32082
S/181/61/003/012/017/028
B104/B102

Thermomagnetic effects in ...

ASSOCIATION: Institut poluprovodnikov AN SSSR Leningrad (Institute of Semiconductors of the AS USSR, Leningrad)
Institut fiziki AN Az. SSR Baku (Institute of Physics of the AS Azerbaydzhanskaya SSR, Baku)

SUBMITTED: February 18, 1961 (initially), July 10, 1961 (after revision)

Card 3/3

S/233/62/000/003/004/010
I042/I242

AUTHOR: Askerov, B.M.

TITLE: Quantum mechanical expression of the energy flow density

PERIODICAL: Akademiya nauk Azerbaydzhanskoy SSR. Izvestiya. Seriya fiziko-matematicheskikh i tekhnicheskikh nauk, no.3, 1962, 77-80

TEXT: Energy flow density in the pure Ψ state is determined from the energy density expression for the same state, with the aid of the Schroedinger equation. For the general case the energy density is given by $U = \frac{1}{2}[\Psi^* \hat{H} \Psi + \Psi \hat{H}^* \Psi^*]$

The Hamiltonian H is assumed independent of time. The Hamiltonian operators, pertinent calculations, and the final expressions for energy flow density are given for the cases of a free particle, a particle in a scalar potential field, and an electron in electromagnetic fields.

Card 1/1

38918

S/181/62/004/006/029/051
B104/B112

24.7600

AUTHORS: Ansel'm, A. I., and Askerov, B. M.

TITLE: Longitudinal thermomagnetic effect in semiconductors situated in a strong longitudinal magnetic field

PERIODICAL: Fizika tverdogo tela, v. 4, no. 6, 1962, 1573 - 1577

TEXT: An investigation is made of the longitudinal thermomagnetic effect in semiconductors situated in a quantizing magnetic field and possessing only a single band. The change of the thermo-emf in the x-ray quantum limit is obtained:

$$\alpha(H)=\frac{E_x}{\nabla_x T}=-\frac{k}{e}\left\{\frac{\int_0^{\hbar\omega_0}\frac{\varepsilon_z^{3/2}}{kT}\tau_H(\varepsilon_z)\frac{\partial f_0(\varepsilon_z)}{\partial\varepsilon_z}d\varepsilon_z}{\int_0^{\hbar\omega_0}\varepsilon_z^{1/2}\tau_H(\varepsilon_z)\frac{\partial f_0(\varepsilon_z)}{\partial\varepsilon_z}d\varepsilon_z}-\zeta_z^*\right\}, \quad (1.9),$$

Card 1/3

Longitudinal thermomagnetic...

where $\zeta_z^* = \zeta_z / kT$ is the reduced chemical potential, and ε_z is the Fermi surface energy at absolute zero in the absence of a magnetic field. It is shown that the change $\Delta\alpha = \alpha(H) - \alpha(0)$ in the x-ray quantum limit is determined by the changes of the relaxation time τ and of ζ. The relaxation time in the cases of scattering by acoustic phonons and ionized impurities is discussed. The following formulas are obtained for the electronic part of thermal conductivity:

$$\varkappa(H) = -\frac{W_z}{V_z T} = \sigma(H)\frac{k}{e}\left(\frac{kT}{e}\right)\frac{I_{1/2}I_{3/2} - I_{3/2}^2}{I_{1/2}^2}, \quad (2.3),$$

$$\sigma(H) = \frac{e^2}{\sqrt{2}\cdot\pi^2}\frac{\hbar\omega_0}{m}\left(\frac{m}{\hbar^2}\right)^{3/2}(kT)^{3/2}I_{1/2}. \quad (2.4),$$

$$I_n = \int_0^\infty x^n \tau_H(x)\frac{\partial f_0(x)}{\partial x}dx \quad (1.11),$$

$$f_0(x) = [1 + \exp(x - \zeta_z^*)]^{-1}, \quad (1.12),$$

Card 2/3

where $\sigma(H)$ is the electrical conductivity in the x-ray quantum limit.

ASSOCIATION: Institut poluprovodnikov AN SSSR Leningrad (Institute of Semiconductors AS USSR, Leningrad). Institut fiziki AN Az. SSR Baku (Institute of Physics AS AzSSR, Baku)

SUBMITTED: February 2, 1962

Card 3/3

ASKEROV, B.M.

Quantum-mechanical expression of the density of an energy flux. Izv. AN Azerb.SSR.Ser. fiz.-mat. i tekh.nauk no.3:77-80 '62. (MIRA 15:9)

(Quantum theory)
(Dynamics of a particle)

AN'SEL'M, A.I.; ASKEROV, B.M.

Longitudinal thermomagnetic effects in semiconductors in a high longitudinal magnetic field. Fiz. tver. tela 4 no.6:1573-1575 Je '62. (MIRA 16:5)

1. Institut poluprovodnikov AN SSSR, Leningrad i Institut fiziki AN AzSSR, Baku.
(Thermomagnetism) (Semiconductors) (Quantum theory)

AM4016859 BOOK EXPLOITATION S/

Askerov, B. M.

Theory of transfer phenomena in semiconductors (Teoriya yavleniy perenosa v poluprovodnikakh) Baku, Izd-vo AN AzSSR, 63. 0123 p. illus., biblio. Errata slip inserted. 1800 copies printed. At head of title: Akademiya nauk Azerbaydzhanskoy SSR. Institut fiziki.

TOPIC TAGS: transport phenomena, transport phenomena in semiconductor, galvanomagnetic effects, transport equation, kinetic equation, equilibrium carriers in semiconductor, equilibrium carriers in metal, relaxation time, thermal emf, Thomson effect, Peltier effect, intrinsic conductivity, intrinsic conductivity, chemical potential, quantizing magnetic field

PURPOSE AND COVERAGE: The book contains a review of the theory of kinetic effects in semiconductors, their dependence on the magnetic

Card 1/3

AM4016859

field, the scattering mechanism, degree of degeneracy of carrier currents, and other transport phenomena in semiconductors. A quadratic and isotropic dependence of the energy on the wave vector is considered (the scalar effective mass approximation) but the results are really generalized to include semiconductors of the n-Ge type. The influence of dragging of carriers by phonons on the kinetic effects is not considered. The book is aimed at senior students of physics departments of universities and scientific workers in the field of semiconductor physics. The author thanks Professor A. I. Ansel'm and corresponding member AN AzerbSSR Professor G. B. Abdullayev, at whose initiative this book was written. He is also grateful to Professor A. I. Ansel'm, Professor G. B. Abdullayev, and lecturer Yu. M. Seidov for useful remarks and advice.

TABLE OF CONTENTS [abridged]:

Card 2/3

AM4016859

SUB CODE: PH SUBMITTED: 27Jun63 NR REF SOV: 056

OTHER: 052 DATE ACQ: 20Dec63

Card 3/3

L 2113-65 EWT(m)/EWP(q)/EWP(b) IJP(c) JD FHL/SSD/ESD(gs)
ACCESSION NR: AP4044629 S/0233/64/000/002/0089/0095

AUTHOR: Askerov, B. M.

