

Our plans for 1958. Obshchestv. pit. no.1:7, 11, 21, 31, 35, 39, 51. Ja '58. (MIRA 11:3)

1.Zaveduyushchiy proizvodstvom stolovoy No.32 1-go Chelyabinskogo tresta stolovykh (for Zholkov). 2. Direktor Moskovskoy shkoly kulinarnogo uchenichestva (Karpenko). 3.Glavnyy inzhener Soyuzg giprotorga (for Otradnov). 4.Zaveduyushchiy proizvodstvom stolovoy No.2 "Dal'nevostochnik" (for Rklitskiy). 5. Direktor Moskovskogo tekhnikuma obshchestvennogo pitaniya (for Uspenskiy). 6.Zaveduyushchaya uchebnoy chast'yu Moskovskogo tekhnikuma obshchestvennogo pitaniya (for Barsukova). 7.Direktor stolovoy zavoda "Stankolit" (for Larionova)

(Restaurants, lunchrooms, etc.)
(Cooking schools)

ZHOLKOV, Yu.A.; OKUN', G.S.; PLAKSIN, B.V.

Recording tachometer. Izm. tekh. no. 3:12-14 Mr '61.
(MIRA 14:2)
(Tachometer)

ZHOLKOV, Yu.A.

Thermal inertia of thermocouples. Izm.tekh. no.12:36-37 D '61.
(MIRA 15:1)
(Thermocouples)

ZHOLKOVER, T., inzhener-mayor; PETROV, I., inzhener-polkovnik;
POTYUKOV, N., inzhener-mayor

Periodicity of operational testing. Av. i kosm. 46 no.5:49-51
My '64. (MIRA 17:7)

L 32613-66 EWT(d)/EWT(l)/EWP(v)/EWP(k)/EWP(h)/EWP(l) TG/GD/BC

ACC NR: AT6011929 SOURCE CODE: UR/0000/66/000/000/0078/0084

52
B+1

AUTHOR: Perov, V. I. (Lyubertsy); Zholkover, T. D. (Lyubertsy)

ORG: none

TITLE: Methods for evaluating and some ways for increasing the reliability of the results of automatic control

SOURCE: Vsesoyuznaya konferentsiya po avtomaticheskomu kontrolyu i metodam elektricheskikh izmereniy; trudy konferentsii, t. 2: Izmeritel'nyye informatsionnyye sistemy. Ustroystva avtomaticheskogo kontrolya. Elektricheskiye izmereniya neelektricheskikh velichin (Automatic control and electrical measuring techniques; transactions of the conference, v. 2: Information measurement systems. Automatic control devices. Electrical measurements of nonelectrical quantities). Novosibirsk, Izd-vo Nauka, 1966, 78-84

TOPIC TAGS: reliability engineering, automatic control, system reliability

ABSTRACT: Reliability is the decisive factor in automatic control since the information gathered during the control of technological devices must reflect accurately their actual state. The quantitative measure of reliability is expressed by the probability that the result is correct. Of all the possible factors affecting the reliability of automatic control, the authors investigate only the loss of information caused by the quality of the control devices.

Card 1/2

L 32613-66

ACC NR: AT6011929

It is assumed that the initial information on the controlled plant is complete. The newly developed formalism is applied to the control of the operational readiness of devices. Orig. art. has: 26 formulas, 1 figure, and 5 tables.

SUB CODE: 09, 14 / SUBM DATE: 29Nov65 / ORIG REF: 003 / OTH REF: 002

Card 2/2

ACC NR: AT7004929 SOURCE CODE: UR/0000/66/000/000/0096/0100

AUTHOR: Zholkover, T. D. (Moscow); Perov, V. I. (Moscow); Tarasova, L. S.

