

MINEYEVA, I.G.; TARKHANOVA, G.A.

Behavior of uranium and thorium in the postmagnetic process of a
complex of potassium alkali rocks. Geol. rud. mestorozh. 6 no.4:
3-14 JI-Ag '64. (MIRA 17:10)

MINERALOGY

"hostile" form of uranium and thorium in alkali rocks and
postmagmatic formations related to them. Geokhimiya no.4.
443-455 Ap '65. (MIRA 18:7)

RABOTNOVA, I.L.; MINEYEVA, L.A.

Study of the lag phase in micro-organisms. Report No.1: Influence of external conditions on the duration of the lag phase in *Torulopsis utilis* and *Pseudomonas fluorescens*. *Mikrobiologiya* 28 no.3:352-357 (MIRA 13:3) My-Je '59.

1. Biologo-pochvennyy fakul'tet Moskovskogo gosudarstvennogo universiteta im. M.V. Lomonosova.

(CRYPTOCOCCUS, culture

Torulopsis utilis, eff. of external cond. on length of lag phase (Rus))

(PSEUDOMONAS, culture

fluorescens, eff. of external cond. on length of lag phase (Rus))

RABOTNOVA, I.L.; ZAYTSEVA, G.N.; MINYEVA, L.A.

Study of the lag-phase in micro-organisms. Report No.2: Changes in cells of *Torula utilis* and *Pseudomonas fluorescens* during the lag phase. *Mikrobiologiya* 28 no.4:481-487 J1-Ag '59. (MIRA 12:12)

1. Biologo-pochvennyy fakul'tet Moskovskogo gosudarstvennogo universiteta im. M.V. Lomonosova.

(CRYPTOCOCCUS)

(PSEUDOMONAS)

RABOTNOVA, I.L.; ZAYTSEVA, G.N.; MINEYEVA, L.A.

Study of the lag phase in micro-organisms. Report No.3: Changes in
the cells of Azotobacter grown on molecular and ammonia nitrogen.
Mikrobiologiya 28 no.5:683-689 S-0 '59. (MIRA 13:2)

1. Kafedra mikrobiologii i kafedra biokhimii rasteniy Moskovskogo
gosudarstvennogo universiteta im M.V. Lomonosova.
(AZOTOBACTER culture)

MINEYEVA, L. A.

27.1110

38044

S/220/62/031/001/001/003
I018/I218

Author: Mineeva, L. A.

Title: THE EFFECT OF REDOX POTENTIAL OF THE MEDIUM ON GROWTH OF UNICELLULAR GREEN ALGAE

Periodical: *Mikrobiologiya*, v. 31, no. 1, 1962, 43-48

Text: For the review on the effect of redox potential on growth and metabolism of microorganisms, see the monograph of Rabotnova "On the role of physico-chemical conditions (pH and rH_2) in the activity of microorganisms", published by AN SSSR, 1957. In the present communication pure cultures of *Chlorella vulgaris* and *Scenedesmus obliquus* were used. Growth media are described. The cultures were illuminated during the entire growth period. Variations in redox potential were achieved by blowing appropriate gaseous mixtures through the medium or by adding reducing substances into the latter (thioglycollate, $Na_2S_2O_3$, $Na_2S_2O_4$ and Na_2SO_3). Redox potential was determined by means of a platinum electrode. Growth was measured with the aid of a nephelometer. The growth of illuminated photosynthesizing cultures was not accompanied by a drop in rH_2 . During growth, alkalization of the medium was noted, this being due to the utilization of nitrate nitrogen and CO_2 for photosynthesis. The slight decrease in Eh observed during the first three-four days (by 100-150 mvolts) was compensated by a marked increase in pH. Growth of algae under heterotrophic conditions (of

Card 1/2

THE EFFECT OF REDOX...

S/220/62/031/001/001/003
I018/I218

nutrition) was accompanied by a slight drop in pH and Eh of the medium. The decrease in Eh was not due to a release of reducing substances into the medium, the latter were determined by the reduction of diphenyl tetrazolium chloride to formazan in alkaline medium. The effect of reducing substances added to the medium was also studied. It has been shown that a decrease in rH_2 of the medium from 30 to 21 was without any effect on the growth rate of both the autotrophic and heterotrophic cultures. This was taken as an indication that the metabolism of algae is not affected by external medium, because of permeability barriers of the organisms. There are 2 figures and 3 tables.

Association: Biologo-pochvennyi fakul'tet Moskovskogo gosudarstvennogo universiteta im. M. V. Lomonosova (Department of Soil Biology, Moscow State University im. M. V. Lomonosov).

Submitted: February 15, 1961

Card 2/2

39210

S/220/62/031/002/003/004
1018/1218

17 1966

also 2906

AUTHOR:

Mineyeva, L. A.

TITLE:

The effect of pH on autotrophic and heterotrophic nutrition of *Chlorella vulgaris* and *Scenedesmus obliquus*

PERIODICAL: Mikrobiologiya, v. 31, no. 2, 1962, 233-240

TEXT: *Chlorella vulgaris* and *Scenedesmus obliquus* were grown in a medium of the following composition: MgSO₅.7H₂O, 0.9 g; KNO₃, 1.2 g; KH₂PO₄, 0.4 g; Fe(citrate), 0.027 g; ZnSO₄, 0.1 mg; H₃BO₃, 0.1 mg; MnSO₄. 4H₂O, 1.5 mg; CuSO₄.5H₂O, traces, excess CO₂ and water 1000.0 ml. Growth of algae in the mineral medium (autotrophic nutrition) was possible from pH 4.5 to 10.0. In the presence of glucose (heterotrophic nutrition in the dark) *Chlorella* could grow at a pH from 5 to 9 and *Scenedesmus*, from pH 5.5 to 7.5. In the presence of acetate as a carbon source, *Chlorella* grew at pH from 6.3 to 6.4 and *Scenedesmus*, at pH 7.0 and higher. It was also shown that the pH of the medium affects the character of nutrition of *Chlorella* and *Scenedesmus*. In illuminated cultures in the presence of glucose or acetate in the medium, the higher the pH the more autotrophic the nutrition of *Scenedesmus obliquus*. The same was true of *Chlorella vulgaris* in the presence of acetate. In the presence of glucose (as a carbon source) the metabolic pattern of *Chlorella* did not change within pH range from 5.3 to 9.3. There are 6 figures and 5 tables.

Card 1/2

The effect of...

ASSOCIATION: *Biologo-pochvennyy fakul'tet Moskovskogo gosudarstvennogo universiteta im. M. V. Lomonosova (Department of Soil Biology, Moscow State University, im. M. V. Lomonosov)*

S/220/62/031/002/003/004
1018/1218

SUBMITTED: April 30, 1961

Card 2/2

37908
S/220/62/031:003:001:003
1016/1216

27.1110

Author: Mineyeva, L. A.

Title: EFFECT OF LIGHT INTENSITY ON THE AUTOTROPHIC AND HETEROTROPHIC NUTRITION OF *CHLORELLA VULGARIS* AND *SCENEDESMUS OBLIQUUS*

Periodical: *Mikrobiologiya*, v. 31, no. 3, 1962, 411-416

Text: The effect of light on growth and metabolic activity of *Chlorella* and *Scenedesmus* was studied in two intensity ranges: a) below light saturation of photosynthesis and b) in the region of light saturation of photosynthesis. The ratio between autotrophic and heterotrophic nutrition under the different conditions were determined on the basis of the expenditure of organic compounds per unit increase of the living mass. The greater the part of photosynthesis in the synthesis of cellular substance the less organic substrate from the medium is spent. In the dark 1/3 of the organic compounds used is transformed into cellular material. In the light this metabolism is augmented by assimilation of carbon by photosynthesis. The shift takes place in the region of low light intensities—below 500-700 light candles. At higher intensities, the ratio between the autotrophic and heterotrophic feeding remains constant within a wide range of light intensities. Very low light intensities (50-100 light candles) had a specific effect on glucose consumption by cultures of

Card 1/2

OR RELEAS

EFFECT OF LIGHT...

S/220/62/031/003/001/003
1016/1216

Scenedesmus, which could not be attributed to photosynthesis. It is suggested that light affects the rate of the heterotrophic processes by increasing the permeability of the cell. There are 2 figures and 4 tables

Association: Biologo-podwennyi fakul'tet Moskovskogo gosudarstvennogo universiteta im M. V Lomonosova (The Faculty of Soil Biology, The Moscow State University im M. V. Lomonosov).

Submitted: June 30, 1961

K

Card 2/2

SKOBKIN, V.S.; MINEYEVA, L.A.

Mutation induction in the bacteriophage T2 following radioactive decay of C14 atoms incorporated into DNA. Genetika no.3:97-104 S '65. (MIRA 18:12)

1. Institut atomny energii imeni I.V.Kurchatova, Moskva.
Submitted March 30, 1965.

MINSYEVA, L.V.

BELOZERSKIY, A.N.; ZAYTSEVA, G.N.; GAVRILOVA, L.P.; MINSYEVA, L.V.

Chemistry of Azotobacter. Report No.1: Nitrogenous substances in Azotobacter [with summary in English]. Mikrobiologiya 26 no.4: 409-417 J1-Ag '57. (MIRA 10:12)

1. Moskovskiy gosudarstvennyy universitet im. M.V.Lomonosova
Biologo-pochevnyy fakul'tet.

(AZOTOBACTER, METABOLISM,
nitrogen (Rus))

(NITROGEN, metabolism,
Azotobacter (Rus))

MINEYEVA, M.N.