TITLE: Galvanomagnetic effects in electronic germanium and silicon

SOURCE: AN AzerbSSR. Izvestiya. Seriya fiziko-tekhnicheskikh i matematicheskikh nauk, no. 2, 1964, 89-95

TOPIC TAGS: galvanomagnetic effect, magnetoresistance, silicon, germanium, electronic semiconductor

ABSTRACT: The galvanomagnetic coefficients are obtained in a multi-ellipsoidal model for an arbitrary direction of the magnetic field and current relative to the crystallographic axes. General expressions are derived for the magnetoresistance, from which follow, in particular, all the results of the previously published papers. The method employed is that proposed by E. H. Sondheimer (Proc. Royal Society v. A224, 260, 1960) and involves the determination of

Card 1/2

L 2113-65
ACCESSION NR: AP4044629

the conductivity tensor in a moving system of coordinates in which the constant-energy surfaces are spheres, followed by a transformation to the previous coordinate system. It is assumed that the scattering is isotropic and is described by a relaxation time that depends only on the energy. "In conclusion, I thank Yu. M. Seidov for reviewing the manuscript." Orig. art. has: 33 formulas.

ASSOCIATION: None

SUBMITTED: 00 ENCL: 00

SUB CODE: SS NR REF SOV: 003 OTHER: 007

Card 2/2

L 21123-65 EWT(m)/EWP(b)/EWP(t) IJP(c)/AFWL/SSD/ESD(gs) JD
ACCESSION NR: AP5001565 S/0233/64/000/004/0089/0093

AUTHOR: Arkexov, B. M.

TITLE: On the anisotropy of the kinetic effects in electronic germanium and silicon

SOURCE: AN AzerbSSR. Izvestiya. Seriya fiziko-tekhnicheskikh i matematicheskikh nauk, no. 4, 1964, 89-93

TOPIC TAGS: germanium, silicon, magnetoresistance, thermal emf, angular dependence, galvanomagnetic coefficient, thermomagnetic coefficient, isotropy

ABSTRACT: The purpose of the investigation was to determine the total angular dependence of the magnetoresistance and the variation of the thermal emf in n-type germanium and silicon. To be able to compare the measured angular dependences of the anisotropic kinetic coefficients with the theoretical values, the author calculates ex-

Card 1/3

plicit expressions for the conductivity tensor in a moving coordinates frame derived from the fixed frame (whose axes are directed along the edges of the unit-cell cube) by the following operations: 1) rotation of the fixed system through an angle about the z axis (system x'y'z'), 2) rotation of the new system about the y' axis through an angle φ (system x"y'z'); 3) rotation about the x" axis through an angle θ. The conductivity tensors obtained in this manner can be used to determine the galvanomagnetic and thermomagnetic coefficients. The variation of the kinetic coefficients in transverse and longitudinal fields are analyzed in light of the derived expressions. In the case of the transverse magnetic effect the results show that the variation of the thermal emf has the same isotropy as the transverse magnetoresistance. The results show that the angular dependences obtained for the anisotropy of the kinetic effects are appreciable in some cases, and that comparison with experiment would be desirable. However, the only published experimental paper does not have accurately defined crystallographic directions, so that an

L 21123-65
ACCESSION NR: AP5001565

unambiguous comparison with theory cannot be made. "I thank Yu. M. Seidov and F. M. Gashimzade for interest in the work and for a discussion of the results." Orig. art. has: 2 figures and 18 formulas.

ASSOCIATION: None

SUBMITTED: 00 ENCL: 00

SUB CODE: SS NR REF SOV: 002 OTHER: 002

Card 3/3

KERIMZADE, A.S.; AKHMEDOV, B.M.; NAPETVARIDZE, Z.G.; ASHEROV, B.M.

Determining the appropriate degree of hardening for sucker rods. Mash. i neft. obor. no.5:14-19 '65. (MIRA 18:6)

1. Azerbaydzhanskiy nauchno-issledovatel'skiy institut neftyanogo mashinostroyeniya.

L 52520-65 EWT(1)/T/EWA(h) Pz-6/Peb IJP(c) AT
ACCESSION NR: AP5010721 UR/0181/65/007/004/1114/1118

AUTHOR: Askerov, B. M.; Gashimzade, F. M.

TITLE: Singularities of the conduction-electron spectrum in semiconductors with ionic lattice in a strong magnetic field

SOURCE: Fizika tverdogo tela, v. 7, no. 4, 1965, 1114-1118

TOPIC TAGS: electron spectrum, conduction spectrum, ionic crystal, semiconductor crystal, quantizing magnetic field, Green function, electron state density

ABSTRACT: The method of causal Green's functions is used to calculate the density of the states of electrons in a quantizing magnetic field, with allowance for interaction with the optical phonons. The calculations show that the state density can oscillate in regions near the Fermi limit, and that the oscillations connected with the Fermi limit and the limiting frequency of the optical phonon are clearly distinguishable, the former taking place at low temperatures and the latter at high temperatures. There is no screening of phonon potential, and a calculation of the coefficient of absorption of light in polar semiconductors of the $A^{III}B^{V}$ type, with

Card 1/2

L 52520-65
ACCESSION NR: AP5010721

2

allowance for the interaction between the carriers and the optical phonons, is found to agree qualitatively with that obtained by others. "The authors thank Yu. M. Seidov for continuous interest and for a discussion of the results." Orig. art. has: 2 formulas.

ASSOCIATION: Institut fiziki AN AzSSR, Baku (Physics Institute, AN AzSSR)

SUBMITTED: 04May64 ENCL: 00 SUB CODE: SS, EP

NR REF SOV: 004 OTHER: 004

Card 2/2

L 14138-66 EWT(1) IJP(c) WW
ACC NR: AP6000866 SOURCE CODE: UR/0181/65/007/012/3631/3634

AUTHORS: Askerov, B. M.; Gashimzade, F. M. 40 58

ORG: Institute of Physics AN AzSSR, Baku (Institut fiziki AN AzSSR)

TITLE: Interband Faraday effect in semiconductors in strong crossed electric and magnetic fields

SOURCE: Fizika tverdogo tela, v. 7, no. 12, 1965, 3631-3634

TOPIC TAGS: Faraday effect, electron transition, semiconductor band structure, dispension equation, dielectric polarization, Green function, absorption coefficient

ABSTRACT: The Faraday effect is calculated in strong crossed electric and magnetic fields for direct interband transitions. The calculations are based on the dispersion relations and use is made of the fact that in the case of weak absorption the angle of rotation of the plane of polarization in the magnetic field can be expressed in terms of the imaginary part of the nondiagonal component of the dielectric tensor of the medium. The Green's function method is

Card 1/2

employed. The polarization operator is calculated by the standard technique, and from the expression for the polarization operator, the angle of rotation of the plane of polarization is calculated. It is shown that in an electric field the oscillation maxima of the allowed transitions are shifted, an additional oscillation maxima due to forbidden transitions appear. The shifts of the maxima are towards the long-wave side. In the case of weak electric fields, the intensities of the allowed and forbidden transitions become comparable for large Landau numbers. In very weak fields the effect of the field is manifest only in a shift of the threshold of the maximum of the angle of rotation towards longer wavelengths. In the long-wave region the angle of rotation has a regular behavior. The expression obtained for the polarization operator makes it also possible to determine the absorption coefficient in crossed fields. Authors thank Ye. V. Kharitonov for a preprint of his paper and Yu. M. Seidov for valuable advice. Orig. art. has: 15 formulas.