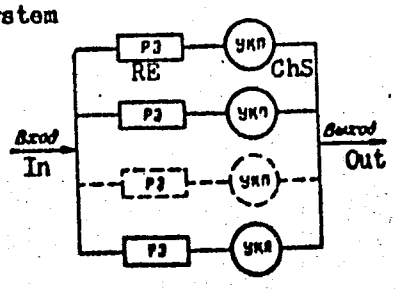
ORG: none

TITLE: Effect of automatic monitoring and switchover devices on reliability of systems with redundancy

SOURCE: Vses. konf. po avtomatich. kontrol i metodam elektrich. izmereniy, 6th, 1964. Avtomatich. kontrol' i metody elektrich. izmereniy; tr. konf., t. I: Teoriya izmerit. info. sistem (Automatic control and electrical measuring techniques; transactions of the conference, v. 1: Theory of measuring information systems). Novosibirsk, Izd-vo Nauka, 1966, 96-100

TOPIC TAGS: reliability, redundancy, automatic control system

ABSTRACT: Systems with active parallel redundancy in which reserve elements RE (see figure) are controlled by check-and-switchover ChS units is considered. Reliability of one branch under m-th load conditions is given by: $P_m = P_m^* P_{mk}$, where P_m^* - reliability of RE under m-th conditions; P_{mk} - reliability of ChS under m-th conditions. A set of differential equations describes the



Card 1/2

ACC NR: AT7004929

reliability conditions in terms of failure rates and r_m (probability that a branch failure is accompanied by elimination or self-elimination of RE). As a result, the probability of successful operation of the entire system is determined. These particular cases are considered: (1) Failure rates are constant in time (exponential law of distribution of reliable-operation time); (2) A definite ratio of failure rates of RE and ChS; (3) Reliability characteristics of RE and ChS do not change when the number of branches changes; starting from a certain value of the redundancy rate, the probability of successful operation decreases. When the probability of RE self-elimination is sufficiently high, ChS devices are superfluous. Orig. art has: 1 figure and 30 formulas.

SUB CODE: 09, 14 / SUBM DATE: none / ORIG REF: 004

Card 2/2

ACC NR: AT7004930 SOURCE CODE: UR/0000/66/000/000/0101/0106

AUTHOR: Zholkover, T. D. (Moscow); Yakovlev, A. I. (Moscow)

ORG: none

TITLE: Redundancy required in measuring instrument for obtaining maximum certainty of quality control

SOURCE: Vses. konf. po avtomatich. kontrol i metodam elektrich. izmereniy, 6th, 1964. Avtomatich. kontrol' i metody elektrich. izmereniy; tr. konf. t. 1: Teoriya izmerit. info. sistem (Automatic control and electrical measuring techniques; transactions of the conference, v. 1: Theory of measuring information systems). Novosibirsk, Izd-vo Nauka, 1966, 101-106

TOPIC TAGS: redundancy, measuring instrument, reliability, quality control

ABSTRACT: Reliability of instruments and their schemes used in checking quality (parameters within specified tolerances) is considered. Probabilities of correct quality control in a scheme using n lower-tolerance-measuring instruments and m upper-tolerance instruments (n- and m-rate redundancies) are determined. Maximum certainty of quality control could be achieved through a parallel scheme of measuring devices with n and m redundancies; however, the probability of false operation of an instrument not intended to measure a parameter in question increases. Hence, caution must be used in designing parallel redundant schemes. Maximum certainty in the correctness of "go" results can be obtained in a parallel-redundancy scheme with output elements connected in series. Orig. art. has: 4 figures, 20 formulas, and 1 table.

Card 1/1 SUB CODE: 09, 14 SUBM DATE: none / ORIG REF: 002

ZHOLKOVSKIY, A.K.; MEL'CHUK, I.A.

Possible method and instruments of semantic synthesis. NTI no.6:23-28 '65. (MIRA 18:9)

ZHOLKOVSKIY, D.I.

Device for additional veneer sheet cutting from logs. Der. prom. 15 n..1:25-26 Ja '66. (MIRA 19:1)

ZHOLKOVSKIY, S.M.

PHASE I BOOK EXPLOITATION 888

U.S.S.R. Komitet standartov, mer i izmeritel'nykh priborov

Pribory dlya izmereniya temperatury i ikh poverka; instruktivnyye materialy (Temperature Measuring Instruments and Their Calibration; Instructions) Moscow, Mashgiz, 1955. 470 p. 10,000 copies printed.