Forecasting the phasic state of precipitation near the earth's
surface. Trudy TSIPno.83:28-38 '59. (MIRA 12:5)
(Precipitation (Meteorology))

MINEYEVA, M.N., LUZHAYA, N.P.

Accuracy of temperature forecasts for Moscow. Trudy TSIP no.95:32-
61 '60. (MIRA 13:8)

(Moscow—Atmospheric temperature)
(Weather forecasting)

MINEYEVA, M.N.

Geopotential forecasting in the centers of high cyclones and anti-cyclones by the wind field with an account of the acceleration. Trudy TSIP no.112:32-39 '61. (MIRA 14:5)

(Meteorology)

MINEYEVA, Nadezhda Ivanovna; MATSUK, R.V., red.; VORONINA, R.K.,
tekhn. red.

[Loan capital, credit and currency circulation of capitalist
countries] Ssudnyi kapital, kredit, denezhnoe obrashchenie ka-
pitalisticheskikh stran. Moskva, Vysshaya shkola, 1962. 62 p.
(MIRA 15:6)

(Finance)

MINEYEVA, O.K.

DOKUKINA, A.F.; KOTON, M.M.; MINEYEVA, O.K.; PARIBOK, V.A.

Synthesis of chloro- and bromo-substituted methylstyrenes. Zhur.ob.
khim. 26 no.6:1651-1653 Je '56. (MIRA 11:1)

1.Leningradskiy politekhnicheskii institut.
(Chemistry, Organic--Synthesis) (Styrene)

MINEYEVA, O. K.

7
Synthesis of chloro- and bromo-substituted methyl-
styrenes. A. P. Dokukina, M. M. Kofan, O. K. Mineeva
and V. A. Paribok. *J. Gen. Chem. U.S.S.R.* 26, 1849-51
(1950) (English translation) --See C. 51 1885:

6
4E 45
4C 26

"APPROVED FOR RELEASE: 06/14/2000

CIA-RDP86-00513R001134420002-4

(1950) (English translation) -- See C. 51, 1886

B.M.R.

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APPROVED FOR RELEASE: 06/14/2000

CIA-RDP86-00513R001134420002-4"

MINEYEVA, O.K.

USSR/ Chemistry - Physical chemistry

Card 1/2 Pub. 147 - 23/35

Authors : Dokukina, A. F.; Koton, M. M.; Kryukova, K. N.; Mineyeva, O. K.;
Paribok, V. A.

Title : Relation between structure and polymerizability of substituted styrenes

Periodical : Zhur. fiz. khim. 30/1, 190-195, Jan 1956

Abstract : Investigation was conducted to determine the polymerization process of numerous disubstituted styrene derivatives containing halogen atoms and methyl radicals in various arrangements in the benzene ring of styrene. The position 2,5- at which the maximum rate of polymerization and maximum molecular weight was observed was considered to be the most favorable position for substitutes in the styrene benzene ring. The series formed

Institution: Leningrad Polytechnic Inst. im. M. M. Kalinin

Submitted : June 27, 1955

Card 2/2 Pub. 147 - 23/35

Periodical : Zhur. fiz. khim. 30/1, 190-195, Jan 1956

Abstract : by styrene substitutes are shown in the order of their polymerization rate. The effect of substituting groups in the benzene ring of styrene on the polymerisability and other characteristics of polymers is discussed. Four USSR/USA references (1939-1955). Tables; graphs; drawing.

YEL'TSOVA, P.A.; KOTON, M.M.; MINEYEVA, O.K.; SURNINA, O.K.

Polymerization of vinyl derivatives of biphenyl, diphenyl ether and phenyl sulfide. Vysokom. soed. 1 no.9:1369-1373 S '59.

(MIRA 13:3)

(Biphenyl) (Phenyl ether) (Phenyl sulfide)

5.3400

78284

SOV/79-30-3-38/69

AUTHORS: Yel'tsova, P. A., Koton, M. M., Mineyeva, O. K.,
Surnina, O. K.

TITLE: Synthesis of Vinyl Derivatives of Biphenyl, Biphenyl
Ether and Biphenyl Sulfide

PERIODICAL: Zhurnal obshchey khimii, 1960, Vol 30, Nr 3, pp 933-
934 (USSR)

ABSTRACT: The effect of substituents phenyl, phenoxy, and phenyl-
mercapto) on the capacity of compounds to undergo
polymerization, and on properties of resulting polymers
was studied. Addition of ethylene oxide to biphenyl and
diphenyl ether in the presence of anhydrous aluminum
chloride, with subsequent dehydrogenation of obtained
carbinols, yields o-vinylbiphenyl (yield 47%), bp 112-
113° (0.5 mm), n_D^{20} 1.6190; p-vinylbiphenyl, bp 124-126°
(2 mm), mp 118-119°; o-vinyldiphenyl ether (yield 70%),
mp 38-39°; p-vinyldiphenyl ether, bp 106° (1 mm), n_D^{20}

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Synthesis of Vinyl Derivatives of
Biphenyl, Biphenyl Ether and
Biphenyl Sulfide

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SOV/79-30-3-38/69

1.6014; p-vinyldiphenyl sulfide (yield 56%), bp 137°
(1 mm), n_D^{20} 1.6495. There are 8 references, 5 U.S.

2 French, 1 German. The U.S. references are: Frank,
R., Adams, C., J. Am. Chem. Soc., 68, 1365 (1946);
Chem. Abst., 47, 7826 (1953); Bradsher, Ch., Wert,
R., J. Am. Chem. Soc., 62, 2806 (1940); Huber, F.,
Renoll, M., Possow, A., Mowry, D., J. Am. Chem. Soc.,
68, 1109 (1946); Mowry, D., Renoll, M., Huber, F., J.
Am. Chem. Soc., 68, 1105 (1946).

SUBMITTED: April 28, 1959

Card 2/2

TARANTAYEV, T.M.; TOKAR', S.Kh.; KUVSHINNIKOV, S.M.; ZUBOVA, Ye.Kh.; MINEYEVA,
R.G.; ONISHCHENKO, G.P.

Seroprophylaxis of Botkin's disease. Zhur.mikrobiol., epid.i imman. 30
no.11:11-15 N '59. (MIRA 13:3)

1. Iz Kirgizskogo instituta epidemiologii, mikrobiologii i gigiyeny i
kafedry organizatsii zdravookhraneniya Kirgizskogo meditsinskogo insti-
tuta.

(HEPATITIS, INFECTIOUS prev. & control)
(GAMMA GLOBULIN ther.)

MINEYEVA, R.K., kand.veter.nauk

Pathomorphology and some problems of the pathogenesis of paratyphoid fever in swine. Uch.zap. KVI 85:154-166'62.(MIRA 16:7)

1. Kafedra patologicheskoy anatomii Kazanskogo veterinarnogo instituta.

(PARATYPHOID FEVER) (SWINE DISEASES AND PESTS)

24,7900

S/058/61/000/010/035/100
A001/A101

AUTHORS: Kopvillem, U.Kh., Mineyeva, R.M., Morozova, I.D.

TITLE: On the theory of the width of the paramagnetic resonance line in corundum with admixture of chromium

PERIODICAL: Referativnyy zhurnal. Fizika, no. 10, 1961, 159, abstract 10V327 (V sb. "Paramagnitn. rezonans", Kazan', Kazansk. un-t, 1960, 92-94)

TEXT: The authors derived a formula for calculating the width of electronic paramagnetic resonance line in magnetic-diluted crystals, due to the presence of dislocations and inner stresses. It is assumed that the spin Hamiltonian of paramagnetic ions contains two parts; the main part is the same for all ions and it determines the spectrum of electronic paramagnetic resonance; the second part characterizes the straggling of constants of the spin Hamiltonian due to straggling of symmetry axes of the crystalline field and it determines the observed width of electronic paramagnetic resonance line. Particular calculations are performed for Cr ions in the lattice of corundum. A comparison of the calculated and experimental data shows that the strong anisotropy of the line width in dependence on direction of the static magnetic field is explained by

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On the theory of the width ...

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A001/A101

the contribution from the straggling of symmetry axes of the crystalline field. Contributions to the line width due to interaction of Cr ions between themselves and with Al nuclei are also calculated. ✓
B

U. Kopvillem

[Abstracter's note: Complete translation]

Card 2/2

YEVDOSHENKO, V.Sh.; MINEYEVA, R.M.; MASHKEVICH, A.A.; CHIKHALOVA, V.S.

Preliminary results of mass immunization of the population of Kirghizistan with "live" poliomyelitis vaccine. Sov. zdrav. Kir. no.1:38-43 Ja-F '62. (MIRA 15:4)

1. Iz Kirgizskogo instituta epidemiologii, mikrobiologii i gigiyeny (direktor - kand.med.nauk V.M.Pereygin). (KIRGHIZISTAN--POLIOMYELITIS)

S/126/62/013/005/002/031
E032/E514

AUTHORS: Kopvillem, U.Kh. and Mineyeva, R.M.

TITLE:

Free nuclear induction in the absence of a magnetic field

PERIODICAL: Fizika metallov i metallovedeniye, v.13, no.5, 1962, 653-657

TEXT: The method of steady state magnetic and ultrasonic spectroscopy, which involves the determination of the spectrum of resonance absorption by the spin system of the high-frequency magnetic and ultrasonic field, suffers from the disadvantage that the absorption spectrum depends on combinations of the spin-system parameters in a complicated fashion and provides no information on short-lived excited states. The present paper is concerned with the possible application of pulsed generators in magnetic and ultrasonic spectroscopy. In this method the spin-system is brought into an excited state during an interval of time which is sufficiently short so that the magnetic particles do not succeed in interacting with each other and their environment. The generator is then switched off and the average values of the quantities characterizing the substance are measured, e.g. the

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Free nuclear induction in the ...

