

ACCESSION NO. 04/03/2001

ASSOCIATION: INTERNAL SECURITY AND ...

SUB CODE: EC

ABDULLAYEV, G.B., red.

[Selenium, tellurium and their applications] Selen, tellur
i ikh primenenie. Baku, Izd-vo AN Azerbaidzhanskoi SSR,
1965. 166 p. (MIRA 18:7)

1. Akademiya nauk Azerbaydzhanskoy SSR, Baku. Institut fiziki.

"APPROVED FOR RELEASE: 04/03/2001

CIA-RDP86-00513R000100120003-4

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CIA-RDP86-00513R000100120003-4"

L 3537-66 EPA(s)-2/EWT(m)/EPF(c)/ETC/SPF(n)-2/EWG(m)/EWP(t)/EWP(b) ZJP(c)
ACCESSION NR: AP5015450 RDW/JD/WW/JG UR/0249/65/021/003/0018/0021

AUTHORS: Abdullayev, G. B.; Abdinov, D. Sh.; Aliyev, G. M. 71
69

TITLE: Effect of oxygen on transport phenomena in selenium of high 5, 7
purity 41

SOURCE: AN AzerbSSR. Doklady, v. 21, no. 3, 1965, 18-21

TOPIC TAGS: selenium, selenium rectifier, thermal conductivity,
electric conductivity, thermal emf, Hall effect, carrier density,
Hall mobility

ABSTRACT: The authors report results of investigations of the influ-
ence of antimony impurity, which effectively compensates the acceptor
action of oxygen, on the electric properties of crystalline and
liquid selenium and on the thermal conductivity of crystalline selen-
ium of purity 99.9999 per cent before and after deoxidation and after
oxidation. The deoxidation was by the method of P. T. Kozyrev (FTT
v. 1, 113, 1959). The procedure for measuring electric conductivity
and the thermal conductivity as functions of the impurities and of the

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temperature was described earlier (FTT v. 4, 1018, 1964 and elsewhere). The Hall effect was measured with direct current by a compensation method in a magnetic field of 20,000 Oe. The article includes a table of the dependence of the electric conductivity, the thermal conductivity, the Hall density, and the Hall mobility prior to deoxidation, and also of the electric conductivity and thermal conductivity after deoxidation, as functions of the antimony content, and plots of the temperature dependence of the electric conductivity before and after deoxidation. The results show that the antimony has different effects on the electric and thermal conductivities before and after deoxidation, and varies with the antimony content. The jump in the conductivity occurring at the melting point also depends on the oxygen content. The results have a direct bearing on the fact that various mechanical properties of selenium rectifiers and photocells are governed principally by their oxygen content. Orig. art. has: 2 figures and 1 table.

ASSOCIATION: Institut fiziki AN AzerbSSR (Institute of Physics, AN AzerbSSR)

Card 2/3

L 3537-66

ACCESSION NR: AP5015450

SUBMITTED: 14Sep64

ENCL: 00

SUB CODE: SS

NR REF SOV: 013

OTHER: 002

Card

AP
3/3

ABDULLAYEV, G.B.; IBRAGIMOV, N.I.; MAMEDOV, Sh.V.; DZHUVARLY, T.Ch.

State of an Mn impurity in Se. Dokl. AN Azerb. SSR 21 no.4:13-16
'65. (MIRA 18:7)

1. Institut fiziki AN AzerSSR.

"APPROVED FOR RELEASE: 04/03/2001

CIA-RDP86-00513R000100120003-4

APPROVED FOR RELEASE: 04/03/2001

CIA-RDP86-00513R000100120003-4"

L 16505-66 EWT(1)/EWT(m)/ETC(f)/ENG(m)/EWP(t) IJP(c) RLW/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
8+1

ORG: none

TITLE: Photoeffect in selenium pn transitions

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, semiconducting 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

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2

L 16505-66

ACC NR: AT6001334

2

thickness and temperature. At constant temperature, the initial sensitivity rose, reached a maximum (about 2 ma) and then dropped sharply with time; the sharpest changes occurred at the higher temperatures. This held true for different thicknesses: the maximum was at 0.5 μ . The thickness of the n-type layer was expressed by $l = (2Dt)^{1/2}$, where D is the diffusion coefficient and t is time. To prevent aging of the photocells it was recommended that the optimal thickness of the n-layer be kept at 0.5 to 1 μ and the upper electrode have a small diffusion coefficient; aging was eliminated in CdSe or CdS by using elements of 0.5 μ with Au of 0.1 μ thickness for the upper electrode. For zero illumination the temperature dependence of the volt-ampere curves was determined for junctions of 99.99999% Se. The density of reverse current decreased with increase in temperature and attained saturation in the 353 to 413 $^{\circ}$ K range. Activation energy (ΔE) was obtained from $\ln I$ vs $1/T$ plot since $I = \exp(-\Delta E/kT)$ and came out to 0.6 ev. The volt-ampere characteristics were also given for different amounts of illumination at 373 $^{\circ}$ C where the current increased proportionally with illumination. These photodiodes were rated superior to standard selenium photoelements on the basis of sensitivity and response. Orig. art. has: 6 figures, 6 formulas.

SUB CODE: 11,09,20/

SUBM DATE: 10Mar65/

ORIG REF: 010/

OTH REF: 009

High purity SECard 2/2 *SM**44, 18*

L 17729-66 EWT(m)/ETC(f)/EWG(m)/EWP(t) LJP(c) RDW/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 \uparrow

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

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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:

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

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 TS

L 17731-66 EWT(m)/EWP(t) LJP(c) JD/GS
ACC NR: AT6001330

SOURCE CODE: UR/0000/65/000/000/0125/0128

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

ORG: *none*

39
B+1

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

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L 17731-66
ACC NR: AT6001338

at 150°C. This was explained on the basis of the longitudinal traps characteristic of Mn impurities in Se, which are more effective in capturing charge carriers at temperatures above 120 to 130°C. The direct and reverse values of the differential resistance (ohms) were given as a function of the applied potential (v) at 150°C. Up to 150°C, all samples had normal rectification values. AT 150°C and above, anomalous rectification took place up to 3 to 4 v; the reverse resistance behaved linearly, whereas the direct resistance was higher up to 4 v and exhibited a maximum at 3v. This behavior was compared to a similar one in Si-SiO₂ at -196°C. The Mn impurities formed deep traps in the region of the pn charge transition in Se-CdSe which resulted in an expanded temperature range for current saturation and anomalous rectification at low voltages and at 150 to 170°C. Orig. art. has: 2 figures.

SUB CODE: 11, 20/ SUBM DATE: 10Mar65/ ORIG REF: 002/ OTH REF: 006

Card 2/2

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: UK/0000/65/000/000/0020/0026

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

ORG: none

22
21
SH

TITLE: Effect of sodium impurities on the optical properties of selenium 27

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

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2

L 04976-67 EWT(1)/EWT(m)/T/EWP(t)/ETI IJP(c) JD/JG/AT
ACC NR: AP6030801

SOURCE CODE: UR/0249/66/022/005/0012/0013

AUTHOR: Abdullavev, G. B.; Nasirov, Ya. N.; Feyziyev, Ya. S.