SUB CODE: 20/ SUBM DATE: 09Feb65/ ORIG REF: 005/ OTHER REF: 005

Card FW 2/2

L 24231-66 EWT(l)/EWT(m)/T/EWP(t)/EWA(h) I.P(c) JD/CG/AT

ACC NR: AP6014608 SOURCE CODE: UR/0386/66/003/009/0350/0354

AUTHOR: Askerov, B. M.; Gaszhimzade, F. M.

ORG: Institute of Physics, Adacemy of Sciences Azerbaydzhan SSR (Institut fiziki Akademii nauk Azerbaydzhanskoy SSR)

TITLE: Contribution to the quantum theory of electric conductivity of semiconductors with nonstandard band

SOURCE: Zhurnal eksperimental'noy i teoreticheskoy fiziki. Pis"ma v redaktsiyu. Prilozheniye, v. 3, no. 9, 1966, 350-354

TOPIC TAGS: indium compound, antimonide, electric conductivity, semiconductor conductivity, semiconductor band structure, line splitting, magnetoresistance, carrier density, electron spectrum, spin orbit coupling

ABSTRACT: The theory developed by Adams and Holstein (J. Phys. Chem. Solids v. 10, 254, 1959) is generalized to include the case of an isotropic but nonstandard band (such as the conduction band of InSb, InAs, etc.). The authors also discuss the influence of spin splitting of the Landau levels on the oscillations of the transverse magnetoresistance in n-InSb. To solve the equation of motion for the density matrix by the method of Adams and Holstein, the authors determine the electron spectrum in crossed electric and magnetic fields with allowance for the interaction

Card 1/2

between the conduction band and the valence band. The results of the calculations show that the off-diagonal component of the electric conductivity tensor is determined, as in the case of the standard band, by the conduction electron density; the nonstandard effect enters the diagonal component only through the energy conservation in the scattering process. The electron spectrum is then used to interpret the Shubnikov--de Haas oscillations for a nonstandard band and it is shown that, unlike earlier interpretations by L. Gurevich and A. L. Efros (ZhETF v. 43, 561, 1962), the present results yield a g-factor which does not vary strongly with the density, and the reason for Gurevich and Efros' misinterpretation of the results is that they use a formula which does not apply in this case. It is shown that the procedure can yield correct values of the g factor and also the value of the spin orbit splitting, which hitherto has not been determined for InSb by a direct method. Orig. art. has: 9 formulas.

SUB CODE: 20/ SUBM DATE: 26Feb66/ ORIG REF: 002/ OTH REF: 004

L 30005-66 IJP(c)

ACC NR: AP5024756 SOURCE CODE: GE/0030/65/011/002/0719/0722

AUTHOR: Askerov, B. M.; Gashimzade, F. M.

ORG: Institute of Physics, Academy of Sciences of the Azerbaydzhan SSR, Baku

TITLE: Damping of the electron spectrum and magnetooptical effects in semiconductors

SOURCE: Physica status solidi, v. 11, no. 2, 1965, 719-722

TOPIC TAGS: electron hole, semiconductor band structure, magnetooptic effect, crystal imperfection, electron interaction, phonon, electron spectrum

ABSTRACT: A convenient method of determining the oscillation maximum in magnetooptical phenomena is to find the form of the peaks of various interband effects by introducing the interaction of electrons with lattice imperfections directly into the electron spectrum when calculating polarization operator $\Pi(\omega)$. The absorption constant k and the angle of Faraday rotation (θ) are related to $\Pi(\omega)$ by

$$k = -\frac{4\pi}{c n_0 \omega} \operatorname{Im} \Pi(\omega),$$

$$\theta = -\frac{2}{n_0 \sigma} \int_0^\infty \left(\frac{\omega}{\omega'}\right)^2 \frac{\operatorname{Im} \Pi_-(\omega') - \operatorname{Im} \Pi_+(\omega')}{\omega'^2 - \omega^2} d\omega'$$

Card 1/3

L 30005-66

ACC NR: AP5024756

considered under certain restrictions and evaluated at the quantum limit. The absorption constant k as a function of H has a pronounced minimum at $\Omega_r = \omega_0$ connected with a singularity in the density of electron states for polar semiconductors in a strong magnetic field. Orig. art. has: 15 formulas.

SUB CODE: 20/ SUBM DATE: 21Jul65/ ORIG REF: 003/ OTH REF: 003

Card 3/3

ACC NR: AP7001972

the spectrum within the linear approximation. The solution of the equation of motion for the density matrix shows that the nonparabolity enters into the dissipative current only through the energy conservation law or the scattering process. The general equation for the electrical conductivity tensor is applied for degenerate semiconductors; Shubnikov-de-Haas oscillation conditions are obtained, in consideration of spin splitting of the Landau levels. The positions of the oscillation maxima are calculated. Inelastic electron scattering by optical phonons is analyzed. The conditions for magnetophon resonance are derived for semiconductors with nonstandard energy bands. It is shown that all the maxima of the Gurevich-Firsov oscillations, except the first one, have the natural width. Orig. art. has: 46 formulas and 1 table. [Based on authors' abstract] [NT]

SUB CODE: 20/SUBM DATE: 07Sep66/ORIG REF: 007/OTH REF: 005/

Card 2/2

L 32692-66 EWT(d)/EWP(1) IJP(c) BB/GG

ACC NR: AP6012425

SOURCE CODE: UR/0406/65/001/004/0049/0054

AUTHOR: Askerov, Ch. I.

ORG: None

TITLE: Synthesis of circuits on one- and two-threshold elements

SOURCE: Problemy peredachi informatsii, v. 1, no. 4, 1965, 49-54

TOPIC TAGS: logic element, logic circuit, computer component

ABSTRACT: One- and two-threshold elements (OE and TE) have higher functional potentials than conventional "AND," "OR," and "NOT" elements, consequently, circuits based on OE and TE contain a smaller number of elements. A development of methods of synthesis of circuits based on such elements is, therefore, important. A large number of articles has been devoted to the problem of synthesis of circuits based on threshold elements, for the synthesis of circuits based on two-threshold elements, however, there is only one method (P. Ercoli, L. Mercurio. Threshold logic with one or more than one threshold. Inform. Process., 1962, Amsterdam, N. Holland Publ. Co., 1963, 741-746) which is not at all effective. The present article proposes methods for the synthesis of circuits containing both OE and TE. These methods in some cases produce more efficient results than those obtained by other methods. The methods proposed make it possible to realize the arbitrary Boolean

Card 1/2

UDC: 62-507

L 7803-66 EWT(d)/EWT(l)/T/EWA(h) IJP(c) IG
ACC NR: AP5027852 SOURCE CODE: UR/0103/65/026/011/2004/2011

AUTHOR: Askerov, Ch.I. (Moscow); Gendler, M.B. (Moscow)

ORG: None

TITLE: Conditions for the realizability of two-threshold functions using real two-threshold elements

SOURCE: Avtomatika i telemekhanika, v. 26, no. 11, 1965, 2004-2011

TOPIC TAGS: logic circuit, Boolean function, reliability engineering, circuit reliability

ABSTRACT: Logical circuits using two-threshold elements are studied taking into account various factors which limit the functional capabilities of such elements. The author discusses the mathematical formulation of the two-threshold Boolean function, gives several examples of physical realizations of such functions, formulates sufficient conditions for a reliable realization of the two-threshold functions, determines the parameters of the physical element, and works out an illustrative example. Orig. art. has: 30 formulas, 1 figure, and 1 table.