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E032/E514

components of the magnetic or electric quadrupole moments of the spin system. A particular feature of the pulse method is that it may be possible to neglect the effect of internal interactions on the experimental results. The only limitation is the requirement that the Hamiltonian representing the interaction of the spin-system with the generator should take the form of a sum of single-particle operators for the magnetic particles. A theoretical analysis of the magnetic and acoustic excitation of a spin-system in the absence of a constant magnetic field is given and an expression is obtained for the expectation value of the operator Q which was introduced by the authors in a previous paper (ZhETF, 1961). An estimate is made of cross effects which appear as a result of the action of two-pulse magneto-acoustic generators on the spin system.

ASSOCIATION: Kazanskiy gosudarstvennyy universitet imeni
V. I. Ul'yanova-Lenina (Kazan' State University imeni
V. I. Ul'yanov-Lenin)

SUBMITTED: July 6, 1961

Card 2/2

L 10530-63 EPF(c)/EWT(1)/EWP(q)/EWT(m)/BDS--AFFTC/ASD/ESD-3--Pr-4--CG/LP(C)WH
ACCESSION NR: AP3000621 8/0181/63/005/005/1403/1405
66
64

AUTHOR: Minskyeva, R. M.

TITLE: Magnetic resonance on simple electron levels of V^{3+} ions incorporated into the corundum/lattice

SOURCE: Fizika tverdogo tela, v. 5, no. 5, 1963, 1403-1405

TOPIC TAGS: electron paramagnetic resonance, V^{3+} ion electron level

ABSTRACT: A theoretical study has been carried out concerning the spectrum, intensities, and line widths of transitions between superfine sublevels of the lower nondegenerate energy level of the V^{3+} ion in the corundum lattice. A spin Hamiltonian is set up and solved for the case in which the constant magnetic field is parallel to the trigonal axis of the crystal. Transition probabilities are calculated, and an expression is derived for the second moment, which consists of two parts: dipole-dipole interactions among particles at the lower level, and dipole-dipole interactions between particles at the lower level and particles at the upper level. It is shown that the chief determinant of line width is the second moment, and, correspondingly, the line width of the transition between superfine sublevels of the lower electron level is the same for all transitions.

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L 10530-63

ACCESSION NR: AP3000621

decreasing exponentially with temperature. Evaluation of line width shows that the spectrum can be observed at temperatures of about 1K. "In conclusion the author expresses deep thanks to S. A. Al'tshuler for the suggested topic, the continuous interest in the work, and for the discussion of the results." Orig. art. has: 6 formulas. 2

ASSOCIATION: Kazanskiy gosudarstvennyy universitet im. V. I. Ul'yanova-Lenina
(Kazan State University)

SUBMITTED: 09Jan63

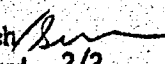
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Card 2/2

~~L 10019-63~~ EFP(c)/EWA(k)/EWP(k)/BDS/EWT(1)/3W2/EEC(b)-2/ES(t)-2--AFFTC/
~~ASD/ESD-3/RADC/APGC/AFWL/SSD--Pr-L/Pf-L/P1-L/Pc-L--GG/K/WG/ER/JHB~~
 ACCESSION NR: AP3001293 S/0181/63/005/006/1697/1699 89

AUTHOR: Al'tshuler, S. A.; Mineyeva, R. M. 88

TITLE: Broadening of paramagnetic resonance lines as a result of indirect exchange interaction

SOURCE: Fizika tverdogo tela, v. 5, no. 6, 1963, 1697-1699

TOPIC TAGS: paramagnetic resonance, spin-lattice relaxation, ionic crystals, chromium ions in ruby

ABSTRACT: A hypothesis of Al'tshuler (ZhETF, 43, 2318, 1962) on the mechanism of paramagnetic resonance in magnetically diluted crystals is supported and developed by comparing available experimental data on chromium ions in ruby with results of detailed calculations by the moment method. The findings confirm that it is the indirect exchange interaction between paramagnetic particles which plays the dominant role in ionic crystals both in the mechanism of spin-lattice relaxation and in the broadening of resonance lines. The effects of crystal-field splitting are discussed, and

Card 1/2

L 10019-63

ACCESSION NR: AP3001293

it is shown that, contrary to suggestions of other authors, neither dipole interactions nor lattice defects can fully account for the line widths observed. Orig. art. has: 8 formulas.

ASSOCIATION: Kazan'skiy gosudarstvennyy universitet im. V. I. Ul'yanova-Lenina
(Kazan' State University)

SUBMITTED: 13Feb63 DATE ACQ: 01Jul63 ENCL: 00

SUB CODE: 00 NO REF SOV: 005 OTHER: 004

Card

2/2

44948

S/048/63/027/001/031/043
B125/B10227.6500
AUTHORS: Kopvillem, U. Kh., and Mineyeva, R. M.

TITLE: On methods pulsed magnetic and sonic spectroscopy

PERIODICAL: Akademiya nauk SSSR. Izvestiya. Seriya fizicheskaya, v. 27,
no. 1, 1963, 93 - 95

TEXT: The possibilities of the pulse method of magnetic and sound spectroscopy are brought out by the example of a spin system excited by a high-frequency sound pulse without constant magnetic field. These calculations are made to establish a connection between the mean value $\langle \mu_x \rangle$ (x, y, z) of the magnetic moment of the specimen for the time interval $\Delta t \ll \tau$ (τ is the shortest characteristic magnetic relaxation time) and the parameters $A_1, B_1,$

Δt of the Hamiltonian
$$\mathcal{H}_{SL} = \sum_j^N [A_1 (S_j^x S_j^x + S_j^y S_j^y) \cos \omega_0 t + B_1 (S_j^x S_j^y + S_j^y S_j^x) \sin \omega_0 t], \quad (2)$$

of the interaction between the sound field and the spin system. Experimental measurements of $\langle \mu_x \rangle$ in the instant $\Delta t = t$ permit the investigation of the spin-phonon interaction in crystals. The solution of the Schrödinger
Card 1/3

S/048/63/027/001/031/043
B125/B102

On methods pulsed magnetic and sonic ...
equation for the spin Hamiltonian, with consideration of the Hamiltonian
(2), leads to the formulas $|\pm m\rangle \leftrightarrow |+_{(m+1)}\rangle$

$$\langle \mu_x(t) \rangle = \langle g_{\parallel} \beta S_z(t) \rangle = \frac{1}{2} N g_{\parallel} \beta P (\cos 2\omega t - 1), \quad 0 \leq t \leq \Delta t, \quad (7)$$

$$\langle \mu_x(t) + \mu_y(t) \rangle = N g_{\perp} \beta P \langle S_x | S_x | S_x, m+1 \rangle |b|^{-1} \sin 2\omega t \times$$

$$\times \{ \operatorname{Re}(b^*) [y \cos \omega t - x \sin \omega t] + \operatorname{Im}(b^*) [y \sin \omega t + x \cos \omega t] \},$$

$$P = \left[\sum_r^{m+1} \exp(E_r/kT) \right]^{-1} \{ \exp(E_m/kT) - \exp(E_{m+1}/kT) \}, \quad (8)$$

for the transition where $\hat{x}, \hat{y}, \hat{z}$ are unit vectors. A pulse of sound moving along the z-axis produces a non-oscillating polarization of the magnetic moment. When the sound has ceased this polarization disappears within the time needed for longitudinal relaxation of magnetization. With nuclear spin systems, $\langle S_z(t) \rangle \neq 0$ is due to the polarization of the nuclei. The components of magnetization occurring in the (x,y) plane according to (8) oscillate with a frequency ω . These components disappear within the time of transverse relaxation and cause a signal of free induction or a spin echo.

Or methods pulsed magnetic and sonic ...

S/048/63/027/001/031/043
B125/B102

ASSOCIATION: Fiziko-tekhnicheskiy institut Kazanskogo filiala Akademii nauk
SSSR (Physicotechnical Institute of the Kazan' Branch of the
Academy of Sciences USSR); Kazanskiy gos. universitet im. V. I.
Ul'yanova-Lenina (Kazan' State University imeni V. I. Ul'yanov-
Lenin)

Card 3/3

AL'TSHULER, S.A.; MINNYEVA, R.M.

Broadening of paramagnetic resonance lines due to indirect
exchange interaction. Fiz. tver. tela 5 no.6:1697-1699
Je '63. (MIRA 16:7)

1. Kazanskiy gosudarstvennyy universitet imeni Ul'yanova-
Lenina.

L 24761-65 EWT(1)/EPF(c)/EPF(n)-2/EPR/T/EPA(bb)-2/EWA(1) Pr-Li/Ps-Li/Pu-Li WW

ACCESSION NR: AP5003464

S/0181/65/007/001/0310/0312

AUTHORS: Al'tshuler, S. A.; Mineyeva, R. M.

TITLE: Concerning nuclear magnetic resonance in nuclei belonging to paramagnetic atoms

SOURCE: Fizika tverdogo tela, v. 7, no. 1, 1965, 310-312

TOPIC TAGS: paramagnetic atom, nuclear magnetic resonance, line broadening, hyperfine structure

ABSTRACT: In view of the difficulties in observing nuclear magnetic resonance (NMR) in paramagnetic atoms, owing to the large linewidth, the author indicates another possibility of observing NMR in paramagnetic atoms under experimental conditions that are easily realized. The method is based on the fact that the crystalline field very frequently gives rise to doublets in ions of rare-earth metals, and the lower level of the doublet usually corresponds to

Card 1/2

L 24761-65

ACCESSION NR: AP5003464

a large g factor. At a temperature 1--2K and a magnetic field close to 1000 Oe the splitting of such a doublet is so large that the population of the lower sublevel is larger than the population of the upper one by approximately 10^5 . This eliminates the broadening due to the dipole-dipole interaction of the electron magnetic moments. This also makes possible the use of crystals with large paramagnetic ion concentration, so that the intensity of the NMR effect can be increased and the number of defects causing line broadening is decreased. Since the local field is quite large (about 30 kOe for Th^{3+} in ethyl sulfate), the effect can be observed in relatively weak external fields. Orig. art. has: 1 formula.