ORG: Institute of Physics, AzerbSSR (Institut fiziki AzerbSSR) *Academiia Nauk AzerbSSR*

TITLE: Effect of partial substitution of lanthanum for tin on the thermoelectrical properties of SnTe *27 27 27*

SOURCE: AN AzerbSSR. Doklady, v. 22, no. 5, 1966, 12-13

TOPIC TAGS: tin telluride, lanthanum telluride, telluride, thermoelectric property

ABSTRACT: Thermoelectric properties of homogeneous, single-phase specimens of $[SnTe]_{1-x}[LaTe]_x$ alloy, where x is equal 0.02—0.08, have been investigated. The curve of composition dependence of thermal emf, at room temperature, was found to have a maximum of about $49 \mu v/^{\circ}k$ at $x = 0.02$ compared to $20 \mu v/^{\circ}k$ for SnTe, where the concentration of holes drops to a minimum of $3.47 \cdot 10^{19}/cm^3$ compared to $2 \cdot 10^{21} cm^{-3}$ for SnTe. The lattice heat conductivity changes correspondingly from $6.2 \cdot 10^{-3} cal/cm \cdot deg \cdot sec$ for SnTe to $5.4 \cdot 10^{-3} cal/cm \cdot deg \cdot sec$. The hole mobility reaches a maximum of $1080 cm/v \cdot sec$ at $x = 0.01$, compared to $25 cm/v \cdot sec$ for SnTe. It is assumed that partial replacement of tin by lanthanum brings about a recovery of the SnTe lattice and simultaneously generates the new defects in connection with formation of SnTe-LaTe solid solutions. Orig. art. has: 3 figures.

SUB CODE: 11/ SUBM DATE: 12Mar65/ ORIG REF: 001/ OTH REF: 003/

[WW]

Card 1/1 *llh*

L 07575-67 EWT(m)/EWP(t)/ETI IJP(c) JD

ACC NR: AP6028891

SOURCE CODE: UR/0249/66/022/003/0017/0019

AUTHOR: Abdullayev, G. B.; Nesirov, Ya. N.; Osmanov, T. G.

ORG: Institute of Physics (Institut fiziki)

TITLE: Investigation of electrophysical properties of certain solid solutions in SnTe-Sn(S₁Se) systems

SOURCE: AN AzerbSSR. Doklady, v. 22, no. 3, 1966, 17-19

TOPIC TAGS: tin compound, telluride, thermoelectric power, Hall effect, thermal conduction, solid solution, carrier density, crystal lattice defect

ABSTRACT: The authors report an investigation of the thermoelectric properties of tin telluride when small amounts of tellurium are replaced with sulfur and selenium. The tests consisted of measurement of the thermoelectric power, the Hall emf, and the thermal conductivity at room temperature as a function of the composition of the solid solutions. The compositions used were [SnTe]_{1-x} - [SnS]_x and [SnTe]_{1-x} - [SnSe]_x with the values of x ranging from 0.02 to 0.08. A plot of the thermoelectric power against the composition of the solid solutions shows that when tellurium is replaced with sulfur and selenium, a maximum is observed in the region x ~ 0.04. At the same time, the carrier density decreases first rapidly and then slowly, from 2.1 x 10²¹ cm⁻³ for the SnTe to 10²¹ cm⁻³ in the case when sulfur is used, and to 1.2 x 10²⁰ cm⁻³ when tellurium is used. Ath anomalous behavior of the thermoelectric power remains the same at all temperatures. A maximum of thermal conductivity is observed at x ~ 0.04.

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L 07575-67

ACC NR: AF6026891

It is proposed that partial substitution of sulfur and selenium for the tellurium results simultaneously in two processes: healing of the lattice defects, which leads to a sharp decrease in the carrier density and in the thermal resistance of the lattice, and formation of a solid solution, which increases the number of defects inherent in solid solutions of these systems. Orig. art. has: 3 figures.

SUB CODE: 20/ SUBM DATE: 19Nov65/ OTH REF: 003

Card 2/2 LS

L 07091-67 EWT(m)/EWP(t)/ETI IJP(c) JD/HW

ACC NR: AP6019007

SOURCE CODE: UR/0109/66/011/006/1151/1154

AUTHOR: Abdullayev, G. B.; Chelnokov, V. Ye.; Iskender-zade, Z. A.; Dzhafarova, E. A.

54
47
B

ORG: none

TITLE: Effect of junction-metal-type impurities on lifetime of minority carriers in n-Si

SOURCE: Radiotekhnika i elektronika, v. 11, no. 6, 1966, 1151-1154

TOPIC TAGS: carrier lifetime, semiconductor research, semiconductor carrier, MINORITY CARRIER, PN JUNCTION, NICKEL, METAL DIFFUSION

ABSTRACT: The results are reported of an experimental study of the effect of Ni on the lifetime of minority carriers contained in the n-base of Si p-n junctions produced by the diffusion alloy process. The p-n junctions were prepared by introducing Al into Si having $\rho = 20$ ohms·cm. Plots of hole lifetime vs.

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UDC: 539.299.52.011.25:621.315.592.2

L 07091-67

ACC NR: AP6019007

7

temperature and vs. injection level are shown, as are plots of hole lifetime vs. temperature measured (at a low injection level) with specimens that contained some Ta, W, and Ti. It is found that the introduction of Ni blunts the action of more efficient recombination centers having $\Delta E_t = 0.55$ ev. Ni atoms diffuse in Si and shield other impurity or dislocation centers. "The authors wish to thank V. M. Tuchkevich for his attention to the work and his valuable comments."

Orig. art. has: 3 figures.

SUB CODE: 20, 09 / SUBM DATE: 11Aug65 / ORIG REF: 004 / OTH REF: 008

Card 2/2 *XC*

L 07250-67 EWT(d)/EWT(m)/EWP(w)/EWP(v)/EWP(t)/EII/EWP(k)/EWP(h)/EWP(l)
ACC NR: AF6028918 IJP(c) JD/RH SOURCE CODE: UR/0233/66/000/001/0077/0084

AUTHOR: Abdullayev, G. B.; Mekhtiyeva, S. I.; Abdinov, D. Sh.; Aliyev, G. M.