Sponsoring Agency: Vsesoyuznyy nauchno-issledovatel'skiy institut metrologii.

Compilers: Gordov, A.N., Candidate of Physical and Mathematical Sciences, Zholkovskiy, S.M., Engineer, and Sosnovskiy, A.G., Engineer; Eds.: Gordov, A.N., Candidate of Physical and Mathematical Sciences and Pilipchuk, B.I., Candidate of Technical Sciences; Tech. Ed.: Sokolova, T.F., Managing Ed. for literature on machine building and instrument making (Mashgiz): Pokrovskiy, N.V., Engineer.

PURPOSE: This set of instructions is intended as a guide for state, industry and trade controllers in testing and calibrating temperature measurement instruments in accordance with specifications established by the Council of Ministers' Committee on Standards, Measures and Measuring Instruments.

Card 1/9

COVERAGE: The book contains instructions for testing and calibrating temperature measuring devices. Part 1, designed primarily for inspectors and controllers responsible for the correct usage of measuring instruments in various branches of industry, carries a description of the more commonly used instruments and provides basic instructions on their use. Part 2 contains instructions for calibrating the different types of instruments. A very extensive Supplement, which actually forms a third part, contains tables used in checking the instruments, and samples of test forms. The book was drafted and compiled by A.N. Gordov, Candidate of Physical and Mathematical Sciences and staff member of the All-Union Scientific Research Institute of Metrology (VNIIM), and engineers S.M. Zholkovskiy and A.G. Sosnovskiy of the Moscow State Institute of Measures and Measuring Instruments (MGIMIP). Final editing, rewriting and preparation for printing was done by the following members of the All-Union Scientific Research Institute of Metrology: Chapter I by A.N. Gordov, Chapter II and instructions 1, 2, and 3 by F.Z. Aliyeva and B.I. Pilipchuk, Chapter III and instruction 4 by F.Z. Aliyeva, N.Z. Dolgiy, N.N. Medvedev, B.I. Pilipchuk and Yu. F. Fal'berg, Chapter IV and instruction 5 by F.Z. Aliyeva and B.I. Pilipchuk, Chapter V and instructions 6, 7, and 8 by B.I. Pilipchuk and N.N. Ergardt, Chapter VI and instructions 9 and 10 by A.S. Arzhanov,

Chapter VII and instruction 11 by I.I. Kirenkov, Chapters VIII, IX, X, and instruction 12, 13 and 14 by A.N. Gordov, I.I. Kirenkov and E.A. Lapina. All the above persons participated in writing Chapter XI. In addition to the tables in the Supplement the book contains another 45 tables and 148 diagrams in the first two parts. There is a total of 30 references, all Soviet.

TABLE OF CONTENTS:

Temperature Measuring Instruments (Cont.) 888

Card 5/9

PART 2. SPECIFICATIONS

Card 7/9

Temperature Measuring Instruments (Cont.) 888

Supplements 339

Bibliography 469

AVAILABLE: Library of Congress

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Card 9/9

MESHCHERSKIY, Nikita Alekseyevich; ZHOLKOVSKIY, S.M., redaktor; SKVORTSOV, I.M., tekhnicheskiy redaktor

[Salinometers; their design, operation, and control] Solemery (Ustroistvo, ekspluatatsiia i poverka). Moskva, Gos. energeticheskoe izd-vo, 1954. 135 p. (MIRA 8:4)
(Salinometer)

ZHOLKOVSKIY, S.M.

Conference on instruments used in thermal and automatic control.
Izm.tekh. no.4:86 Jl-Ag '56. (MLRA 9:11)
(Thermometry) (Automatic control)

ZHOLKOVSKIY, S.M.

[redacted]

Intrafactory inspection of thermometering instruments. Izm. tekh. no.4:94 Jl-Ag '57. (MLRA 10:8)

(Thermometers)

ZHOLKOVSKIY, S.M., red.