ASSOCIATION: Kazanskiy gosudarstvennyy universitet im. V. I. Ul'yanova-Lenina (Kazan' State University)

SUBMITTED: 10Aug64

ENCL: 00

SUB CODE: SS, NP

NR REF SOV: 004

OTHER: 003

Card

2/2

L 9410-66 ENT(l)/ENT(m)/EWP(j)/T/EWP(t)/EWP(b)/EWA(c) IJP(c) JD/WJ/JG/GG/RM

ACC NR: AP5024691

SOURCE CODE: UR/0056/65/049/003/0743/0746

AUTHOR: ^{44, 55} Bershov, L. V.; ^{44, 55} Marfunin, A. S.; ^{44, 55} Mineyeva, R. M. 64
BORG: ^{44, 55} Institute of Geology of Ore Deposits, Petrography, Mineralogy and Geochemistry of the Academy of Sciences SSSR (Institut geologii rudnykh mestorzhdений, petrografii, mineralogii i geokhimiі Akademii nauk SSSR)TITLE: Electron paramagnetic resonance of the tetrahedral complex $[MnF_4]^{2-}$ in scheelite

SOURCE: Zhurnal eksperimental'noy i teoreticheskoy fiziki, v. 49, no. 3, 1965, 743-746

TOPIC TAGS: ^{21, 44, 55} electron paramagnetic resonance, manganese compound, single crystal, hyperfine structure, crystal symmetry 18

ABSTRACT: The authors have observed in a single crystal of natural scheelite two different Mn^{2+} spectra, which are naturally attributed to Ca and W sites. One of these spectra has the characteristic signature of a super-hyperfine structure from four F^{19} nuclei. The coordination of Mn^{2+} in the second spectrum is definitely tetrahedral. Both spectra (which overlap partially) have tetragonal symmetry with common Z axis. This makes it possible to obtain the constants of the spin Hamiltonian for Mn^{2+} in W sites, indicating a new charge compensation mechanism in scheelite. In addition, this is at present the only compound in which EPR spectra of Mn^{2+} with fluorine ligands in tetrahedral coordination are observed. Orig. art. has: 2 figures,

Card 1/2

L 9410-66

ACC NR: AP5024691

1 formula, and 2 tables.

SUB CODE: 20/ SUBM DATE: 09Apr65/ ORIG REF: 003/ OTH REF: 014
 18

Card

gc
2/2

BERSHOV, L.V. ; MARFUNIN, A.S.; MINEYEVA, R.M.

Electronic paramagnetic resonance of Mg^{2+} in apophyllite. Dokl.
AN SSSR 164 no.5:1141-1142 0 '65. (MIRA 18:10)

1. Institut geologii rudnykh mestorozhdeniy, petrografii, mineralogii
i geokhimi AN SSSR. Submitted April 9, 1965.

I. 05622-67

EWT(1)/EEC(K)-2/T/EWP(k)

IJP(c) WG/RTW

ACC NR: AF6024492

SOURCE CODE: UR/0181/66/008/007/2222/2227

AUTHOR: Mineyeva, R. M.

ORG: Institute of Geology of Mineral Deposits, Petrography, Mineralogy, and Geochemistry, AN SSSR, Moscow (Institut geologii rudnykh mestorozhdeniy, petrografii, mineralogii i geokhimii AN SSSR)

TITLE: Spin lattice relaxation and resonant absorption of ultrasound in crystals containing paramagnetic ions with singlet electron level

SOURCE: Fizika tverdogo tela, v. 8, no. 7, 1966, 2222-2227

TOPIC TAGS: spin lattice relaxation, resonance absorption, ultrasound absorption, paramagnetic ion, absorption coefficient, spin phonon interaction

ABSTRACT: This is a continuation of earlier work (FTT v. 5, 1403, 1963), where the theory of the line width of the transition between nuclear sublevels of the ground-state electron singlet was developed. The present article deals with the spin-lattice relaxation times for these transitions. To this end, general formulas are derived for the probabilities of the relaxation transitions and for the coefficient of ultrasound absorption at low temperatures. The formulas derived are then used to obtain numerical estimates for $V^{3+}:Al_2O_3$ and $Tm^{3+}:Tm(C_2H_3SO_4)_3 \cdot 9H_2O$. The values obtained are of the order of 2 and of $10^5 - 10^{12}$ sec respectively (the corresponding temperatures are 1.5 and 4.2 and 2K respectively). The effect of spin-phonon interaction on the acoustic paramagnetic resonance is also investigated, and the coefficient of resonant

Card 1/2

L 05622-67

ACC. NR: AF6024492

absorption of ultrasound is found to be of the order of 10^{-9} cm^{-1} at frequency 6×10^8 sec^{-1} , in the case of the V^{3+} ion, and of the order of 10^{-19} $\omega^2 \text{ cm}^{-1}$ for Tm^{3+} at 4.2K; it increases with decreasing temperature. The author thanks S. A. Al'tshuler for guidance. Orig. art. has: 1 formulas.

SUB CODE: 20/ SUBM DATE: 27Sep65/ ORIG REF: 008/ OTH REF: 010

Card 2/2 *sep*

POLYAKOVA, A.I.; FAKHRUTDINOVA, L.I.; MINEYEVA, S.I.; AL'PIDOVSKAYA, V.G.

Operation of a unit for the drying of reduced gas in the
Minnibayevo gasoline plant. Nefteper. i neftekhim. no.5:14-17
'64. (MIRA 17:8)

1. Tatarskiy neftyanoy nauchno-issledovatel'skiy institut,
g. Bugul'ma.

BAZHENOV, Vladimir Ivanovich; KOBLYANSKIY, D.A., retsenzent;
RYZHIKOVA, A.M., retsenzent; BELOKOSKOVA, N.A.,
retsenzent; MINEYEVA, V.I., retsenzent; PODTSEMCHIKOVA,
K.K., retsenzent; GABOVA, D.M., red.

[Study of materials used in the clothing industry] Mate-
rialovedenie shveinogo proizvodstva. Moskva, Legkaia in-
dustriia, 1964. 374 p. (MIRA 18:4)

BELOV, V.P.; MINGALEV, B.S.; SHEKHTER, V.M.

Possibility of determining form factors in the leptonic decay of hyperons. Zhur.eksp.i teor.fiz. 38 no.2:541-552 F '60.
(MIRA 14:5)

1. Leningradskiy fiziko-tekhnicheskii institut Akademii nauk SSSR.
(Mesons--Decay)

MINGALEV, M.

Radar. Nashi vesti no.61:3 Ag '54.
(Radar)

(MIRA 8:1)

MINOALEY, M.

Radar (continuation). Nashi vesti no.74:3 Nr '55. (MLRA 8:3)
(Radar)

MINGALEV, V.

Food service enterprises are short of equipment. Obshchestv.pit.
no.5:30-31 My '60. (MIRA 13:10)

1. Zamestitel' ministra trgovli Bashkirskoy ASSR.
(Bashkiria--Restaurants, lunchrooms, etc.--Equipment and
supplies)

VASIL'YEV, Mikhail Vladimirovich; MINGALEV, Yu. A., redaktor; MAMOT, A.I.,
redaktor; LUGHEO, Yu.V., redaktor izdatel'stva; ZEP, Ye.M.,
tekhnicheskiy redaktor

[Automobile and tractor transportation in open-cut mining]
Avtomobil'nyi i traktorny transport na kar'erakh. Sverdlovsk,
Gos.nauchno-tekhn.izd-vo lit-ry po chernoi i tsvetnoi metallurgii,
Sverdlovskoe otd-nie, 1957. 432 p. (MIRA 10:11)
(Mine haulage) (Motor trucks)

MINGALEV, Yu.A.; ULEZKO, Yu.S.; ZININ, V.S.

Remote control of scraper winches. Trudy Unipromedi no.2:163-173
'57. (MIRA 11:11)
(Mining machinery) (Winches) (Remote control)

MINGALEV, Yu. A.

127-58-5-27/30

AUTHORS: Kulakov, I.K., Mining Engineer (Sibgiprozoloto); Latskiy, V.I., and Mingalev, Yu.A., Mining Engineers (Unipromed')

TITLE: Apropos of the Article by A.I. Golomolzin, T.V. Kapitanov et al "To Reduce Unnecessary Quantities of Capital Mine Workings" (Na stat'yu A.I. Golomolzina, T.V. Kapitanova i drugikh "Sokratit' izlishniye ob'yemy kapital'nykh gornykh vyrabotok")

PERIODICAL: Gornyy Zhurnal, 1958, Nr 5, pp 78-79 (USSR)

ABSTRACT: This is a review of two comments on the above-mentioned article which was published in Gornyy Zhurnal, Nr 6, for 1957.

AVAILABLE: Library of Congress

Card 1/1 1. Mines-Operation

MINGALEV, Yu.A.; VERETENNIKOV, V.F.; KORLYAKOV, P.A.; KOLDOMOV, A.S.