ORG: none

TITLE: New properties of high purity selenium

SOURCE: AN AzerbSSR. Izvestiya. Seriya fiziko-tekhnicheskikh i matematicheskikh nauk, no. 1, 1966, 77-84

TOPIC TAGS: selenium, chemical purity, oxidation, thermoelectric power, heat conduction, physical diffusion, activation energy, semiconductor conductivity

ABSTRACT: In view of the fact that many properties of selenium are still not understood, the authors have checked on the hypothesis that many of them are due to the presence of oxygen and oxygen complexes in the selenium. The authors have investigated selenium of special high purity (grades B₄ and B₅, with purity 99.9999 and 99.99999%) before and after de-oxidation, and also after oxidation. The methods for oxidation and measurements are indicated in earlier papers (FTT v. 6, 1020, 1964 and elsewhere). The parameters tested were the electric conductivity, the thermoelectric power, the thermal conduction, the activation energy during self-diffusion, the density, the microhardness after introducing impurities, and the effect of oxygen-compensating impurities (Cd, Sb, Mn, Tl, Na, S). The measurement results are presented in graphic form. Many of the phenomena are explained from the point of view that the oxygen impurities produced in selenium acceptor levels, whereas the addition of the impurities

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L 07250-67

ACC NR: AP6028918

which oxidize easily is equivalent to de-oxidation. The latter makes selenium closer to an intrinsic semiconductor. It is concluded that the p-conductivity of selenium, the fact that the thermal conductivity, the electric conductivity, the density, and the microhardness go through a minimum when impurities are introduced, the anomalously large value of the scattering cross section, the strong decrease in the electric conductivity and thermoelectric power on melting, as well as other factors are connected with the presence of oxygen impurities and its complexes in the selenium. Evidence in favor of this conclusion is drawn from a comparison of numerous experimental data by others. The influence of oxygen on the rectifying properties of selenium is also discussed. Orig. art. has: 6 figures and 1 formula.

SUB CODE: 20// SUBM DATE: 00/ ORIG REF: 032/ OTH REF: 017

Card

2/2

ddk

ACC NR: AN6028891

SOURCE CODE: UR/0249/66/022/003/0017/0019

AUTHOR: Abdullayev, G. B.; Nesirov, Ya. N.; Osmanov, T. G.

ORG: Institute of Physics (Institut fiziki)

6/

TITLE: Investigation of electrophysical properties of certain solid solutions in SnTe-Sn(S₁Se) systems

SOURCE: AN AzerbSSR. Doklady, v. 22, no. 3, 1966, 17-19

TOPIC TAGS: tin compound, telluride, thermoelectric power, Hall effect, thermal conduction, solid solution, carrier density, crystal lattice defect

ABSTRACT: The authors report an investigation of the thermoelectric properties of tin telluride when small amounts of tellurium are replaced with sulfur and selenium. The tests consisted of measurement of the thermoelectric power, the Hall emf, and the thermal conductivity at room temperature as a function of the composition of the solid solutions. The compositions used were [SnTe]_{1-x} - [SnS]_x and [SnTe]_{1-x} - [SnSe]_x with the values of x ranging from 0.02 to 0.08. A plot of the thermoelectric power against the composition of the solid solutions shows that when tellurium is replaced with sulfur and selenium, a maximum is observed in the region x ~ 0.04. At the same time, the carrier density decreases first rapidly and then slowly, from 2.1 x 10²¹ cm⁻³ for the SnTe to 10²¹ cm⁻³ in the case when sulfur is used, and to 1.2 x 10²⁰ cm⁻³ when tellurium is used. An anomalous behavior of the thermoelectric power remains the same at all temperatures. A maximum of thermal conductivity is observed at x ~ 0.04.

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L 07575-67

ACC NR: AF6028891

It is proposed that partial substitution of sulfur and selenium for the tellurium results simultaneously in two processes: healing of the lattice defects, which leads to a sharp decrease in the carrier density and in the thermal resistance of the lattice, and formation of a solid solution, which increases the number of defects inherent in solid solutions of these systems. Orig. art. has: 3 figures.

SUB CODE: 20/ SUBM DATE: 19Nov65/ OTH REF: 003

Card 2/2 LS

ACC NR: AP6023882

SOURCE CODE: UR/0109/66/011/007/1336/1337

AUTHOR: Abdullayev, G. B.; Dzhafarova, E. A.; Badalov, A. Z.;
Iskender-zade, Z. A.; Chelnokov, V. Ye.

ORG: none

TITLE: Reactive properties of reverse-biased silicon p-n junctions

SOURCE: Radiotekhnika i elektronika, v. 11, no. 7, 1966, 1336-1337

TOPIC TAGS: semiconductor device, pn junction

ABSTRACT: The reactive properties of low-volt (6 v breakdown) p-n junctions made from n-Si with a resistivity of 0.03--0.05 ohm·cm were investigated. Measurements were made at temperatures of -196--130C and at frequencies of 0.4--600 kc. Plots of junction capacitance vs. reverse bias at room temperature, for 5--100--200--400--600-kc, are shown. In the far-from-breakdown region, the

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UDC: 539.293.011.41

ACC NR: AP6023882

capacitance is independent of the small-signal frequency and decreases when the bias voltage increases, approximately as $C = U_{rc}^{-1/4}$. In the breakdown region, at lower frequencies, the capacitance rapidly increases with the bias voltage; at higher frequencies, the capacitance drops to zero and turns into inductance. A physical explanation is offered. Orig. art. has: 1 figure.

SUB CODE: 09 / SUBM DATE: 01Apr65 / ORIG REF: 003

Card 2/2

L 08336-67 EWT(m)/EWP(t)/ETI IJP(c) JD/JG

ACC NR: ARG017149

SOURCE CODE: UR/0275/66/000/001/B006/B006

AUTHOR: Abdullayev, G. B.; Bakirov, M. Ya.; Gasymov, R. B. 27 42

TITLE: An investigation of contact phenomena between selenium and certain metals

SOURCE: Ref. zh. Elektronika i yeye primeneniye, Abs. 1B44

REF SOURCE: Sb. Poverkhnostn. i kontaktn. yavleniya v poluprovodnikakh. Tomsk, Tomskiy un-t, 1964, 284-289

TOPIC TAGS: selenium, selenium compound, selenium rectifier, semiconducting material, semiconductor band structure, semiconductor research

TRANSLATION: The contact phenomena between selenium and Cd, In, Hg, Ga, Pb, and Zn were investigated. Electron probe analysis of the layers adjacent to contacts show that some chemical compounds, e. g., CdSe, InSe, HgSe, GaSe, PbSe, ZnSe, exhibit n-type conductivity and produce an ordinary p-n transition on contact with Se. The width of the forbidden zone, specific conductivity, concentration, mobility, and the carrier lifetime differ significantly between these compounds and selenium. Using artificial surface deposition of n-layers of varying thickness, it was determined that thermal forming of selenium rectifiers actually means thickening the n-layer. The increase in thickness of the n-layer beyond its optimum value, leads to a decrease in sensitivity, i. e., to aging. The higher the temperature, the more abrupt is the aging. G. K.

SUB CODE: 07,09,20
Card 1/1 nst

UDC: 539.293:546.23

L 10335-67

ACC NR: AF6028211

SOURCE CODE: UR/0249/66/022/002/0011/0013

AUTHOR: Abdullayev, G. B.; Nasirov, Ya. N.; Osmanov, T. G.