SUB CODE: IE, MA, EC / SUBM DATE: 05Mar65

Card 1/1 UDC: 621.374.335.681.142.67

L 47505-66 EWT(1)

ACC NR: AP6032519 SOURCE CODE: UR/0413/66/000/017/0094/0094

INVENTOR: Askerov, Ch. I.; Kovachich, Yu. V.; Semenkov, O. I.

ORG: none

TITLE: Integrator unit for a serial digital differential analyzer. Class 42, No. 185566 [announced by the Institute of Automation and Telemechanics (Technical Cybernetics), AN SSSR (Institut avtomatiki i telemekhaniki (tekhnicheskoy kibernetiki) AN SSSR)]

SOURCE: Izobreteniya, promyshlennyye obraztsy, tovarnyye znaki, no. 17, 1966, 94

TOPIC TAGS: digital differential analyzer, digital integrator

ABSTRACT: An Author Certificate has been issued for an integrator unit for a serial acting digital differential analyzer. The unit consists of a delay line for increment storage, an increment counter, a shift register, adders, gates, an inhibit circuit, and an operation command block (see Fig. 1). The delay line output is connected to one input of gate (4) whose other input is tied with the operation command block output. The output of this gate is applied to the shift register. The outputs from the shift register stages are applied to the corresponding increment counter stages through gates (5) which are also connected to a control unit. The outputs of the increment counter stages are grouped and applied to an INHIBIT gate (7) whose second

Card 1/2 UDC: 681.142.07

ALIYEV, G.M.; ASKEROV, Ch.M.; KERIMOV, I.G.

Effect of a sulfur admixture on the electric properties of selenium. Izv. AN Azerb. SSR. Ser.fiz.-mat. i tekh.nauk no.5:45-49 '61. (MIRA 15:2)

(Selenium--Electric properties) (Sulfur)

ACCESSION NR: AP4027708 S/0233/63/000/006/0073/0078

AUTHOR: Barkinkhoyev, Kh. G.; Askerov, Ch. M.; Aliyev, G. M.

TITLE: The effect of a mercury admixture on the electric properties of selenium

SOURCE: AN AzerbSSR. Izvestiya. Seriya fiz.-matem. i tekhn. nauk, no. 6, 1963, 73-78

TOPIC TAGS: mercury, mercury vapor, selenium, electric conductivity, diffusion factor, component suspension, molybdenum ampule, thermoelectromotive forces doner level, acceptor level

ABSTRACT: The investigation into the effect of mercury impurities on the electric properties of selenium was prompted by the contradictory opinions on this subject published in literature. The samples involved in the test were molybdenum ampules with selenium and mercury. Following a special treatment, the samples were crystallized at 210C for 25 hours. The electric conductivity and thermoelectromotive force were then measured by the compensation method, and the graphs were plotted on the basis of the mean values of several measure-

Card 1/2

ACCESSION NR: AP4027708

ments. The same samples were used for measuring the thermoelectromotive force in relation to copper within an 8-10 degree gradient and 20-200 C temperature range. The experimental data reveal that the small concentrations of mercury atoms in the selenium tend to reduce its electrical conductivity. This can be explained by the assumption that the mercury atoms in the selenium produce donor levels which increase with increasing impurities, intensifying their compensation of the selenium acceptor levels. Such an effect of the impurities prior to the full compensation of the selenium acceptor levels, should lead to a reduced electric conductivity. The increasing temperature relationship of the concentration and the reduced mobility of the current carrier in selenium are natural from the point of view of the band theory. All the data published in literature indicate that the mobility increases and the concentration of the current carriers in selenium decreases with temperature. But this problem, on the whole, is still not very clear. Orig. art. has: 6 figures

ASSOCIATION: AN AzerbSSR

SUBMITTED: 00 DATE ACQ: 17Apr64 ENCL: 00

SUB CODE: PH, CH NO REF SOV: 004 OTHER: 008

Card 2/2

ASKEROV, Ch.M.; ALIYEV, G.M.; AKHUNDOVA, E.G.

Heat conductivity, density, and microhardness of the system selenium-sulphur. Izv. AN Azerb. SSR. Ser. fiz.-tekh. i mat. nauk no.1:83-89 '64. (MIRA 17:9)

S/0181/64/006/004/1018/1022

ACCESSION NR: AP4028423

AUTHORS: Abdullayev, G. B.; Aliyev, G. M.; Barkinkhoyev, Kh. G.; Askerov, Ch. M.; Larionkina, L. S.

TITLE: Electrical properties of crystalline and liquid selenium after deoxygenation

SOURCE: Fizika tverdogo tela, v. 6, no. 4, 1964, 1018-1022

TOPIC TAGS: electric conductivity, selenium, deoxygenation, thermoelectromotive force, solid liquid study

ABSTRACT: The authors measured the electrical conductivity and the thermoelectromotive force of three samples of Se in the temperature interval 293-773K. The samples were characterized by the following impurity concentrations: 10^{-3}%, 10^{-4}%, and 10^{-5}% for the three samples, respectively. Measurements were made on all three samples before deoxygenation (ordinary Se) and on samples 1 and 3 after deoxygenation. Different jumps in conductivity were observed during fusion of all three samples of ordinary Se. The activation energy of electrical conductivity was found to be 2.05 ev for liquid Se of this type. In the solid phase, the thermoelectromotive force of sample 1 ordinary Se declined with increase in temperature. During

Card 1/2

L 04971-67 EWT(m)/EWP(w)/EWP(t)/ETI/EWP(k) LJP(c) JD
ACC NR: AP6023950 SOURCE CODE: UR/0233/65/000/006/0069/0074

AUTHOR: Akhundova, E. G.; Askerov, Ch. M.; Aliyev, G. M.; Abbasov, R. G.

ORG: none

TITLE: Effect of sulfur, chlorine and dysprosium impurities on the electrical conductivity of hexagonal and liquid selenium

SOURCE: AN AzerbSSR. Izv. Ser fiz-tekhn i matem n, no. 6, 1965, 69-74

TOPIC TAGS: sulfur, chlorine, dysprosium, semiconductor conductivity, selenium, electric conductivity

ABSTRACT: In order to clarify the influence of impurities on the formation of current and the jump in the electrical conductivity σ of selenium on melting, the effect of S, Cl and Dy on the σ of selenium of brands B_3 and B_4 (respectively 99.999 and 99.9999% pure) in the hexagonal modification and in the liquid state including the melting range was studied. Fig. 1 shows the curve of σ vs. the concentration of impurities. It is seen that Dy increases σ by a factor of 10, and that the higher the concentration of Cl, the more slowly σ reaches a maximum. This indicates that Dy impurities can be studied in the production of selenium rectifiers and can be used to replace the volatile Cl impurities. Cl strongly increases σ in B_4 selenium, whereas S strongly decreases it. A study of the temperature dependence of σ showed that σ in the solid state and its jump on melting change substantially with the impurity concentrations. Cl acts like oxygen, creating acceptor levels in Se, and thus increases

Card 1/2

SHAMSIYEV, A.A.; ASKEROV, F.A.; ISMAILOV, A.M.

Strength of some Azerbaijan rocks under uniaxial expansion and contraction. Azerb. neft. khoz. 39 no.12:17-18 D '60. (MIRA 14:9)

(Azerbaijan--Rocks--Testing)

FARADZHEV, T.G.; ASKEROV, F.A.