The PL-1 conveyor-loader. *Biul.tekh.-ekon.inform.Gos.nauch.-issl.*
inst.nauch.i tekh.inform. no.9:13-14 '63. (MIRA 16:10)

ASHIKHMIN, D.A., inzh.; VERETENNIKOV, V.F., inzh.; GLAZYRIN, I.A., inzh.;
D'YAKOV, A.G., inzh.; MINGALEV, Yu.A., inzh.

Scraper conveyor with a bottom carrying arm for hauling hard,
large-size ore. Gor.zhur. no.1C:54-55 0 '64.

(MIRA 18:1)

1. Nauchno-issledovatel'skiy i proyektno-konstruktorskiy institut
gornogo i obogatitel'nogo mashinostroyeniya, Sverdlovsk.

ASHIKHMIN, D.A., inzh.; MINGALEV, Yu.A., inzh.

Industrial testing of a bottom loading belt scraper conveyor.
Izv.vys.ucheb.zav.; gor.zhur. 8 no.11:105-109 '65.

(MIRA 19:1)

1. Nauchno-issledovatel'skiy i proyektno-konstruktorskiy institut
gornogo i obogatitel'nogo oborudovaniya. Rekomendovana kafedroy
rudnichnogo transporta Sverdlovskogo gornogo instituta. Submitted
April 14, 1965.

PETROV, A.A.; POHFIR'YEVA, Yu.I.; YAKOVLEVA, T.V.; MINGALEVA, K.S.

Conjugated systems. Part 42: Order of addition of iodine to vinyl acetylene hydrocarbons. Zhur.ob.khim. 28 no.9:2320-2324 S '58. (MIRA 11:11)

1. Leningradskiy tekhnologicheskii institut imeni Lensoвета.
(Iodine) (Acetylene)

SOV/20-123-2-25/50

5()
AUTHOR:

Petrov, A. A., Mingaleva, K. S., Kupin, B. S.

TITLE:

Dipolar Moments and Reactivity of the Vinyl Acetylene Hydrocarbons (Dipol'nyye momenty i reaktsionnaya sposobnost' vinilatsetilenovykh uglevodorodov)

PERIODICAL:

Doklady Akademii nauk SSSR, 1958, Vol 123, Nr 2, pp 298-300 (USSR)

ABSTRACT:

The investigation of the addition reactions of the 1,3-eninhydrocarbons lead to the conclusion that in the molecules of the vinyl acetylene and n-alkyl acetylenes (II) the electron cloud is displaced in the direction of the triple bond (Ref 1). However, in the case of the vinyl allyl acetylenes (III) and some isoalkenyl acetylenes (IV) a double polarization of their molecules had to be assumed which is increased in the one or the other direction depending on the nature of the addenda: in the interaction with the hydrogen halides the order of addition proved an electron displacement in the direction of the triple bond (Ref 2), however, in reactions with bromine, water and alcohols it was the direction of the double bond (Refs 3,4). This twofold reactivity could have its cause in the weakening

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SOV/20-123-2-25/50

Dipolar Moments and Reactivity of the Vinyl Acetylene Hydrocarbons

of the polarity of the enin system due to a partial electron displacement in one direction which is contrary to the usual displacement in the 1,3-enin system ((III), (IV)). Some physical properties of the vinyl alkyl acetylenes tend to show such a polarization (Scheme). The authors measured the dipolar moments of 7 vinyl alkyl acetylenes with the following alkyl groups: CH_3^- , C_2H_5^- , C_3H_7^- , C_4H_9^- , $\text{C}_5\text{H}_{11}^-$, $\text{C}_6\text{H}_{13}^-$, and $\text{C}_8\text{H}_{17}^-$, as well as the cis- and trans-propenyl acetylenes, the isopropenyl acetylene and the β -tert.butyl-vinyl acetylene, and, for the reason of comparison, also the moment of the phenyl acetylene. The following results were obtained: 1) The dipolar moments of the vinyl methyl and isopropenyl acetylenes are considerably lower than that of vinyl acetylene (0.77 D). Thereby the electron displacement in the opposite direction to the non-substituted vinyl acetylene was experimentally proved. 2) The dipolar moment increases a little with the increase of the carbon radical, but then remains about constant. 3) In the cis- and trans-propenyl acetylenes the electrons are displaced in the same direction as in the non-substituted vinyl acetylene.

Card 2/4

SOV/20-123-2-25/50

Dipolar Moments and Reactivity of the Vinyl Acetylene Hydrocarbons

4) The Bekker-Natan effect can not be directly proved in the molecule of isopropenyl acetylene. Although β -tert-butyl-vinyl acetylene has a higher dipolar moment than isopropenyl acetylene this dipolar moment is close to that of vinyl butyl acetylene. Thus, the measurement results of the dipolar moments of vinyl acetylene hydrocarbons proved the concept of the reaction mechanism of the addition in the places of the conjugated triple and double bond, as earlier proposed on the basis of chemical characteristics. There are 2 tables and 10 references, 7 of which are Soviet.

ASSOCIATION: Leningradskiy tekhnologicheskii institut im. Lensovet
(Leningrad Technological Institute imeni Lensovet)

PRESENTED: July 4, 1958, by B. A. Arbuzov, Academician,

Card 3/4

5(3)

AUTHORS: Petrov, A. A., Mingaleva, K. S.

S07/79-29-9-4/76

TITLE: Dipole Moments and Activity in the Telomerization Reaction
With Diene Hydrocarbons of Some Allyl Chlorides

PERIODICAL: Zhurnal obshchey khimii, 1959, Vol 29, Nr 9,
pp 2826 - 2829 (USSR)

ABSTRACT: To clarify the causes underlying the rules described in previous papers (Refs 1-5) as well as certain other rules governing the telomerization of diene hydrocarbons with halogen derivatives, and to determine the dependence of reactivity on their structure, accurate data were needed concerning the physico-chemical properties of the initial halogen derivatives and the telomers obtained from them. For this purpose, the dipole moments of a number of pure hydrochlorides of diene hydrocarbons and their initial products were investigated by the telomerization with them and other dienes. Crotyl chloride and 2-chloropentene-3 probably have a trans-configuration. Telomers are, in most cases, mixtures in which the isomers specified in tables 1 and 2 predominate;

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Dipole Moments and Activity in the Telomerization Reaction SOV/79-29-9-4/76
With Diene Hydrocarbons of Some Allyl Chlorides

therefore, data concerning telomers were made use of with caution. By confronting the dipole moments of the diene hydrochlorides investigated and of allyl chloride the following conclusions were drawn: 1) Allyl halogen derivatives exhibit somewhat lower dipole moments, as compared to their corresponding saturated analogues (Ref "6). 2) Dipole moments of allyl halogen derivatives grow with increasing number of methyl group on the double bond. 3) To a somewhat weaker degree, the dipole moments act upon the methyl groups at the carbon bound with chlorine. 4) A second chlorine atom at the double bond somewhat increases the moment. These and further investigation results and conclusions showed that the peculiarities in the behavior of halogen derivatives, in the telomerization with dienes, are not only determined by their dipole moments and the moments of telomers. Thus, there is no direct relation between reaction properties and dipole moments. There are 2 tables, 8 references 7 of which are Soviet.

ASSOCIATION: Leningradskiy tekhnologicheskij institut imeni Lensovet
(Leningrad Institute of Technology imeni Lensovet)
SUBMITTED: July 19, 1958
Card 2/2

85022

5.3400

2209, 1153, 1321

S/079/60/030/007/032/039/XX
B001/B066

AUTHORS: Petrov, A. A., Mingaleva, K. S., Maretina, I. A., and Nemirovskiy, V. D.

TITLE: Investigations in the Field of Conjugated Systems. CXXII. Dipole Moments and Reactivity of Vinyl Acetylene Ketones and Amines

PERIODICAL: Zhurnal obshchey khimii, 1960, Vol. 30, No. 7, pp. 2248-2250

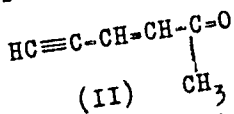
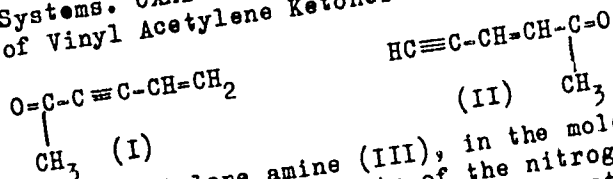
TEXT: Following their papers (Refs. 1-4) on the interpretation of rules governing the reactivity of vinyl acetylene hydrocarbons, the authors determined the dipole moments of two vinyl acetylene ketones, (I) and (II), of different structures, and of amine (III). The dipole moment of ketone (I) was found to be much larger than the moments of methyl-vinyl ketone (Ref. 5) and mesityl oxide (Ref. 6). The dipole moment of ketone (II), with moments of the carbonyl group and of the enine system opposite to each other, was lower than in the case of methyl-vinyl ketone. The same ratio also existed between the polarizability of these ketones (Table 2).

Card 1/3

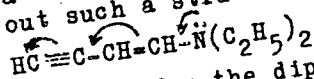
85612

Investigations in the Field of Conjugated Systems. CXXII. Dipole Moments and Reactivity of Vinyl Acetylene Ketones and Amines

S/079/60/030/007/032/039/XX
B001/B066



Vinyl acetylene amine (III), in the molecule of which a conjugation exists between the electron pair of the nitrogen atom and the enin system, showed a very large dipole moment, whereas saturated and unsaturated amines without such a structure have small moments (Refs. 7, 8, 9)



This agreement between the changes to be expected for the dipole moments under the conjugation effect and those observed in experiments, support the authors' assumption on the electron displacement in 1,3-enin systems. Vinyl acetylene amine (III) adds bromine primarily to the triple bond. This corresponds to that electron polarization which might be assumed from the magnitude of the dipole moment (Ref. 12). Consequently, a certain dependence exists in some cases between polarity in the steady state and the reactivity of the derivatives of vinyl acetylene hydrocarbons. There are 2 tables and 13 references: 7 Soviet, 1 US, and 5 British.