25

ORG: Institute of Physics (Institut fiziki)

TITLE: Influence of partial replacement of tin by Si, Ge, and Pb on the electric and thermal properties of SnTe

SOURCE: AN AzerbSSR. Doklady, v. 22, no. 2, 1966, 11-13

TOPIC TAGS: tin compound, telluride, semiconductor carrier, thermoelectric power, temperature dependence, impurity center, carrier density, solid solution

ABSTRACT: The purpose of the study was to determine the effect of impurities on the anomalous behavior observed in the concentration and temperature dependences of the thermal emf (α) of SnTe. The investigations were carried out on single-phase and homogeneous samples of composition $[\text{SnTe}]_{1-x}[\text{SiTe}]_x$, $[\text{SnTe}]_{1-x}[\text{GeTe}]_x$, and $[\text{SnTe}]_{1-x}[\text{PbTe}]_x$ with $x = 0.02 - 0.08$. Measurements of the dependence of the thermal emf on the composition at room temperature show that for all three substitutions a maximum is observed at $x = 0.02$. With increasing x , the thermal emf first decreases and then rises again until it reaches at $x \geq 0.1$ a value corresponding to the solid solution of the corresponding system. A similar behavior is observed in the dependence of the carrier density (n) on the composition at room temperature, which exhibits a minimum at $x = 0.02$. The higher the atomic weight of the substituting element, the lower the carrier density, which decreases from $2.1 \times 10^{21} \text{ cm}^{-3}$ to $6 \times 10^{19} \text{ cm}^{-3}$ when the tin is

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L 10335-67

ACC NR: AF6028211

replaced with lead. An anomalous extremum is observed also at $x = 0.02$ in the dependence of the thermal conductivity of the lattice on the composition at room temperature. The results are attributed by the authors to a simultaneous filling of the vacancies due to the tin as the tin is replaced by the other substances, and to the formation of a solid solution of the type $A^{IV}B^{VI} - A^{IV}B^{VI}$, which occurs simultaneously as a result of partial substitution of the tin. At values $x \leq 0.02$, the predominant process is that of filling of the vacancies, while at $0.02 \leq x < 0.10$ the predominant process is formation of the solid solution, which leads to an increase in the concentration of the effects. The maxima on the dependence of the lattice thermal conductivity on the composition are due to healing of the defects. Slight differences occurring when lead is used as the substituting substance are attributed to the large mass and the ionic radius of the latter. Orig. art. has: 3 figures.

SUB CODE: 20/ SUBM DATE: 19Nov65/ OTH REF: 003

Card 2/2 in lo

ACC NR: AP6033369

SOURCE CODE: UR/0249/66/022/004/0026/0028

AUTHOR: Abdullayev, G. B.; Masirov, Ya. N.; Osmanov, T. G.

ORG: Institute of Physics (Institut fiziki)

TITLE: Thermoelectric properties of certain solid solutions of $\text{SnTe-Cu(As, Sb, Bi)Te}_2$

SOURCE: AN AzerbSSR. Doklady, v. 22, no. 4, 1966, 26-28

TOPIC TAGS: thermoelectric property, solid solution, tin compound, telluride

ABSTRACT: The authors study the behavior of SnTe in solid solutions of $[\text{SnTe}]_{1-x}[\text{CuSbTe}_2]_x$ and $[\text{SnTe}]_{1-x}[\text{CuBiTe}_2]_x$ at $x=0.01-0.10$. The ratio between the components is based on molecular percent. These same systems can be considered as $\text{SnTe-Cu}_2\text{Te-AS}_2$ (Sb_2, Bi_2) Te_2 solid solutions. All of the specimens used in the study were homogeneous and single-phase. The results show that two processes can take place in forming a system of multiple solid solutions using SnTe as a base with a small amount of the second component, specifically $\text{Cu(As, Sb, Bi)Te}_2$: 1. atoms or groups of atoms reduce defect concentration from lead in SnTe which is explained by the reduction in current

Card 1/2

ACC NR: AP6033369

carrier concentration and a certain increase in the thermoelectromotive force; 2. new defects appear during solid solution formation and are related to solid solution type. This produces an increase in current carrier concentration and a reduction in the thermal conductivity of the lattice when the second process predominates. Orig. art. has: 3 figures.

SUB CODE: 20/ SUBM DATE: 19Nov65/ OTH REF: 002

Card 2/2

ABDULLAYEV, G. G.

29354. Khirurgicheskoye lecheniye trakhomy i yeye oslozhneniy. V sb: Nauch. sessiya akad. nauk UzSSR 24-28 yanv. 1949 g. Doklady Fed. Sektsii. Tashkent, 1949, s. 3-8

SO: Leto is' zhurnal'nykh Statey, Vol. 39, Moskva, 1949

ABDUMAYEV, G. G.

28653

Khirurgichyeskoye Lyechyeniye Trakhomy I Yeye Oslonnyeni Izvestiya Akad Nauk
UZSSR, 1949, No 2, S. 107-11 - Ryeczyanye Na - Uzbyek Yan

SC: LETCPIS NO. 38

ABDULLAYEV, G.I.

Some problems in the clinical aspects and diagnosis of substernal goiter. Azerb. med. zhur. no. 8:7-13 Ag '60. (MIRA 13:8)

1. Iz gospital'noy khirurgicheskoy kliniki (zav. - deystv. chlen AMN SSSR B.V. Petrovskiy) Lechebnogo fakul'teta 1-go Moskovskogo ordena Lenina meditsinskogo instituta imeni I.M. Sechenova.

(GOITER)

ABDULLAYEV, G. I.

Cand Med Sci - (diss) "Surgical treatment of substernal goiter."
Moscow, 1961. 19 pp; (Academy of Medical Sciences USSR); 300
copies; price not given; (KL, 7-61sup, 256)

MALINOVSKIY, N.N.; ABDULLAYEV, G.I.

Selection of an approach for the excision of intrathoracic goiter.
Khirurgia 38 no.10:106-110 0 '62. (MIRA 15:12)

1. Iz gospital'noy khirurgicheskoy kliniki (zav. - deystvitel'nyy
chlen AMN SSSR prof. B.V. Petrovskiy) I Moskovskogo ordena Lenina
meditsinskogo instituta imeni I.M. Sechenova.
(GOITER)

ABDULLAYEV, G.I., kand. med. nauk; KARAMOV, K.S., kand. med. nauk;
GUSEYNOV, I.A., kand. med. nauk; GADZHIYEV, A.A.;
FATALIYEVA, V.G.; MUSTAFAYEV, R.A.; BAGIROV, A.M.

Some problems in the diagnosis of stenosis of the left
atrioventricular orifice and indications for mitral commissu-
rotomy. Azerb. med. zhur. 41 no.9:8-16. S '64.

(MIRA 18:11)

1. Iz otdela grudnoy khirurgii Instituta eksperimental'noy
i klinicheskoy meditsiny AMN SSSR (dir. - chlen-korrespondent
AN AzSSR prof. Efendiyev, F.A. [deceased]) i iz kafedry
propedevtiki vnutrennikh bolezney 1-go (sav. - prof. G.Kh.
Baysheva-Zeynalova) Azerbaydzhanskogo meditsinskogo instituta
imeni Narimanova (rektor - prof. Kh.A. Gasanov).

ABDULLAYEV, G.K.

Reactions of chloromethyl ethers of alcohols with salts of nitrous
acid. Uch. zap. AGU. Ser. fiz.-mat. i khim. nauk no.4:81-84 '61.
(MIRA 16:6)

(Ethers) (Nitrites)

Translation from: Referativnyy zhurnal, Geologiya, 1957, Nr 8,
p 148 (USSR) 15-57-8-11209D

AUTHOR: Abdullayev, G. K.