Plasticity of clay rocks. Azerb. neft. khoz. 40 no.6:17-18 Je '61. (MIRA 14:8)

(Clay)

ASKEROV, F.A.; SHAMSIYEV, A.M.

Effect of temperature on the mechanical properties of clay rocks. Izv.AN Azerb.SSR. Ser.geol.-geog.nauk no.1:67-72 '65.
(MIRA 18:8)

MEKHTIYEV, M.A.; GAUZER, Ye.G.; ASKEROV, F.B.

Functional state of the thyroid gland in sheep tested by the accumulation of radioiodine (I^{131}). Dokl. AN Azerb. SSR 21 no.2:55-58 '65. (MIRA 18:5)

ASKEROV, F.G.

Pipe amygdales in the Eocene effusives of the Kazakh trough (Lesser Caucasus). Izv. AN Azerb. SSR. Ser. geol.-geog. nauk no.2:60-62 '65. (MIRA 18:8)

RUMYANTSEV, I.N., podpolkovnik meditsinskoy sluzhby; NAGIROV, K.S., starshiy leytenant meditsinskoy sluzhby; ASIEROV, G.A., starshiy leytenant meditsinskoy sluzhby.

Use of petroleum turpentine in fly control. Voen.-med. zhur. no.7:76-77 Jl '61. (MIRA 15:1)
(FLIES--EXTERMINATION) (TURPENTINE)

SHAKHTAKHTINSKIY, G.B.; GUSEYNZADE, S.M.; KHALILOV, Kh.S.; ASKEROV, G.R.

Production of pure vanadium pentoxide from flushing fluids of alkali metal sulfates. Azerb. khim. zhur. no.3:140-173 '65.
(MIRA 19:1)

1. Institut khimii AN AzerSSR.

P

USSR / General and Specialized Zoology. Insects. Harmful Insects and Acarids. Pests of the Technical, Oil, Medicinal and Essential-Oil Cultures.

Abs Jour : Ref Zhur - Biol., No 18, 1958, No. 82994

Author : Askerov, G. Ya.; Ismaylov, M. G.

Inst : The Azerbaydzhan Scientific Research Cotton Growing Institute

Title : Pinching of the Cotton Plant in the Struggle Against the Mallow Moth

Orig Pub : Byul. nauchno-tekhn. inform. Azerb. n.-i. in-ta khlopkovodstva, 1957, No 2, 17-20

Abstract : The pinching (P) of the cotton plant in Nakhichevan, in accordance with agricultural principles, occurs from 15 July to 15 August. In experiments, conducted in 1954, from 300 model plants, during the customary P (pinching of the top parts), there were collected 20 eggs on 16 July;

Card 1/3

ISACHKIN, B.Ya. (Penza); MALININ, V.V. (Leningrad); BOGDANOV, I.M.; SENNOVSKAYA, F.V., obshchestvennyy metodist; ASKEROV, K. (Baku)

Draft program for mathematics in grades 9 to 11 of evening (staggered) secondary schools of general education. Mat. v shkole no.3:57-59 My-Je '63. (MIRA 16:7)

1. Inspektor po shkolam rabochey molodezhi Kalininskogo rayona Moskvy (for Bogdanov).
(Mathematics—Study and teaching)

ASKEROV, K.A., ABDULLAYEV, A.M.; ISMAILOV, M.A.

Effect of the structural parameters of three roller bits on their efficiency. Mash. i neft. obor. no.11:20-22 '64. (MIRA 19:1)

1. Mashinostroitel'nyy zavod im. S.M.Kirova.

SHERSTNEV, N.M.; PROTASOV, G.N.; ASKEROV, K.A.

Possibility of using weighting agents. Azerb. neft. khoz. 40 no.6:14-16 Je '61. (MIRA 14:8)
(Oil well drilling fluids)

KASUM-ZADE, D.S.; YADULLAYEV, N.N.; SHERSTNEV, N.M.; ASKEROV, K.A.; DASHDAMIROV, F.A.; BAGIRYANTS, R.S.

Analysis of the performance of reduced-diameter bits and the effectiveness of their use in the area of the Darwin-More Shoal. Azerb.neft.khoz. 40 no.12:23-26 D '61. (MIRA 15:8)
(Apsheron Archipelago--Oil well drilling, Submarine)

NIKITIN, V.S.; SHARUTIN, A.S.; YES'MAN, B.I.; ASKEROV, K.A.

Qualitative characteristics of drilling fluids used for drilling wells in absorption horizons. Azerb. neft. khoz. 41 no.9:16-19 S '62. (MIRA 16:6)

(Oil well drilling fluids)

KARPENKO, M.M.; SHARUTIN, A.S.; ASKEROV, K.A.

Turbodrilling and electric drilling in the Karadag oil field.
Sbor. nauch.-tekh. inform. Azerb. inst. nauch.-tekh. inform.
Ser. Neft. prom. no.6:29-36 '63. (MIRA 18:9)

DZHALILOV, N.M.; ASKEROV, K.A.; GADZHIYEV, N.A.; GANICHKIN, V.V.; KAGRAMANOV, I.M.

Wear of tricone bits in turbodrilling in the Zyrya area. Azerb. neft. khoz. 42 no.1:18-20 Ja '63. (MIRA 16:10)

(Apsheron Peninsula—Oil well drilling—Equipment and supplies)
(Mechanical wear)

ASKEROV, K.M.

Studying the effective methods of using the organic fertilizers of petroleum origin for tomatoes and cabbage. Trudy Inst. pochv. i agrokhim. AN Azerb.SSR 22:83-92 '64.

(MIRA 18:11)

ASKEROV, K.M.

Efficient methods of the application of organic fertilizers of petroleum origin to tomatoes in the basic vegetable-producing regions of the Azerbaijan S.S.R. Izv. AN Azerb. SSR. Ser. biol. i med. nauk no.3:73-78 '63. (MIRA 16:6)
(Azerbaijan--Vegetables--Fertilizers and manures)

ASKEROV, K.M.

Efficient methods of the application of organic fertilizers derived from petroleum by-products for the increase of cabbage yields. Izv. AN Azerb. SSR. Ser. Biol. i med. nauk no.2:79-84 '63. (MIRA 17:5)

ASKEROV, K. Z.

Askerov, K. Z. - "The Problem of Feeding Silkworms during Various Seasons of the Year." Min Higher Education USSR. Azerbaydzhan Agricultural Inst. Kirovabad, 1956 (Dissertation for the Degree of Candidate in Agricultural Sciences).

So: Knizhnaya Letopis', No. 10, 1956, pp 110-127

ASKEROV, M.A.

Analysis of the mechanism of increased resistance of animals to microbes producing gas gangrene in case of traumatic muscle injuries. Dokl. AN SSSR 136 no. 3:727-729 Ja '61. (MIRA 14:2)

1. Institut normal'noy i patologicheskoy fiziologii AN SSSR. Predstavleno akademikom V.N. Chernigovskim.
(WOUNDS) (CLOSTRIDIUM SEPTICUM) (PHAGOCYTOSIS)

ASKEROV, M.A.

Mitotic activity of cells as an indicator of the beginning of defense and reparatory processes in anaerobic wound infections. Dokl. AN SSSR 136 no.4:986-988 F '61. (MIRA 14:1)

1. Institut normal'noy i patologicheskoy fiziologii Akademii meditsinskikh nauk SSSR. Predstavleno akademikom V.N. Chernigovskim.
(WOUNDS) (CELL DIVISION (BIOLOGY))
(INFECTION)

OSTRYY, O.Ya.; ASKEROV, M.A.