Card 2/3

85612

Investigations in the Field of Conjugated Systems. CXXII. Dipole Moments and Reactivity of Vinyl Acetylene Ketones and Amines S/079/60/030/007/032/039/XX B001/B066

ASSOCIATION: Leningradskiy tekhnologicheskij institut imeni Lensovet
(Leningrad Technological Institute imeni Lensovet)

SUBMITTED: July 16, 1959

X

Card 3/3

PETROV, A.A.; MINGALEVA, K.S.; MARETINA, I.A.

Investigation in the field of conjugate systems.
Dipole moments of some α -alkyl- β -halobutadienes.
75-77 '60.

Report 125:
Trudy LTI no.60:
(MIRA 14:6)

1. Kafedra organicheskoy khimii Leningradskogo tekhnologicheskogo
instituta imeni Lensoвета.
(Butadiene--Dipole moments)

S/079/61/031/011/002/003
D228/D305

AUTHORS:

Petrov, A. A., Mingaleva, K. S., Stadnichok, M. D.
and Maretina, I. A.

TITLE:

The dipole moments, structure and reaction capacity of
some enin hydrocarbons and silicohydrocarbons

PERIODICAL:

Zhurnal obshchey khimii, v. 31, no. 11, 1961, 3521-3524

TEXT:

The authors compare the dipole moments of four enin hydrocarbons with tertobutyl and triphenyl radicals and five enin silicohydrocarbons with a triple-bonded, trimethylsilyl grouping in order to clarify the difference in the reaction capacity of such substances. Previous work in this field has been done by A. A. Petrov, K. S. Mingaleva, and B. S. Kupin (Ref. 4; Dokl. AN SSSR, 123, 298, 1958; Ref. 5; Zh. obshch. khimii, 29, 3732, 1959) and other scientists. Experimental procedure: The hydrocarbons were prepared in the following way: vinylacetylene and its isopropenyl derivative by the method of I. A. Maretina and A. A. Petrov (Ref. 8; Zh. obshch. khimii, 31, 419, 1961).

Card 1/3

The dipole moments...

S/019/61/030/010/002/005
D228/D305

entailing the respective alkylation of propenyltertbutylmagnesium bromide and the degradation of the alcohol, obtained from tertbutylacetylmagnesium bromide and acetone; triphenylmethylvinylacetylene by reacting triphenylchloromethane with vinylacetylmagnesium bromide. The silyl hydrocarbons were synthesized from trimethyl- or triphenylsilylanal and vinylacetylmagnesium bromide. The dipole moments were determined by the method of dilute solutions, the dielectric permeability being measured to a special device by the pulsation technique. According to G. N. Kartsev and Ya. K. Syrkina (Ref. 9, Dokl. AN SSSR, 122, 99, 1958, 122, AN SSSR, Otd. khim. nauk, 374, 1960), atomic polarization cannot be disregarded in the case of Si compounds, so the authors used a value of 5 units per one Si atom, the atomic polarization for silylhydrocarbons. Conclusions. The data for the hydrocarbons show that the introduction of methyl and triphenyl radicals at the 1, 3, and 4 positions in the vinylacetylene and vinylmethylacetylene molecules has various effects on their dipole moments; these are especially pronounced in the case of the former radical, and the authors consider the phenyl ring to be enriched by electrons at the expense of the main systems. The same patterns were ob-

Card 2/3

The dipole moments...

S/079/61/031/011/002/015
D228/D305

served in the silicohydrocarbons, although such compounds tend to have smaller dipole moments, which may be due to the displacement of free electron pairs of the halogens or oxygen to the side of the Si atom, whose d-shell is unfilled. However, the orientation of the dipole moment in the molecules of the silicohydrocarbons does not appear to differ from that in the molecules of the corresponding hydrocarbons. There are 2 tables and 9 references: 7 Soviet-bloc and 2 non-Soviet-bloc. The references to the English-language publications read as follows: W. H. Carothers, G. J. Berchet, J. Am. Chem. Soc., 55, 1095 (1933); C. Eaborn, Silicoorg. comp., London, 1960.

ASSOCIATION: Leningradskiy tekhnologicheskii institut im. Lensovet
(Leningrad Technological Institute im. Lensovet) ✓

SUBMITTED: November 30, 1960

Card 3/3

PETROV, A.A.; MINGALEVA, K.S.; ZAVGORODNIY, V.S.

Chemistry of unsaturated tin hydrocarbons. Part 4: Dipole moments of
alkyl-, alkenyl-, and phenylacetylenic tin hydrocarbons. Zhur.ob.khim.
34 no.2:533-535 '64. (MIRA 17:3)

1. Leningradskiy tekhnologicheskij institut imeni Lensoвета.

PETROV, A. A.; RADCHENKO, S. I.; MINGALEVA, K. S.; SAVICH, I. G.; LEBEDEV, V.B.

Alkyl thioenynes and their analogs. Part 1: Synthesis and properties of vinylacetylenic thio-, seleno-, and telluro ethers. Zhur. ob. Khim. 34 no.6:1899-1905 Je '64. (MIRA 17:7)

1. Leningradskiy tekhnologicheskii institut imeni Lensoveta.

L 17962-65 EWT(m)/EPF(c)/EWP(j) Pc-4/Pr-4 ASD(a)-5/SSD/AFWL/ESD(t)/RPL
WW/JFW/RM

ACCESSION NR: AP5002621

S/0079/64/034/008/2630/2632

AUTHOR: Ionin, B. I.; Mingaleva, K. S.; Petrov, A. A.

TITLE: Dipole moment of phosphinic acid esters with unsaturated radicals 7 B

SOURCE: Zhurnal obshchey khimii, v. 34, no. 8, 1964, 2630-2632

TOPIC TAGS: ester, phosphinic acid, chemical bonding, organic phosphorus compound, saturated hydrocarbon, unsaturated hydrocarbon, dipole moment

Abstract: The dipole moment of eight diethyl esters of phosphinic acids with saturated, ethylene, and acetylene radicals: diethyl esters of methylacetylenyl- and phenylacetylenylphosphinic acids and their ethylene and unsaturated analogs, as well as ethyldiacetylenylphosphinic ester, were measured. An assumption of weak conjugation of the diethylphosphone group with multiple bonds was confirmed. It was shown that the diethylphosphone group is somewhat more conjugated with a triple bond than with a double bond. The dipole moment was found to be directed in all cases toward the diethylphosphone group. Orig. art. has 2 tables.

Card 1/2

L 17962-65

ACCESSION NR: AP5002621

ASSOCIATION: Leningradskiy tekhnologicheskij institut im. Lensoveta (Leningrad
Technological Institute)

SUBMITTED: 27Jun63

ENCL: 00

SUB CODE: OC, EM

NO REF SOV: OIL

OTHER: 004

JPRS

Card 2/2

STADNICHUK, M.D.; MINGALEVA, K.S.; PETROV, A.A.

Dipole moments and the structure of $\kappa,3$ -diene silicon hydrocarbons.
Zhur. ob. khim. 34 no.10:3289-3291 0 '64. (MIRA 17:11)

1. Leningradskiy tekhnologicheskii institut imeni Lensoveta.

TEMNIKOVA, T.I.; KARAVAN, V.S.; SEMENOVA, S.N.; ATAVIN, A.S.; MIRSKOVA,
A.N.; CHIPANINA, N.N.; PRELOVSKAYA, R.A.; AKIMOVA, G.S.;
CHISTOKLETOV, V.N.; PETROV, A.A.; MINGALEVA, K.S.; GOLODOVA,
K.G.

Letters to the editors. Zhur. org. khim. 1 no.11:2076-
2078 N '65. (MIRA 18:12)

1. Leningradskiy gosudarstvennyy universitet (for Temnikova,
Karavan, Semenova). 2. Irkutskiy institut organicheskoy khimii
Sibirskogo otdeleniya AN SSSR (for Atavin, Mirskova, Chipanina,
Prelovskaya). 3. Leningradskiy tekhnologicheskii institut
imeni Lensoveta (for Akimova, Chistokletov, Petrov).

L 25598-66 EWT(m)/EWP(j) RM

SOURCE CODE: UR/0079/65/035/009/1566/1570

ACC NR: AP6016687

AUTHOR: Bogolyubov, G. M.; Mingaleva, K. S.; Petrov, A. A.46
BORG: Leningrad Technological Institute im. Lenolet (Leningradskiy tekhnologicheskii institut)TITLE: Dipole moments of certain acetylenic derivatives of phosphorus

SOURCE: Zhurnal obshchey khimii, v. 35, no. 9, 1965, 1566-1570

TOPIC TAGS: dipole moment, intramolecular mechanics, UV spectrum, sulfide, halide, organic phosphorus compound, phosphorus

ABSTRACT The intramolecular electronic interactions in the molecules of sulfides of tertiary alpha,beta-unsaturated phosphines were studied by determining their dipole moments and ultraviolet spectra. The dipole moments were obtained for the phosphine sulfides, thiophosphoryl halides, and halides of tricoordinated phosphorus and correlated with the Taft inductive constants. The increase in the dipole moments of sulfides of tertiary acetylenic phosphines with increasing sum of the inductive constants of the substituents on the phosphorus atom may be explained by a positive electronic effect, directed identically with the vector of the total moment of the molecule. The dipole moments of halides of tricoordinated phosphorus decrease with increasing electron-attracting ability of the substituents, analogously to the triphosphoryl.