TITLE: Morphological Types of Pyrite Crystals and Their Relation to Genetic Characteristics of the Sulfide Deposits of Azerbaidzhanskaya SSR (Morfologicheskiye tipy kristallov pirita i ikh svyaz' s geneticheskimi osobennostyami sul'fidnykh mestorozhdeniy AzerbSSR). Author's abstract of his dissertation for the degree of Candidate of Geological and Mineralogical Sciences, presented to Azerb. industr. in-t (Azerbaidzan Industrial Institute), Baku, 1956

ABSTRACT: On the basis of study of pyrite crystals of various deposits and comparison of the obtained data, the author attempts to show a relationship between the morphology of crystals and the various conditions of formation of pyrite; that is, he attempts to show a

Card 1/3

15-57-8-11209D

Morphological Types of Pyrite Crystals (Cont.)

dependence of formation of simple forms and their combinations on the physical and chemical conditions and depths of formation of the deposits. As a result of detailed goniometric measurements of pyrite from 20 different deposits of the Azerbaidzhanskaya SSR, he establishes the presence of 113 simple forms, of which almost 100 forms are described for the first time and 31 forms are new for pyrite crystals in general. He arrives at the following conclusions. Depending on the geological-mineralogical characteristics of the deposits, morphological types of pyrite crystals which have the largest number of forms are formed under average temperature and average depth conditions, and also, in part, in transitional conditions. In high temperature hydrothermal, and also in contact deposits, the number of observed forms of pyrite crystals decreases to two or three, and in some cases, as many as five or six forms. These crystals are modifications of the cubic habit; the octahedron and pyritohedron habits are more rare. In low temperature deposits, the number of simple forms decreases to the minimum; the form of

Card 2/3

15-57-8-11209D

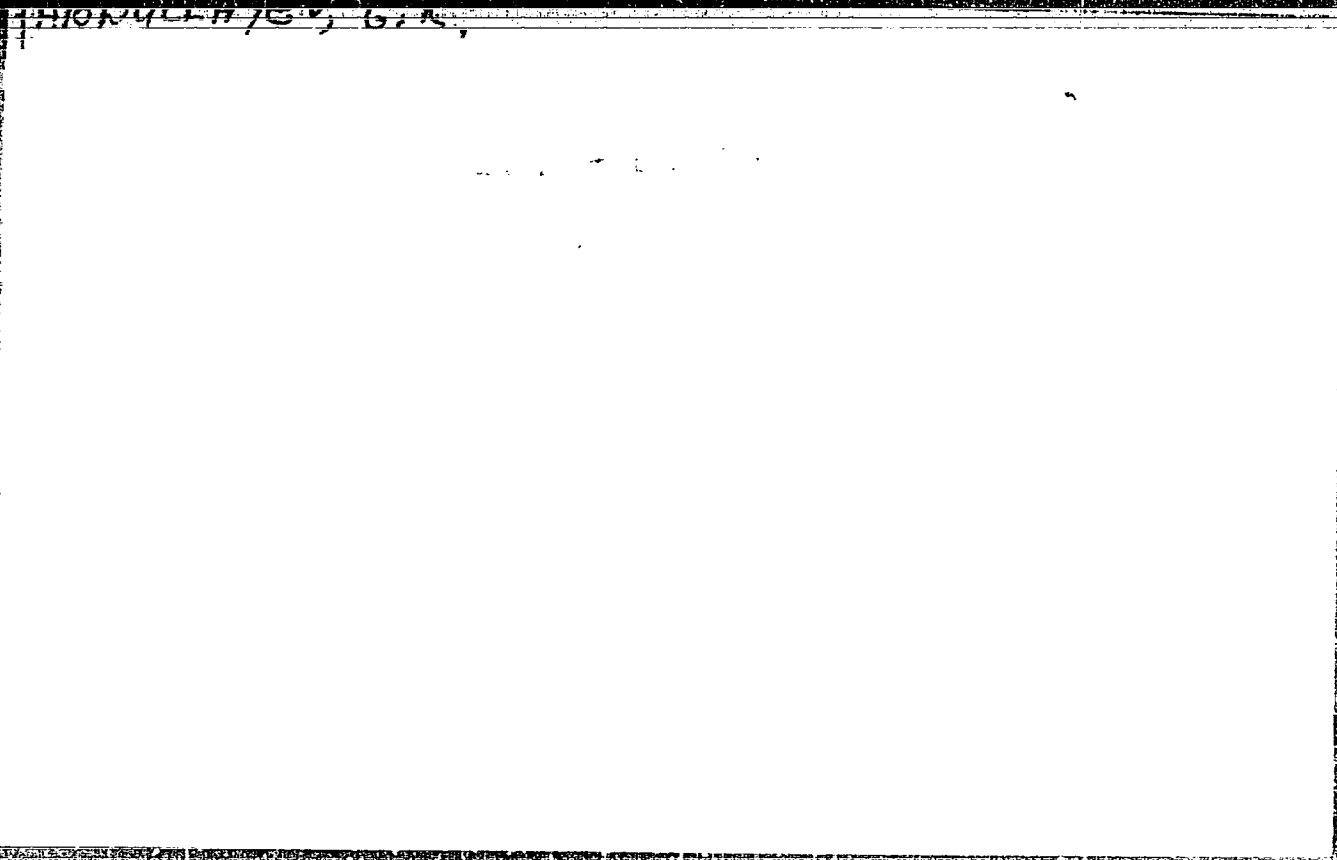
Morphological Types of Pyrite Crystals (Cont.)

crystals is either that of a cube or pyritohedron. The author believes that the reason that in some deposits of hydrothermal origin (basically in average temperature conditions) morphological types of pyrite crystals with diverse forms are developed, with predominant development of certain forms, lies in the physical and chemical characteristics of the mineral-forming solutions, as well as in the presence in the solution of various admixtures. The difference in time of entry of portions of the mineral-forming solutions also affects the variation in form.

ASSOCIATION: Azerb. industr. in-t (Azerbaijan Industrial
Institute)

Card 3/3

I. V. Kunayev



"APPROVED FOR RELEASE: 04/03/2001

CIA-RDP86-00513R000100120003-4

APPROVED FOR RELEASE: 04/03/2001

CIA-RDP86-00513R000100120003-4"

USSR/Organic Chemistry. Synthetic Organic Chemistry. E-2

Abs Jour : Ref Zhur - Khimiya, No. 8, 1957, 26681.

3-methylpentane, n-hexane and 2,3-dimethylhexane were separated. Surmises concerning the mechanism of formation of n- and iso-olefins are expressed.

Card 2/2

15-1957-10-14014

The Morphology of Pyrite Crystals From Karalar Village in Kedabekakiy
Rayon

{111}, {210}, and {430}, and less commonly by {100} and {211}.
The growth of the faces of the various forms and of the stria-
tions and vicinal forms accompanying them is described in de-
tail. After studying pyrite crystals from different deposits
in the Az SSR, the author concludes that the crystals with the
greatest wealth of forms develop in the medium temperature range
of the hydrothermal process. Correspondingly, it is stated that
the pyrite crystals studied, which are characterized by an abun-
dance of crystal forms, grew in a medium temperature environment.