Nervous stimulations and the general adaptation syndrome in the processes of the increase of the resistance of the organism. Trudy Inst. norm. i pat. fiziol. AMN SSSR 6:136-139 '62. (MIRA 17:1)

1. Laboratoriya nervnoy trofiki (zav. - doktor med. nauk O. Ya. Ostryy) Instituta normal'noy i patologicheskoy fiziologii AMN SSSR.

Askerov, M. G.

AID P - 2094

Subject : USSR/Mining

Card 1/1 Pub. 78 - 7/24

Authors : Askerov, M. G., Shafiyev, B. N., Makushkin, A. G. and Popova, N. V.

Title : Ways of improving well cementing in major overhauls

Periodical: Neft. khoz., v.33, no.4, 35-39, Ap 1955

Abstract : Dependent upon the condition of the well whose walls have been damaged and require tightening and sealing of the damaged places, different amounts of cement are necessary. The coefficient of absorbing capacity, the coefficient of permeability, the kind and size of fissures and the amount and pressure of the water flow into the well will determine the amount of cement mixture to be pumped, the pressures to be applied, and also the cementing methods to be used. Charts, diagrams.

Institution: None

Submitted : No date

ASKEROV, M.G.; MAKUSHKIN, A.G.; POPOVA, N.V.

Discharge pressure in the case of insulating wells against extraneous waters. Azerb.neft.khoz. 35 no.8:23-25 Ag '56. (MLRA 9:10)

(Oil well cementing)

ASKEROV, M.G.; MAKUSHKIN, A.G.; POPOVA, N.V.

Effect of the elasticity of fluids and the production string in major well repairs. Neft.khoz. 35 no.2:40-42 F '57. (MIRA 10:3)
(Oil wells--Equipment and supplies--Repairing)

ASKEROV, M.I.; BARKHUDAROV, A.I.; MATVEYEV, V.I., redaktor.

[Safe working conditions in oil industries; practice of the First Industry of the Trust "Artemneft'" in combating industrial trauma] Za bezopasnuiu rabotu na neftianykh promyslakh; opyt bor'by s proizvodstvennym travmatizmom na 1-om promysle tresta Artemneft'. Baku, Gos.nauchno-tekhn.izd-vo neftianoi i gorno-toplivnoi lit-ry, Azerbaidzhanskoe otd-nie, 1953. 18 p. (MIRA 8:4)
(Petroleum industry--Safety measures)

ASKEROV, M.K.

Raising Moina rectirostris Leydig as live feed for sturgeons.
Uch. zap. AGU no.7:59-63 '55. (MLRA 9:12)

(Water fleas) (Sturgeons) (Fishes--Food)

ASKEROV, M.K.

Raising Moina rectirostris Leydig as live feed for young sturgeons [in Azerbaijani with summary in Russian]. Izv.AN Azerb.SSR no.1:127-139 Ja '57. (MLRA 10:5)

(Kura Valley--Water fleas) (Sturgeons)

ASKEROV, M.K.

Year-round raising of water fleas. Uch.zap.AGU no.5:73-83 '58.
(MIRA 12:1)
(Water fleas)

ASKEROV, M.K.

Prospects for a mass reproduction of Moina macrocopa Straus as food for the young sturgeon and salmon families. Uch. zap. AGU. Biol. ser. no.3:19-32 '59. (MIRA 15:5)
(BRANCHIOPODA) (STURGEONS) (SALMON)

ASKEROV, M.K.

Biological control of phyllopods in the sturgeon ponds of fish hatcheries. Vop. ekol. 5:9 '62. (MIRA 16:6)

1. Azerbaydzhanskaya nauchno-issledovatel'skaya rybokhozyaystvennaya laboratoriya, Baku.
(Branchiopoda--Biological control)
(Sturgeons) (Fishes--Food)

ASKEROV, M.M.

The 1KMSh-16-25 wrench for rod joints of all sizes. Mash. i neft. obor. no.6:10 '63. (MIRA 17:8)

1. Azerbaydzhanskiy nauchno-issledovatel'skiy institut neftyanogo mashinostroyeniya, g. Baku.

ASKEROV, M.M.

Light 4VP-50 swivel for washing sand plugs. Mash. i neft. obor. no.7: 7-8 '63. (MIRA 17:1)

1. Gosudarstvennyy nauchno-issledovatel'skiy i proyektnyy institut neftyanogo mashinostroyeniya.

MUSTAFAYEV, M.M.; ASKEROV, M.Yu.

Lowering the cost of offshore drilling [in Azerbaijani with summary in Russian]. Azerb.neft.khoz. 37 no.8:47-48 Ag '58.
(MIRA 11:11)
(Neftyanye Kamni region--Oil well drilling, Submarin)

ASKEROV, M.Yu.; GASANOV, A.B.

Technical and economic effectiveness of drilling small-diameter wells [in Azerbaijani with summary in Russian]. Azerb.neft.khoz. 38 no.1:47-48 Ja '59. (MIRA 12:4)
(Oil well drilling)

ASKEROV, M.Yu.; GASANOV, A.B.

Means for reducing the cost of oil and gas well drilling. Azerb. neft. khoz. 38 no.8:47-48 Ag '59. (MIRA 13:1)
(Oil well drilling--Costs)

ASKEROV, M.Yu.

Analyzing economic indices inconnection with slim well drilling [in Azerbaijani with summary in Russian]. Azerb.neft.khoz. 39 no.9:46-47 S'60. (MIRA 13:10)

(Oil well drilling)

BABAYEV, S.G.; SEDOV, V.A.; ASKEROV, M.Yu.

Results of field tests of the performance of brake pulleys of draw works. Mash. i neft. obor. no.8:12-16 '65. (MIRA 18:9)

1. VNIIPTneftemash.

A.[illegible]EV, [illegible].

[illegible]314

Rol' I obyaza mosti Fyel'dshyera na vrachyebno[illegible] vchastkye stroityel'stva. Fyel' dshyer I shashyerka, 1[illegible]9, No. 8, s. [illegible]8-50

SO: [illegible] 30. 40

L 23822-65 EWT(d)/ Pg-4 IJP(c)

ACCESSION NR: AR4046308 S/0044/64/000/008/B052/B053

SOURCE: Ref. zh. Matematika, Abs. 8B283

B

AUTHOR: Askerov, N. G.