Card 1/2

UDC: 547.341+537.226.1

L 25598-66

ACC NR: AP6016687

halides. The patterns observed are explained by conjugation of the triple bonds with the phosphorus atom, the possibility of which is confirmed by the ultraviolet spectra of the sulfides of tertiary unsaturated phosphines. Orig. art. has: 1 figure, 2 formulas, and 5 tables. [JPRS]

SUB CODE: 07, 20 / SUBM DATE: 23Jun64 / ORIG REF: 003 / OTH REF: 002

Card 2/2 PV

L 26052-66 EWT(m)/EWP(j) IJP(c) JW/RM

ACC NR: AP5025123

SOURCE CODE: UR/0079/65/035/010/1720/1723

81
79
B

AUTHOR: Petrov, A. A.; Maretina, I. A.; Mingaleva, K. S.

ORG: Leningrad Technological Institute imeni Lensovet (Leningradskiy tekhnologicheskii institut)

TITLE: Silicon-containing acetylene enamines

SOURCE: Zhurnal obshchey khimii, v. 35, no. 10, 1965, 1720-1723

TOPIC TAGS: silicon compound, silane, electron density, secondary amine, magnetic resonance, dipole moment, hydrogen bonding, organic synthetic process, acetylene

ABSTRACT: A study of the physical properties of 1, 3 amines of the $R_2N-CH=CH-C\equiv CH$ type made it possible to hypothesize the strong displacement of the electron cloud in their molecules to the side of the triple bond. These compounds have a considerably higher dipole moment than the saturated amines; the nitrogen atom does not seem inclined to hydrogen bond formation; and the magnetic resonance signal of the acetylene proton indicates strong shielding. The purpose of the work was to determine how the electron density distribution is changed in a system during introduction into the chain of a silicon atom capable of d, π -reaction

Card 1/2

UDC: 547.333.3:547.345

L 26052-66

ACC NR: AP5025123

with π -electrons of multiple bonds. By the action of trialkylchlorosilanes on the Iotsich complexes obtained from the single amines of $\text{HC}\equiv\text{C}-\text{CH}-\text{CH}-\text{NR}_2$, two silicon containing acetylene enamines of $\text{R}_3\text{Si}-\text{C}\equiv\text{C}-\text{CH}=\text{CH}-\text{NR}_2$ type were synthesized, where $\text{R}=\text{CH}_3$ and C_2H_5 . The dipole moments of the silicon-containing acetylene amines are greater than those of the original 1, 3-single amines by 0.4-0.8D. This fact is interpreted as the result of a d-orbit participation of the silicon atom in the conjugation. Orig. art. has: 2 fig. 2

SUB CODE: 07,20/ SUBM DATE: 09Oct64/ ORIG REF: 006

Card 2/2 *alo*

GRUDTSINA, A.I., dots; MINGAZETDINOV, A.A., vrach

Problems in labor hygiene in the preparations of radon baths.
Gig. i san. 25 no. 6:59-62 Je '60. (MIRA 14:2)

1. Iz Bashkirkogo meditsinskogo instituta i Bashkirkoy
respublikanskoy sanitarno-epidemiologicheskoy stantsii.
(RADON-THERAPEUTIC USE) (RADIATION PROTECTION)

Mingazin, T.A.

✓ Preparation of metallic rubidium from rubidium iodide.
T. A. Mingazin (M. V. Lomonosov State Univ., Moscow).
Zhur. Neorg. Khim. 2, 995-6 (1957).—The prepn. of Rb from
small quantities (3.5 g.) of RbI by reduction with Ca was
studied. The reduction was carried out at 10^{-3} mm. pres-
sure while the temp. was brought to 730° over a period of
3.5 hrs. The Rb evapd. and condensed on the walls of the
app. A 60% yield was obtained. J. Rovtar. ~~Leach-~~

3
1-4E3A
1-4E2C

NS

SOV/137-58-12-25091

Translation from: Referativnyy zhurnal. Metallurgiya, 1958, Nr 12, p 151 (USSR)

AUTHOR: Mingazin, T. A.

TITLE: Investigation of the Bismuth-rubidium System (Issledovaniye sistemy vismut-rubidiy).

PERIODICAL: Turkm. univ., Uch. zap. Turkm un-t, 1957, Nr 11, pp 231-239

ABSTRACT: The investigation of alloys of the Bi-Rb system was carried out by means of a special apparatus which permits one to weigh micro-specimens of Rb, prepare alloys, obtain thermographic curves, take test samples for X-ray analysis, and measure the density of small amounts of alloys under hermetically sealed conditions. On the Bi side the eutectic occurs with 4.5% Rb at 250°C; the second phase of this eutectic is a Bi₂Rb compound with a melting point ~ 650°, a density of 7.5 g/cc, and cubic lattice. On the Rb side there is a eutectic with a melting point close to that of Rb.

L. V.

Card 1/1

SOV/137-58-12-25092

Translation from: Referativnyy zhurnal. Metallurgiya, 1958, Nr 12, p 151 (USSR)

AUTHOR: Mingazin, T. A.

TITLE: On the Investigation of the Bi-Rb System (K issledovaniyu sistemy vismut-rubidiy)

PERIODICAL: Izv. AN TurkmSSR, 1958, Nr 1, pp 91-93

ABSTRACT: Ref. RzhMet. 1958, Nr 12, abstract 25091

Card 1/1

AUTHOR: Mingazin, T. A.

78-3-3-39/47

TITLE: Discussion on Lectures (Obsuzhdeniye dokladov)

PERIODICAL: Zhurnal Neorganicheskoy Khimii, 1958, Vol. 3, Nr 3,
pp. 776-776 (USSR)

ABSTRACT: T.A. Mingazin discusses the lectures by N.N. Zhuravlev and R.N. Kuz'min. They dealt with one of the stages of the complex investigation of the physico-chemical and crystallo-chemical properties of bismuth alloys with the elements of the periodic system according to their position in the table by D.I. Mendeleev. The transition of most of them to a superconducting state is an outstanding property of these alloys. Thus there is a superconducting compound for every kind of metal in bismuth alloys with alkaline metals. There are no other references on alloys of bismuth with rubidium than those by N.Ye. Alekseyevskiy. For this reason the lecturer had carried out thermographic, metallographic and partly also radiographic analyses of this system. A special method for the production of bismuth-rubidium alloys excluding the oxidation of the latter was worked out in view of the strong chemical

Card 1/2

Discussion on Lectures

78-3-3-39/47

activity of rubidium and of its small quantities. According to the values of thermic and metallographic analyses there is a certain compound in the Bi-Rb system which has a melting point at about 650°. This compound approaches Bi_4Rb . A complete x-ray structural analysis did not succeed. There are, however, also lines of the second phase with a cubic lattice besides the bismuth lines on the Debye crystallogram. Two parts of the phase diagram Bi - Rb were investigated: from the side of bismuth and from the side of rubidium. The middle part of the diagram was not investigated. The phase diagram Bi - Rb has no doubt a complicated look. Of late the compound Bi_2Rb was discovered radiographically in the fusion of bismuth with rubidium containing an admixture of potassium. At present the central part of the phase diagram Bi - Rb is investigated thermographically and metallographically, and the compounds found in the system are investigated by means of x-ray structural analysis.

ASSOCIATION: Turkmenskiy gosudarstvennyy universitet, Ashkhabad (Ashkhabad, Turkmen State University)

Card 2/2

56-34-4-5/60

AUTHORS: Zhuravlev, N. N., Mingazin, T. A., Zhdanov, G. S.

TITLE: The Structure of Superconductors. XII (Struktura sverkhprovodnikov. XII) The Investigation of Bismuth - Rubidium Alloys (Issledovaniye splavov vismuta s rubidiyem)

PERIODICAL: Zhurnal eksperimental'noy i teoreticheskoy fiziki, 1958, Vol. 34, Nr 4, pp. 820 - 826 (USSR)

ABSTRACT: According to thermal, microscopical, and radiographic data the test diagram (probnaya diagramma) of the fusibility of the system Bi-Rb is constructed. The investigation of this system is connected with the solution of various methodical problems. The main difficulties mainly are connected with the high chemical activity of metallic rubidium and also with the great difference of the physical-chemical properties of bismuth and rubidium. The whole investigation was performed at small quantities ($\sim 3g$) of rubidium which required the working out of micromethods for the production of the alloys and their physical-chemical analysis. First the production

Card 1/4

The Structure of Superconductors. XII. The Investigation of Bismuth-Rubidium Alloys

56-34-4-5/60

of the alloys is discussed, the apparatus used for this are discussed by means of figures. The melting was performed in small resistance furnaces. Then the authors report on the thermal analysis of the alloys. The curves of heating and cooling were taken by an automatic electron potentiometer unto a temperature of 50 - 100°C. The results of the thermal analysis obtained are illustrated in a diagram and subsequently discussed. At the bismuth-rich alloys (to the composition Bi_2Rb) also a metallographical investigation was performed. According to this the number of the crystals of the compound Bi_2Rb increases with increasing rubidium content in the alloy. The alloy with 15,8 per cent by weight rubidium according to its composition resembles the compound Bi_2Rb (17 per cent by weight;) it contains a small quantity of eutectic and is almost homogeneous. In the system Bi-Rb the various phases differ by their color. Then the authors report on the determination of the structure of the superconductive compound Bi_2Rb . By

Card 2/4

The Structure of Superconductors. XII. The Investigation of Bismuth-Rubidium Alloys

56-34-4-5/60

exact determination of the lattice period of Bi_2Rb the value $a = 9,590 \pm 0,002 \text{ kX}$ was obtained. The distances between the lattice planes, computed from these data agree well with the measured results. The Rb atoms in the structure of the Bi_2Rb are distributed according to the diamond law. Some conclusions are: In the system bismuth-rubidium 4 compounds were stated: Bi_2Rb , BiRb_3 , and two compounds of the probable composition Bi_2Rb_3 and BiRb_2 . The maxima in the fusibility diagram correspond to the compounds Bi_2Rb and BiRb_3 . These compounds form in the fusion of the components with high heat emission. The two other compounds form according to the peritectic reaction. The superconductive compound Bi_2Rb crystallizes in isometric syngony with $a = 9,590 \pm 0,002 \text{ kX}$ and has a structure of the type of Cu_2Mg . The increase of the minimum interatomic distances in the Bi_2Rb leads to an increase of the temperature of the transition into the superconductive state. Finally the author

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The Structure of Superconductors. XII. The Investigation of Bismuth-Rubidium Alloys

56-34-4-5/60

thanks Professor N. Ye. Alekseyevskiy for his valuable advice in the performance of this work, and R. N. Kuz'min for his assistance in the performance of the experiments.- There are 6 figures and 10 references, 9 of which are Soviet.