Card 2/2

O. V. Karpova

ABDULLAYEV G. K.
USSR/Physical Chemistry - Crystals.

B-5

Abs Jour : Referat Zhur - Khimiya, No 1, 1958, 274

Author : G.K. Abdullayev.

Inst : Academy of Sciences of Azerbaijan SSR.

Title : To The Question of The Connection Between the Crystal Morphology and The Conditions of Their Formation.

Orig Pub : Me'ruzeler. AzerbSSR elmler Akad., Dokl. AN AzerbSSR, 1957, 13, No 1, 43-48

Abstract : 225 pyrite crystals from 20 occurrences in the Azerbaijan SSR were measured and about 2500 crystals of the same description were inspected. The presence of 113 simple forms was established, of which 29 forms were registered for the first time. The comparison of the morphology of crystals with geological-mineralogical peculiarities of the occurrences permitted to assume a connection of the crystal

Card 1/2

ABDULLAYEV, G.K.

Morphologic types of pyrite crystals and their relation to the
genetic characteristics of Azerbaijan sulfide deposits. Trudy
Azerb. ind. inst. no.17:23-36 '57. (MIRA 11:9)
(Azerbaijan--Sulfides) (Pyrites) (Crystallography)

ABDULAYEV, G.K.
SITKOVSKIY, I.N.; ABDULAYEV, G.K.

Morphological characteristics of pyrite crystals of the Bitti-
Bulakhsk field. Zap. Vses. min. ob-va 86 no.4:481-485 '57.
(MIRA 11:1)

(Kadabak District--Pyrites)

ABDULLAYEV, G.K.

Goniometric study of pyrite crystals from the Paragachay deposit
[in Azerbaijani with summary in Russian]. Izv. AN Azerb. SSR.
Ser. geol.-geog. nauk no. 2: 95-101 '58. (MIRA 11:12)
(Paragachay Valley--Pyrites)

ABDULLAYEV, G.K.

Crystallographic study of Chiragidzor pyrites [in Azerbaijani
with summary in Russian]. Izv. AN Azerb. SSR. Ser. geol.-geog. nauk
no.3:95-102 '58. (MIRA 11:12)
(Azerbaijan--Pyrites)

~~ABDULLAYEV, G.K.~~

Goniometric study of pyrite crystals in the Urumschay deposit
[in Azerbaijani with summary in Russian]. Izv. AN Azerb. SSR.
Ser. geol.-geog. nauk no. 5: 85-92 '58. (MIRA 11:12)
(Urumschay Valley--Pyrites)

ABDULAYEV, G.K.

Crystallographic study of pyrites from sulfide deposits in the Nagorno-Karabash Autonomous Province. Izv.vys.ucheb.zav.; geol. i razv. 1 no.9:64-71 S '58. (MIRA 12:9)

1. Kafedra kristallografii i mineralogii Azerbaydzhanskogo industrial'nogo instituta im. M.A.Azizbekova.
(Nagorno-Karabash Autonomous Province--Pyrite crystals)

ADZHALOVA, S.S.; ABDULLAYEV, G.K.

Collecting properties of rocks in horizon No.1 of the Kyurovdag
producing area. Azerb.neft.khoz. 37 no.8:10-13 Ag '58.
(MIRA 11:11)

(Kura Lowland--Rocks, Sedimentary--Analysis)

ABDULLAYEV, G.M.; GAVIDOV, R.S.

Pyrites in sulfide deposits of Ordubad District. Izv. AN Azerb. SSR.
Ser. geol.-geogr. nauk no. 2:53-65 1970. (1 ILL. 12:11)
(Ordubad District--Pyrites)

SULTANOV, A.D.; ABDULLAYEV, G.K.

Lithology and reservoir properties of rocks in the upper part of
producing formation in the Kura Lowland. Izv.AN Azerb.SSR.
Ser.geol.-geog.nauk no.6:79-89 '59. (MIRA 15:4)
(Kura Lowland--Oil sands)

ABDULLAYEV, G.K.

Lithological and reservoir properties of rocks in the upper part
of the Mishovdag oil producing formation [in Azerbaijani with
summary in Russian]. Azerb.neft.khoz. 38 no.1:4-7 Ja '59.

(MIRA 12:4)

(Mishovdag region--Petroleum geology)

ABDULIAYEV, G.K.

Striation on pyrite crystal faces. Zap. Vses. min. ob-va 88 no. 4:465-
467 '59. (MIRA 12:11)

1. Kafedra kristallografii i mineralogii Azerbaydzhanskogo industrial'-
nogo instituta im. M. Azisbekova. 2. Deystvitel'nyy chlen Vsesoyuznogo
mineralogicheskogo obshchestva.
(Pyrite crystals)

SULTANOV, A. D.; ABDULLAYEV, G. K.

Characteristics of arenaceous and silt reservoir rocks in the upper part of the productive series in the Kyurovdag and Mishovdag oil fields. Izv. AN Azerb. SSR. Ser. geol.-geog. nauk no. 3: 83-94 '60. (MIRA 13:10)
(Ali-Bayramly District--Petroleum geology)

SULTANOV, A.D.; ABDULLAYEV, G.K.; GUSEYNOV, G.A.

Lithological and reservoir characteristics of sand and silt rocks
in the Maikop series of the Caspian monocline. Izv. AN Azerb. SSR.
Ser. geol-geog.nauk no.6:71-81 '60. (MIRA 14:3)
(Caspian Sea region—Rocks, Sedimentary)

ABDULLAYEV, G.K.; FARKHADOVA, S.M.

Condensation of phenols with hydrobenzamide, Uch. zap. AGU.
Ser. fiz.-mat. i khim. nauk no.2:53-59 '61.

(MIRA 16:7)

ABDULLAYEV, G.K.; SULTANOV, A.D.

Reservoir properties of rocks of the lower Maikop in the Amirkhanly oil field. Dokl. AN Azerb. SSR 17 no. 3:213-218 '61. (MIRA 14:5)
(Amirkhanly region—Petroleum—Geology)

ABDULLAYEV, G.K.; PANAKHOV, A.S.

Changes in the lithological composition of lower Maikop deposits of the Tertiary Caspian monocline in the Amirkhanly, Saadan, and Siazan'-Nardaran areas. Dokl. AN Azerb. SSR 17 no.6:489-493 '61.
(MIRA 14:8)

1. Institut khimii AN AzerSSR. T'Sekh nauchno-issledovatel'skikh proizvodstvennykh rabot Neftpromysloвого upravleniya. Siazan'neft'. Predstavleno akademikam AN Azerbayzhanskoy SSR A.D. Sultanovym.
(Azerbaijan—Petrology)

ABDULLAYEV, G.K.; AGNIALIYEV, I.B.; GUSSEYNOV, G.A.