TITLE: Boundary value problem with a parameter in the boundary condition

CITED SOURCE: Tr. Seminara po funkts. analizu. Voronezhsk. un-t, vy*p. 7, 1963, 3-6

TOPIC TAGS: boundary value, boundary value problem, boundary condition, none zero solution condition, Eigen value, Laplace operator, parameter value

TRANSLATION: Let Ω be bounded region of the m-dimensional space whose boundary consists of a twice continuously differentiable surface G_1 and a piece G_0 of hyperplane $x_m = 0$. It is assumed that in the points of intersection of the surfaces G_1 and G_0 these surfaces will form an angle which does not exceed $\pi/2$. The problem of finding on Ω the non-zero solution of the equation

$$Lu = \lambda u, \qquad (1)$$

Card 1/3

satisfying the boundary conditions:

$$u=0 \quad \text{in } G_1 \quad \text{and} \quad \lambda \frac{\partial u}{\partial x_m} = \sigma u \quad \text{in } G_0$$

where $\sigma > 0$

$$Lu \equiv -\sum_{i,j=1}^{n} \frac{\partial}{\partial x_i}\left(a_{ij}(x)\frac{\partial u}{\partial x_j}\right) + a(x)u,$$

the coefficients $a_{ij}(x)$ have in Ω limited first derivatives

$$\sum_{i,j=1}^{n} a_{ij}\xi_i\xi_j > \alpha \sum_{i=1}^{n} \xi_i^2,$$

the coefficient a(x) is a measurable, limited, non-negative function. Besides, the function a_{im} changes to zero on G_0, if $i \neq m$. The basic result is the following theorem: the problem (1)-(2) has a non-zero solution for a computable number of values of the parameter (Eigen values) among which only a finite number of non-substantial. The set of Eigen values has only 2 points of concentration, 0 and ∞. To each Eigen value, with the possible exception of the final value, correspond

L 23822-65

ACCESSION NR: AR4046308

one-dimensional root subspaces. The proof uses results of the papers (Askerov, N. K.; Kreyn, S. G.; Laptev, G. M.; Dokl. AN SSSR 1963, 153; RZHMat, 1963, 4B241) and some theorems of functional analysis. As an example, the author examines a square region Ω, $0 \leq x_1 \leq 1$ and $-1 \leq x_2 \leq 0$, while the operator L is given as the minus Laplace operator. E. Volkov.

SUB CODE: MA ENCL: 00

Card 3/3

ACCESSION NR: AP4025104 S/0020/64/155/003/0499/0502

AUTHORS: Askerov, N. G.; Kreyn, S. G.; Laptev, G. I.

TITLE: One class of not self-adjoint boundary value problems

SOURCE: AN SSSR. Doklady*, v. 155, no. 3, 1964, 499-502

TOPIC TAGS: boundary value problem, differential equation, mathematical physics, differential operator, Hilbert space, scalar product, linear operator, Riesz theorem

ABSTRACT: A number of problems in mathematical physics can be reduced to homogeneous boundary value problems with one and the same parameter λ in the differential equations and boundary conditions. In spite of the fact that with every fixed λ, the differential operator and boundary conditions are self-adjoint, the problem is very often not self-adjoint; the spectrum can be imaginary. The article is a general examination of one class of these problems. Suppose a linear operator A with an everywhere dense domain of definition D(A) is given in a separable Hilbert space H with a scalar product (,). Also suppose that two linear operators T and Γ, mapping D(A) into some other separable Hilbert space

Card 1/3

ACCESSION NR: AP4025104

H_1 with scalar product $(\ ,\ )_1$, are defined on $D(A)$. The operators A, T, and Γ have the following properties: totality of the elements of $D(A)$ satisfying the conditions $Tv = 0$ and $\Gamma v = 0$, dense in H; the restriction A_0 of the operator A to the set of all elements of $D(A)$, for which $Tv = 0$, is a self-adjoint, positively defined operator having a completely continuous reciprocal; and the operator Γ maps $D(A_0)$ into a set, dense in H_1, and is thus as completely continuous as the operator from the space $H_{1/2}$ into the space H_1. The Green formula

$$(Au, v) = A(u, v,) - (Tu, \Gamma v)_1$$

where $A(u,v)$ is a bilinear function such that $A(u,u) \geq 0$, is valid. For each $\varphi \in H_1$ there exists a unique element $w \in N$ which satisfies the identity

$$(A_0^{1/2}w, A_0^{1/2}z) = (\varphi, \Gamma z)_1$$

for any $z \in D(A_0^{\frac{1}{2}})$. The equation

$$f = \lambda Pf + \frac{1}{\lambda} Qf,$$

was examined generally in the Hilbert space H. Here, P is positive and Q are non-negative completely continuous operators in H. It can

Card 2/4

ACCESSION NR: AP4025104

be immediately verified that equation $(3)_1$ is equivalent to the system of equations $P^{1/2}BP^{1/2}g + P^{1/2}BQ^{1/2}h = \frac{1}{1+\lambda}g,$

$$-Q^{1/2}BP^{1/2}g + (I - Q^{1/2}BQ^{1/2})h = \frac{1}{1+\lambda}g,$$

where $g = P^{1/2}f,\ h = \frac{1}{\lambda}Q^{1/2}f$ и $B = (I + P + Q)^{-1}.$

All eigenvalues of equation (3) have a non-negative real part. If the condition

$$4\|P\|\|Q\| < 1,$$

is fulfilled, then all the eigenvalues are real. Starting with some number, all eigen values of the problem $Ay = \lambda y,\ \lambda Ty = \sigma Ty$ are real. If the condition

$$\sum\frac{1}{\mu_n} < \infty,\quad \sum\frac{\|Te_n\|_1^2}{\mu_n} < \infty,$$

is fulfilled, then the system $\{y_k^{(s)}\}$ of generalized and adjoint solutions of the problem $Ay = \lambda y,\ \lambda Ty = \sigma Ty$ is repeatedly complete. This becomes valid if the coefficient σ is substituted by a restricted non-negative operator in H_1. Orig. art. has: 11 equations.

Card 3/4

ASKEROV, R.A.

Innervation of the trachea and bronchi in cats. Dokl. AN Azerb. SSR 19 no.3:75-79 '63. (MIRA 17:8)

1. Azerbaydzhanskiy meditsinskiy institut imeni Narimanova. Predstavleno akademikom AN AzSSR F.A. Melikovym.

USSR / Human and Animal Morphology. Nervous System. S-2
Peripheral Nervous System.

Abs Jour: Ref Zhur-Biol., No 14, 1958, 64771.

Author : Abdul ayev, M.S.; Askerov, R. A.
Inst : Not given.
Title : On the Question of the Nerve Portae of the Muscles of the Eye ball.

Orig Pub: Azerb. Tibb Zh., 1957, No 4, 15-18 (Azerb.) 65-68.

Abstract: There is a direct relationship between the density of the small trunks of the nerves and the size of the individual muscles of the eyeball; the larger the muscle, the thicker its innervating nerve. The nerves approach all the muscles of the eyeball, with the exception of the inferior obliquus of the muscle, at a very sharp angle, i.e., nearly parallel to the muscle fascicles; while to the

Card 1/2

ASKEROV, R.A.

Structure and distribution of the nervous apparatus in the human trachea and bronchi. Izv.AN Azerb.SSR.Ser.biol.i med.nauk no.6:109-114 '62. (MIRA 15:12)
(BRONCHI--INNERVATION) (TRACHEA--INNERVATION)

ASKEROV, R.A.

A rare case of accessory renal vessels. Azerb. med. zhur. no.12: 78-81 '62. (MIRA 17:4)

1. Iz kafedry normal'noy anatomii (zav. - zasluzhennyy deyatel' nauki, prof. K.A. Balakishiyev) Azerbaydzhanskogo gosudarstvennogo meditsinskogo instituta (rektor - zasluzhennyy deyatel' nauki, prof. B.A. Eyvazov).

ASKEROV, R.B.; MAMEDZADE, R.N.

Some upper Cretaceous sea urchins from the Lesser Caucasus. Dokl.AN Azerb.SSR 15 no.1:45-49 '59. (MIRA 12:3)

1. Institut geologii AN AzerSSR.
(Indzhachay Valley--Sea urchins, Fossil)

ASKEROV, R.B.