ASSOCIATION: Moskovskiy gosudarstvennyy universitet (Moscow State University)

SUBMITTED: November 15, 1957

1. Bismuth alloys--Analysis 2. Superconductors--Structural analysis

Card 4/4

MINGAZIN, T.A., Cand Phys-Math Sci -- (diss) "Thermographic, microscopic, and X-ray study of the bismuth-rubidium system." Ashkhabad, 1959. 11 pp with diagrams (Min of Higher Education USSR. Mos Order of Lenin and Order of Labor Red Banner State Univ M.V. Lomonosov). 150 copies. Bibliography: p. 11 (10 titles) (KI,38-59,114)

9

PLATE I X-RAY DIFFRACTION

SOV/4164
Vesoyunova sovshchayze po splavne rezhikh metallow. Ist, Moscow, 1957
Redkiye metalli i splavy; trudy... (Rare Metals and Alloys; Transactions of the
First All-Union Conference on Rare-Metal Alloys) Moscow, Metallurgizdat, 1960.
438 p. 3,150 copies printed.

Sponsoring Agencies: Akademiya nauk SSSR, Institut metallurgii; USSR
Komissiya po redkim metallam pri mashino-stroitel'stvenno kometate.
Ed.: I.L. Shapovalov; Ed. of Publishing House: O.M. Ismayev; Tech. Ed.:
P.G. Tolstoyev.

PURPOSE: This collection of articles is intended for metallurgical engineers,
physicists, and workers in the machine-building and radio-engineering industries.
It may also be used by students of schools of higher education.

CONTENTS: The collection contains technical papers which were presented and dis-
cussed at the First All-Union Conference on Rare-Metal Alloys, held in the In-
stitute of Metallurgy, Academy of Sciences USSR in November 1957. Results of
investigations of rare metal alloys, titanium and copper-base alloys with ad-
ditions of rare metals are presented and discussed along with investigations of
thorium, vanadium, niobium, and their alloys. The effect of rare-earth metals
on properties of magnesium alloy and steels is analyzed. The uses of rhodium
as a catalytic material, electroplying material, and material suitable for
making glow discharge electrical systems are discussed. Also, the ef-
fect of the addition of cerium elements on the properties of heat-resistant
steel is examined and alloys with special physical properties (particularly
semiconductive alloys) are discussed. In addition, the physical properties (particularly
and non-Soviet reference sources) of the articles.

PART II. TITANIUM AND COPPER-BASE
ALLOYS WITH RARE-EARTH ELEMENTS

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PART VII. RESOLUTION

AVAILABLE: Library of Congress
Card 8/8

SOV/4164
10/14/80

MINGAZI, I. A.

24.7100

78111
SOV/70-5-1-20/30

AUTHORS: Zhuravlev, N. N., Smirnov, V. A., Mingazin, T. A.

TITLE: X-Ray Investigation of Compounds Rb_3Bi and Rb_3Sb
(Brief Communication)

PERIODICAL: Kristallografiya. 1960, Vol 5, Nr 1, pp 134-137 (USSR)

ABSTRACT: $RbBi_2$, a superconductor, has been known to form cubic crystals with $a = 9.609$ A and bond lengths Bi-to-Bi 3.40 A; Rb-to-Bi 3.98 A; Rb-to-Rb 4.16 A. Semiconductors Rb_3Bi and Rb_3Sb were produced by melting the mixtures of the respective metals. The obtained products were pure Rb_3Bi and a mixture of Rb_3Sb crystals with those of $RbSb$. All are dark-gray, brittle, and chemically more active than metallic Rb. The X-ray data proved the hexagonal symmetry of Rb_3Bi , whose identity periods were $a = 6.42 \pm 0.02$ A and $c^3 = 11.46 \pm 0.05$ A; Rb_3Sb proved also to be hexagonal.

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X-Ray Investigation of Compounds Rb_3Bi
and Rb_3Sb (Brief Communication)

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SOV/70-5-1-20/30

with $a = 6.29 \pm 0.02\text{A}$ and $c = 11.17 \pm 0.05\text{A}$. Both compounds are isomorph with K_3Bi ; their space group is $C6_3/mmc$; 2 mole. wt and 8 atoms per unit cell; density is 3.76 for Rb_3Bi and 3.27 for Rb_3Sb . The bond lengths are: Bi-to-Bi 6.42 A; Bi-to-Rb 3.71A; Rb-to-Rb 3.85 (in Rb_3Bi) and 3.73 A (in Rb_3Sb); Sb-to-Sb 6.29 A; Sb-to-Rb 3.85 (in Rb_3Bi) and 3.73 A (in Rb_3Sb); Sb-to-Sb 6.29A; Sb-to-Rb 3.46 A. Rb atoms form close-packed sheets with Bi or Sb atoms in triangular spaces within the sheet and in body centers of triangular prisms having Rb atoms of adjacent sheets at the vertices and pinacoid centers. A comparison reveals an increase of Bi-to-Bi bond from 3.40 A in RbBi_2 to 6.42 A in Rb_3Bi , and decrease of Bi-to-Rb and Rb-to-Rb bonds. These changes are believed to be responsible for the turn of a superconductor to a semiconductor. There are 2 tables; and 7 Soviet references.

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X-Ray Investigation of Compounds Rb_3Bi
and Rb_3Sb (Brief Communication)

78111
SOV/70-5-1-20/30

ASSOCIATION: Moscow State University imeni M. V. Lomonosov (Mos-
kovskiy gosudarstvennyy universitet imeni M. V.
Lomonosova)

SUBMITTED: September 24, 1959

Card 3/3

L 36400-66 EWT(m)/EWP(t)/ETI IJP(c) JD

ACC NR: AP6018779

(A)

SOURCE CODE: UR/0070/66/011/003/0471/0472

AUTHOR: Vergunas, F. I.; Mingazin, T. A.; Smirnova, Ye. M.; Abdiyev, S.

ORG: none

TITLE: Texture and electrical conductivity of cadmium sulfide sheets

SOURCE: Kristallografiya, v. 11, no. 3, 1966, 471-472

TOPIC TAGS: cadmium sulfide, electric conductivity, crystal orientation, ~~substrate~~
~~films~~, temperature dependence, photosensitivity

ABSTRACT: The effect of substrate temperatures on structure formation in photosensitive CdS films was studied and correlations between electrical conductivity and the degree of crystal orientation were obtained. Samples were obtained by vacuum sublimation ($2 \cdot 10^{-5}$ mm Hg) where the substrate temperature (T_p) varied from 75 to 400°C. Cu was added to increase the photosensitivity by treating the surfaces with a Cd-CuCl powder and annealing for one hour in Ar. Indium electrodes were evaporated into the surfaces to measure the electrical conductivity. The structure and grain orientation of the films were determined by x-rays and by a photomethod. All of the films had a grain size of about 10^{-5} cm and were composed of α -modified CdS. In the temperature interval of 150-400°C, the crystals had their σ axis oriented perpendicular to the plane of the substrate. The activation treatment (Cu addition) resulted in coarser crystals (2 to

UDC: 548.0 : 537.311

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L 36400-66

ACC NR: AP6018779

5 μ) and in a decrease in the orientation for all values of T_p except for 250°C, where the orientation rose sharply. The electrical parameters measured the concentration of current carriers for both dark and light conductivity. In all cases, the greater the orientation the greater was the conductivity, indicating an anisotropic conductivity mechanism; the conductivity was much greater perpendicular to the c axis than parallel to it. Along the c axis the barrier potential for current carriers was high, but decreased with exposure to light. The barrier distance was estimated to be below 10^{-5} cm, indicating that the barriers were acting within grains. Orig. art. has: 1 figure.

SUB CODE: 11,09/

SUBM DATE: 05Apr65/

ORIG REF: 001/

OTH REF: 005

Card 2/2/MLP

MINGAZOV, I.F. (Kanyshla Kuybyshevskoy oblasti).

Experience in growing rich crops of corn. Khim. v shkole 12 no.3:
71-72 Ny-Je '57. (MLRA 10:6)
(Corn (Maize))

MINGAZOVA, A. V.

42756. MINGAZOVA, A. V. Kharakteristika Pervichnogo Perioda Sifilisa V Voyennyye Gody. Sbornik Trudov Kliniki Kozhnykh i Vener. Bolezney. (Kazan. Gos. Med. In-t) Kazan', 1948, s. 116-23. Bibliogr: Ionarv.

SO: Letopis' Zhurnal'nykh Statey, Vol. 7, 1949