Efficiency of repeated hydraulic fracturing in fields of the
Oil Field Administration of the Siazan' Petroleum Trust. Azerb.
neft. khoz. 40 no.9:26-27 S '61. (MIRA 15:1)
(Siazan' region--Oil fields--Hydraulic fracturing)

ABDULLAYEV, G.K.; GUSEYNOV, M.R.; GUSEYNOV, G.A.

Role of tectonic factors in the formation of oil pools in the
Caspian Tertiary monocline. Azerb. neft. khoz. 42 no.1:4-6
Ja '63. (MIRA 16:10)

(Caspian Sea region--Petroleum geology)

ABDULLAYEV, G.K.; MAMEDOV, Kh.S.

Crystalline structure of magnesium diborate. Azerb.khim.zhur.
no.4:101-104 '65. (MIRA 18:12)

1. Institut khimii AN AzSSR. Submitted July 2, 1964.

ABDULLAYEV, G.F.; FARHADLOVA, S.M.; AGAMALIYEVA, E.A.

Condensation of phenols with hexamethylenediamine in the presence
of paraform. Uch. zap. AGU. Ser. khim. nauk no.4:31-40 '63.
(MIRA 17:11)

ABLULLAYEV, G.K.; MAMEDOV, Kh.S.

Crystal structure of the complex compound tetraammine-ethanolamine cuprosulfate $[\text{Cu}(\text{HOCH}_2\text{CH}_2\text{NH}_2)_2(\text{H}_2\text{O})_4]\text{SO}_4$
Zhur. strukt. khim. 6 no.1:171-172 Jan '65.

(MIRA 18:12)

1. Institut khimii AN Azerbaydzhanskoj SSR. Submitted July 16, 1964.

USSR/General Biology. General Histology.

B-3

Abs Jour: Ref Zhur-Biol., No 20, 1958, 90334.

Author : Abdullayev, G.M., Dul'tsin, M.S., Terent'yeva, E.I.,
Faynshteyn, F.E.

Last :

Title : Thrombocytes Studied with the Electron Microscope.

Orig Pub: Byul. eksperim. biol. i med., 1957, 44, No 10, 114-116
(res. Eng.)

Abstract: The thrombocytes (T) of healthy humans and those afflicted with leukemia and aplastic and hypoplastic anemia were studied with an electron microscope having a magnification of 7000 X. In the center of the T of healthy individuals one distinguishes a grainy granule and on the periphery a hyalere consisting of a net of intertwining fibrils, forming numerous projections, branchings

Card : 1/2

ACC NR: AP6034404 (A) SOURCE CODE: UR/0249/66/022/006/0013/0014

AUTHOR: Abdullayev, G. B.; Nasirov, Ya. N.; Feyziyev, Ya. S.

ORG: Institute of Physics, Academy of Sciences, Azerbaydzhan SSR (Institut fiziki Akademii nauk AzerbSSR)

TITLE: Effect of partial replacement of germanium by lanthanum on the thermoelectric properties of GeTe

SOURCE: AN AzerbSSR. Doklady, v. 22, no. 6, 1966, 13-14

TOPIC TAGS: germanium tellurium alloy, germanium base alloy, tellurium containing alloy, thermoelectric property, LANTHANUM

ABSTRACT: The effect of partial replacement of germanium by lanthanum on the thermoelectric properties of GeTe has been investigated on specimens of $(\text{GeTe})_{1-x}(\text{LaTe})_x$ system alloy, where x is molar portion of the initial compounds in the range $x = 0.01-0.08$. The maximum thermal emf, maximum lattice heat conductivity and carrier mobility, and minimum carrier concentration were found in alloys with $x = 0.01$. It was established that the hole concentration at $x = 0.01$ decreases from about $6 \cdot 10^{20} \text{ cm}^{-3}$ for GeTe to $4.5 \cdot 10^{20}$ for compounds with $x = 0.01$ with a simultaneous increase of carrier mobility from $50 \text{ cm}^2/\text{v}\cdot\text{sec}$ to about $60 \text{ cm}^2/\text{v}\cdot\text{sec}$. The lattice heat conductivity is similarly affected by the composition. The authors presume that with a partial replacement of germanium by lanthanum in the alloys with $x = 0.01-0.08$, the defect concentration in Ge of GeTe takes place simultaneously

Card 1/2

ABDULLAYEV, G.M. (Moskva)

Clinical application of transfusion of blood prepared with solution
no.10 of the Lenin Central Institute of Blood transfusion, Klin.
med., 33 no.11:45-48 N '55. (MLRA 9:7)

1. Iz khirurgicheskoy kliniki (sav.-prof. D.M.Grozdov) Tsentral'-
nogo ordena Lenina instituta gematologii i perelivaniya krovi
(dir.-chlen-korrespondent AMN SSSR prof. A.A.Bagdasarov)
(BLOOD BANKS,
preservative solution containing glucose, citrates, &
quinine bisulfate)

ABDULLAYEV, G. M.

EXCERPTA MEDICA Sec.9 Vol.12/4 February April 1958

1987. (572) CLINICAL USE OF CATIONITE BLOOD TRANSFUSIONS.-(Russian text) Abdullayeff G. M. - PROBL. GEMATOL. PEREL. KROVI 1957, 1 (42-45) Illus. 2

The method of preparation of blood based on the principle of ion-exchanging absorption, without chemical stabilizers, was studied. The principle of the method (Steinberg, 1944) is that part of the calcium is extracted from the blood with the aid of cation-exchanging pitch. The blood thus loses its capacity of coagulation. The pitch does not affect the morphological components of the blood. The cationized blood was given to 65 patients, in whom 487 transfusions were carried out. Out of 25 patients 16 showed hypoplastic or aplastic anaemia, and in 14 a favourable effect was observed. Out of 10 aplastic anaemic patients, 9 were discharged in a state of remission. The positive results persisted in haemorrhagic diatheses, also after transfusion of cationized blood. The increasing thrombocyte count lasted short and was reduced after 3-5 days to the initial value. There was no recurrence of haemorrhage. When splenectomy is impossible, viz. in Werlhof's disease, this blood should be transfused. 14 references.

Dikhno - Krasnoyarsk

ABDULAYEV, G.M.; FEDOROVA, L.I.

Survival of erythrocytes in the organism of the recipient after preparation by means of ion exchange adsorbents [with summary in English, p.64]. Probl.gemat. i perel.krovi 2 no:5:55-57 S-0 '57.
(MIRA 11:1)

1. Iz Tsentral'nogo ordena Lenina instituta gematologii i perelivaniya krovi (dir. - deystvitel'noy chlen AMN SSSR prof. A.A. Bagdasarov) Ministerstva zdravookhraneniya SSSR.

(BLOOD TRANSFUSION

erythrocytes prepared with ion exchange adsorbents,
acclimatization in system of recipient)

(ION EXCHANGE RESINS, eff.

treatment of blood for transfusion, eff. on erythrocyte
acclimatization on recipient)

ABDULLAYEV, C.M.