Stratigraphic distribution of Upper Jurassic brachiopods in the Lesser Caucasus (Azerbaijan). Dokl. AN Azerb. SSR 18 no.12:41-43 '62. (MIRA 16:11)

1. Institut geologii AN AzerSSR. Predstavleno akademikom AN AzerSSR M.M. Aliyevym.

MELIKOV, O.G.; ASKEROV, R.B.

Stratigraphy of the distribution of sea urchins in the Lower Cretaceous sediments of the Lesser Caucasus (Azerbaijan S.S.R.) Dokl. AN Azerb. SSR 19 no.12:39-43 '63. (MIRA 17:4)

1. Institut geologii Azneftekhim. Predstavlero akademikom AN Azerbaydzhanskoy SSR K.A.Alizade.

ASKEROV, S.G.

Principle possibilities for increasing drilling rates in the Shirvan Steppe. Azerb. neft. khoz. 39 no.7:46-48 Jl '60. (MIRA 13:10)

(Kura Lowland--Oil well drilling)

ASKEROV, T.M.

Use of the "Ural-1" electronic digital computer in solving a problem concerning the supply of material and technical resources within the system of the National Economy Council of the Azerbaijan S.S.R. Izv. AN Azerb. SSR.Ser. fiz.-mat. i tekh. nauk no.3:51-57 '63. (MIRA 16:11)

Astapov, B.G.

Economic efficiency of artificial attraction in the central field of the Kuybyshev city field. Nauch.-tekh. sbor. po dob. nefti no.25: 149-157 '54. (MLRA 7:12)

1. Vsesoyuznyy neftegazovyy nauchno-issledovatel'skiy institut.

ASKEROV, V. F.

ASKEROV, V. F.: "A change in the kidney functions as a result of hemisection of the spinal cord in dogs." Second Moscow State Medical Inst imeni I. V. Stalin. Moscow, 1956. (Dissertation for the Degree of Candidate in Medical Science.)

Knizhnaya Letopis'
No 32, 1956. Moscow.

USSR / Human and Animal Physiology. Excretion. T

Abs Jour: Ref Zhur-Biol., No 9, 1958, 41386.

Author : Askerov, V. F.
Inst : Academy of Sciences AzerbSSR.
Title : Changes of Renal Function in Dogs Following Hemisection of the Spinal Cord. Communication I. The Effect of Unilateral Hemisection of the Spinal Cord at the Level of Its Cervical Segments Upon the Renal Function.

Orig Pub: Dokl. AN AzerbSSR 1957, 13, No 1, 53-61.

Abstract: Right hemisection of the spinal cord at the level of the fifth cervical segment failed to have any effect (during the first week) on diuresis (D) of

Card 1/2

USSR / Human and Animal Physiology. Excretion. T

Abs Jour: Ref Zhur-Biol., No 9, 1958, 41387.

Author : Askerov, V. F.
Inst : Academy of Sciences AzerbSSR.
Title : Changes of the Renal Function in Dogs following Hemisection of the Spinal Cord. Communication 2. The Effect of Repeated Hemisection of the Spinal Cord at the Level of the Cervical Segments on the Renal Function.

Orig Pub: Dokl. AN AzerbSSR, 1957, 13, No 2, 203-207.

Abstract: A second hemisection of the spinal cord on the same side (first and fifth cervical segments) in dogs with exteriorized ureters, following the reestablish-

Card 1/2

USSR / Human and Animal Physiology. Excretion. T

Abs Jour: Ref Zhur-Biol., No 9, 1958, 41387.

Abstract: ment of the function of the homolateral kidney, caused only slight changes in the diuresis and urea concentration of the urine, with rapid return to normal urinary excretion.

Card 2/2

USSR/Human and Animal Physiology. Excretion T-7

Abs Jour : Ref Zhur - Biol., No 14, 1958, No 65346

Author : Askerov V.F.
Inst : AS AzerbSSR
Title : The Change in Renal Function Resulting from Hemisection of the Spinal Cords of Dogs. Communication 3. The Effect of Hemisection of the Spinal Cord at the Level of the Cervical Segments on the Excretion of Radioactive Bromine by the Kidneys.

Orig Pub : Dokl. AN AzerbSSR, 1957, 13, No 3, 333-337

Abstract : Hemisection of the spinal cords of dogs (with ureters exteriorized by the Palov-Orbel method) at the level of cervical segments 1-5 sharply delayed the excretion of radioactive Br by the kidneys. Excretion by the kidney ipsilateral to the operation was especially delayed, and the slowing of excretion was most marked with transections in the region of the fifth segment. These findings indicate the presence of

Card : 1/2

ASKEROV, V.F.

ASKEROV, V.F.

Renal function changes caused by hemisection of the spinal cord in dogs. Report No.1: Effect of unilateral hemisection of the spinal cord at the level of the cervical segments on renal function [with summary in English]. Biul.eksp.biol. i med. 43 no.5:55-61 My '57. (MIRA 10:10)

1. Iz kafedry normal'noy fiziologii (zav. - chlen-korrespondent AMN SSSR prof. E.A.Asratyan) II Moskovskogo gosudarstvennogo meditsinskogo instituta imeni I.V.Stalina (dir. - prof. O.V.Kerbikov). Predstavlena deystvitel'nym chlenom AMN SSSR prof. V.V.Parinym.

(KIDNEYS, physiol.
eff. of unilateral hemisection of spinal cord at level of cervical segments in dogs (Rus))
(SPINAL CORD, physiol.
eff. of unilateral hemisection at level of cervical segments on renal funct. in dogs (Rus))

ASKEROV, V.F.

Effect of spinal hemisection on renal function. Report No.2: Sequelae of renal function following cervical hemisection of the spinal cord. [with summary in English]. Biul.eksp.biol. i med. 45 no.3:48-51 Mr'58 (MIRA 11:5)

1. Iz kafedry normal'noy fiziologii (zav. - prof. E.A. Asratyan) II Moskovskogo meditsinskogo instituta imeni N.I. Pirogova (dir. - prof. O.V. Keribikov). Predstavlena deystvitel'nym chlenom AMN SSSR V.N. Chernigovskim.

(SPINAL CORD, physiology,
eff. of hemi-section on renal funct. (Rus))
(KIDNEYS, physiology,
eff. of hemi-section of spinal cord. (Rus))

ASKEROVA, R.

New species of Leontodon from Azerbaijan. Dokl. AN Azerb. SSR 15 no.6:526-528 '59.
(Azerbaijan—Leontodon) (MIRA 12:9)

ASKEROVA, R. K.

"The Caucasian Catnip (Family Nepeta L.)." Cand Biol Sci, Inst of Botany, Acad Sci USSR, Leningrad, 1954. (RZhBiol, No 4, Feb 55)

SO: Sum. No. 631, 26 Aug 55-Survey of Scientific and Technical Dissertations Defended at USSR Higher Educational Institutions (14).

ASKEROVA, R.K.

New species of the genus Nepeta L. from Azerbaijan. Bot.mat. Gerb. no.16:286-289 '54. (MLRA 8:9)
(Azerbaijan--Nepeta)

ASKEROVA, R.K.

A new species of the genus Crepis L. [in Azerbaijani with summary in Russian]. Dokl.AN Azerb.SSR 14 no.11:901-903 '58.
(MIRA 11:12)

1. Institut botaniki AN AzerSSR.
(Hawk's-beard)