[Instructions 265-54 for checking industrial capillary viscosimeters] Instruktsiia 265-54 po poverke rabochikh kapilliarnykh viskozimetrov. Izd. ofitsial'noe. Moskva, 1957. 16 p. (MIRA 14:5)

1. Russia(1923- U.S.S.R.) Komitet standartov, mer i izmeritel'nykh priborov.
(Viscosimeter--Testing)

ZHOLKOVSKIY, S.M., red.; KUZNETSOVA, M.I., red. izd-va; MATVEYEVA, A.Ye., tekhn. red.

[Instructions 261-55 for checking areometers] Instruktsiia 261-55 po poverke areometrov. Izd. ofitsial'noe. Moskva, 1957. 32 p. (MIRA 14:5)

1. Russia(1923- U.S.S.R.) Komitet standartov, mer i izmeritel'nykh priborov.
(Hydrometer--Testing)

L 6402-66 EWT(m)/EPF(c)/EWP(t)/ETI(z)/EWP(b) IJP(c) JD/HW

ACC NR: AP5025709 SOURCE CODE: UR/0286/65/000/018/0058/0058

34
B

INVENTOR: Kurilenko, V. G.; Zholkovskiy, V. V.; Komin, N. Ye.

TITLE: Magnetically soft, nickel-magnesium-zinc ferrite. Class 21, No. 174733 [Announced by the Plant of the State Committee on Radioelectronics, SSSR (Predpriyatiye gosudarstvennogo komiteta po radioelektronike SSSR)]

SOURCE: Byulleten' izobreteniy i tovarnykh znakov, no. 18, 1965, 58

TOPIC TAGS: ferrite, nickel oxide containing ferrite, magnesium oxide containing ferrite, zinc oxide containing ferrite, magnetic soft ferrite, cobalt oxide containing ferrite, copper oxide containing ferrite

ABSTRACT: This Author Certificate introduces a magnetically soft, nickel-magnesium-zinc ferrite containing (mol%) 46—49 iron oxide, 5.5—31.2 nickel oxide, 10—14 magnesium oxide, and 12—22 zinc oxide. To make the ferrite a suitable material for the frequency-controlling core of various generators (i.e., to keep losses at a low level with the increase in magnetic-field intensity in the frequency range of 3—50 Mg), cobalt oxide in the amount of 0.3—3.5 mol% is added. In a variant, 0.5 to 6.0 mol% copper oxide is added to the ferrite as specified in order to increase its initial magnetic permeability. [ND]

SUB CODE: MM/ SUBM DATE: 01Jul63/ ATD PRESS: 4139

Card 1/1 UDC: 621.318.13

0901 1716

ZHOLKVER, A.

Crisis in the Ruhr Valley and West German trade unions. Sov. profsoiuzy 7 no.20:56-57 O '59. (MIRA 12:12)
(Ruhr Valley--Coal mines and mining)
(Germany, West--Trade unions)

ZHOLKVER, V.Ye. (Bokovo-Antratsit, Voroshilovgradskaya oblast')

Traumatic diaphragmatic hernia. Khirurgiia no.9:68 S '54. (MLRA 7:12)
(HERNIA, DIAPHRAGMATIC,
traum.)

ZHOLKVER, V.Ye.

Holder for double-bladed knives. Vest.khir.76 no.9:117 O '55.
(MLRA 9:1)

1. Iz Khirurgicheskogo otdeleniya (zav. V.Ye.Zholkver) Bokovo-Antratsitovskoy bol'nitsy Voroshilovgradskoy oblasti.
(SURGICAL INSTRUMENTS AND APPRATUS)

ZHOLKVER, V.Ye.; YUVCHENKO, V.I.

Late results of femoral herniotomy by the V.E. Zholkver method.
Khirurgiia no.12:64-66 '61. (MIRA 15:11)

1. Iz Bokovo-Antratsitovskoy rayonnoy bol'nitsy (glavnyy vrach I.Ye. Kornev).

(FEMUR—HERNIA)

ZHOLKVER, V.Ye.

Triple blade and its holder. Ortop., travm. i protez. no.8:61-62 '62. (MIRA 17:10)

1. Iz Bokovo-Antratsitovskoy bol'nitsy (glavnyy vrach - I.Ye. Kornev).

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