21(8); 17(0) PAPER I 37th INTERNATIONAL CONFERENCE ON THE PEACEFUL USES OF ATOMIC ENERGY, 24, Geneva, 1958

Radikalnoyevskikh vobshchih i radiatsionnykh i radiatsionnykh meditsina (Reports of Soviet Scientists; Radiobiology and Radiation Medicine) Moscow, Izd-vo Gilar. vpr. po izpol'sovaniyu atomnoy energii pri Svernye Ministerstvo SSSR, 1959. 429 p. 8,000 copies printed. (Series: Vnesheye Mezhduнародnaya Kooperatsiya po mirnomu ispol'zovaniyu atomnoy energii. Tzudy, tom 2)

General Ed.: A.V. Lebedevskiy, Corresponding Member, USSR Academy of Medical Sciences; Ed.: L.B. Mikheevskiy, Tech. Ed.: Ye.I. Masal'. PUBLISHED BY THE PUBLISHERS AND EDITORS AT VAINA NURE RADIATION AND RADIATION MEDICINE ARE TAUGHT.

FOREWORD: This book is intended for physicians, scientists, and engineers as well as for persons and students at various levels of radiobiology and radiation medicine are taught.

CONTENTS: This is Volume 5 of a 6-volume set of reports delivered by Soviet scientists at the Second International Conference on the Peaceful Uses of Atomic Energy, held on September 1-13, 1958, in Geneva. Volume 5 contains 32 reports edited by Candidates of Medical Sciences S.Y. Lavitskiy and V.V. Fedor. The reports cover problems of the biological effects of ionizing radiation, future sources of radiation in small doses, genetic effects of radiation, treatment of radiative sickness, uses of radioactive isotopes in medical and biological research, and atomic energy for diagnostic and therapeutic purposes, soil absorption of radioactive products, their intake by plants, and their storage in plants and foodstuffs. References accompany each report.



Reports of Soviet Scientists (Cont.)

Abdullaev, C.M. The Acetylating Function of the Oxocysteine A System in Radiation Sickness (Report No. 229)	160
Berzhal', M.F., E.D. Gal'tsora, G.A. Melnikova, I.A. Pospelovskiy, L.A. Solov'yeva, and N.Ye. Zhuravskiy. Effect of Ionizing Radiation and of Radio-Mimetic Substances on the Microbe Cell (Report No. 232)	167
Klimenko, S.F., and V.A. Chibrikov. Local Tests to Show the State of Bone Metabolism and Arteriosclerosis in Irradiated Organisms (Report No. 207)	180
Radtsigov, A.A., P.R. Vinogradovskiy, N.O. Zambetov, N.E. Kozlovskiy, Ye. S. Sokolov, I.F. Zhukovskiy, G.M. Zhuravskiy, and N.Ye. Zhuravskiy. Experience in Treating Radiation Sickness with Antidotes and Thrombolytic Substances (Report No. 238)	180
Lepshina, A.A., and I.B. Esirina-Markus. Experiments to Determine Maximum Permissible Thermal Radiation Flux (Report No. 207)	196
Shadrinskii, S.I., and V.I. Znamenskiy. Isotopic Method in Studying the Hormone Effect on Metabolism in Ovarian Tissue (Report No. 207)	205

RUTBERG, H.A.; ABDULLAYEV, G.M.

Separation and preservation of a viable thrombocyte mass. Probl.
gemat. i perel. krovi 3 no.6:41-45 N-D '58. (MIRA 12:7)

1. Iz Tsentral'nogo ordena Lenina instituta gematologii i pere-
livaniya krovi (dir. - deystvitel'nyy chlen AMN SSSR prof. A. A.
Bagdasarov) Ministerstva zdravookhraneniya SSSR.
(BLOOD PLATELETS)

BAGDASAROV, A.A., prof.; RAUSHENBAKH, M.O., prof.; ABDULLAYEV, G.M.;
BELYAYEVA, B.F.; LAGUTINA, N.Ya.

Treatment of acute radiation sickness with concentrated thrombocytes.
Probl.gemat. i perel.krovi 4 no.8:3-7 Ag '59. (MIRA 13:1)

1. Iz Tsentral'nogo ordena Lenina instituta gematologii i perelivaniya
krovi (dir. - deystvitel'nyy chlen AMN SSSR prof. A.A. Bagdasarov)
Ministerstva zdravookhraneniya SSSR. 2. Deystvitel'nyy chlen AMN SSSR
(for Bagdasarov).
(BLOOD TRANSFUSION)
(RADIATION INJURY ther.)

BAGDASAROV, A.A.; RAUSHENBAKH, M.O.; SUKYASYAN, G.V.; ABDULLAYEV, G.M.;
NOVIKOVA, M.N.; LAGUTINA, N.Ya.; SAMOYLINA, N.L.; CHERNOV, G.A.

Some aspects of the clinical course and treatment of acute
radiation sickness in monkeys. Med.rad. 4 no.9:17-24
S '59. (MIRA 12:11)

1. Iz Tsentral'nogo ordena Lenina instituta gematologii i
perelivaniya krovi Ministerstva zdravookhraneniya SSSR.
(RADIATION INJURY exper)

TOTSKAYA, A.A.; TERENT'YEVA, E.I.; ABDULLAYEV, G.M.

Cytochemistry of blood platelets in acute radiation sickness.
Med.rad. no.9:29-34 '61. (MIRA 15:1)

1. Iz tsitologicheskoy laboratorii i radiobiologicheskoy labora-
torii Tsentral'nogo ordena Lenina instituta gematologii i pereli-
vaniya krovi Ministerstva zdravookhraneniya SSSR.
(RADIATION SICKNESS) (BLOOD PLATELETS)

TOTSKAYA, A.A.; TERENT'YEVA, Ye.I.; ABUMUJAYEV, G.M.

Electron microscope structure of the blood platelets in dogs
following the development of acute radiation injury. Radic-
biologia 2 no.1:87-91 Ja '62 (MIRA 18:1)

RUTBERG, R.A.; MALLER, A.R.; ABDULLAYEV, G.M.

Preservation of antihemophilic globulin in preserved blood.
Probl. gemat. i perel. Krovi 8 no.9:19-23 S '63. (MIRA 17:9)

1. Iz laboratorii fraktsionirovaniya belkov (zav. - prof. G.Ya. Rozenberg) i khirurgicheskoy kliniki (zav. - prof. E.M.Grozdov) Tsentral'nogo ordena Lenina instituta gematologii i perelivaniya krovi (dir. - dotsent A.Ye.Kiselev) Ministerstva zdravookhraneniya SSSR.

ABELLIAYEV, G.M.; KOSHEVNIKOV, I.N.

Technique of transfusion therapy in surgery on leucophiliacs.
Probl. gemat. i perel. krovi 9 no.8:31-40 1964.

(MIRA 18:3)

1. Khirurgicheskaya klinika (zav. - prof. I.M. Gromov) Tsentral'-
nogo ordena Lenina Instituta perezhivaniya kletki gematologii (dir.
- dozent A.Ye. Kiselev), Moskva.

ABDULLAYEV, G.S.; VORONOV, T.F.

Experience in obtaining high yields of tomatoes at the Lenin
Collective Farm. Kons.i ov.prom. 16 no.3:29-32 Mr '61.

(MIRA 14:3)

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