

BOKIY, G.B.; KUKINA, G.A.

X-ray structural study of potassium trichloroethylene platate
and tribromoethylene platate. Zhur.strukt.khim. 6 no.5:706-
715 S-0 '65. (MIRA 18:12)

1. Institut obshchey i neorganicheskoy khimii imeni N.S.
Kurnskova AN SSSR. Submitted June 10, 1964.

KUKINA, G.I., inzh.

Hotel facilities. Gor.khoz.Mosk. 36 no.4:39-43 Ap '62.
(MIRA 15:8)

1. Gorodskaya planovaya komissiya Moskv.
(Moscow--Hotels, taverns, etc.)

YERSHOV, V.A.; KUKINA, L.I.

Cholesterol-protein complexes in the cerebrospinal fluid under normal conditions and in certain pathological states. Zhur.nevr.i psikh. 60 no.5:558-561 '60. (MIRA 13:9)

1. Kafedra nervnykh bolezney (zav. - prof. V.A. Yershov) Stalingradskogo meditsinskogo instituta. (CHOLESTEROL) (PROTEINS) (CEREBROSPINAL FLUID)

Kukina, M.I.

KUKINA, M.I., operatsionnaya sestra (Ivanovo)

Holder for ligature material. Med.sestra 16 no.7:28-29 J1 '57.
(LIGATURE (SURGERY)) (MIRA 10:11)

KUKIHA, M.I.

Rapid sterilization of milk in autoclave. Med. sestra, Moskva.
1:25-26 Jan 1953. (GIML 24:2)

1. Senior Operative Nurse.

KUKINA, N.V.
CA

11 E

Comparative evaluation of the biological action of synthetic ascorbic acid and of its natural concentrates. A. A. Kukina and N. V. Kukina. *Vitamin Research News* (U.S.S.R.) 1946, No. 1, 40. Guinea pigs on C-avitaminosis diet were given 0.5-5 mg. synthetic ascorbic acid daily, while another group received natural concentrates obtained from dog rose (plants or their extracts) in dosage equiv. in terms of vitamin C to the above. After 60 days, the 1st group showed symptoms of scurvy in various manifestations; this was observed in the 2nd group only in isolated cases.

G. M. Kosolov

ASB-31A METALLURGICAL LITERATURE CLASSIFICATION

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80	81	82	83	84	85	86	87	88	89	90	91	92	93	94	95	96	97	98	99	100
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SELEZENEVA, A.A.; KUKINA, N.V.

Comparative evaluation of the biological action of synthetic
ascorbic acid and its natural concentrates; a summary. Trudy
VNIVI 5:176-177 '54. (MLRA 9:3)

1. Biologicheskii otdel Leningradskogo filiala.
(ASCORBIC ACID)

18(5)

SOV/128-59-5-25/35

AUTHOR: Shlykov, M.I., Kukina, R.A., Engineers

TITLE: Use of Cherepovets Foundry Pig Iron for Malleable Iron Production

PERIODICAL: Liteynoye Proizvodstvo, 1959, Nr 5, pp 40-41 (USSR)

ABSTRACT: In the Ivanovo Plant imeni G.K. Korolev, the period of cooling when tempering malleable iron should be shortened. Cherepovets foundry pig iron type IK2 had to be used. The charge consisted of 20% iron IK2, 37% cracked steel, and 43% recovered stuff. Fig.(1) shows the period of cooling for a standard molten mass of malleable iron and Fig. (2) the same for a new molten mass, for which a shortening of the period of cooling could be obtained. The table shows the chemical composition of the various types of iron as well as their mechanical properties. Fig.(3) shows a diagram of the mechanical properties of thermally treated standard malleable iron with and without Cherepovets iron. There are 3 graphs and 1 table.

Card 1/1

KUKINA, R.A.; SMIRNOV, M.P.

Shortening the annealing cycle in the small-lot production of
malleable castings. Lit.proizv. no.7:36-37 J1 '64.

(MIRA 18:4)

KUKINA, R.A.

Introducing a new technology for obtaining malleable iron
castings in small-lot production. Biul.tekh.-ekon.inform.
Gos.nauch.-issl.inst.nauch.i tekh.inform. 18 no.11:4-5
N '65. (MIRA 18:12)

Куккина, В. П.

AUTHOR BOTSCHKAREVA M.A., KUKINA W.P. PA - 2483
TITLE The Tasks to be achieved by the Libraries of the Branches of
the Academy of Science of the USSR.
(Sadatschi bibliottetschnoj raboty w filialach akademii nauk
S.S.S.R. Russian.)
PERIODICAL Vestnik Akademii Nauk 1957 Vol 27, Nr 1, pp 115-116*
Received: V/1957 Reviewed: V/1957
ABSTRACT From the 22 to the 31 October 1956 the forth conference of
directors of branch libraries and directors of other institutes
connected with the Academy of Science of the USSR was held at
Moscow.
In his opening address, A.I. Gorbanew, doctor of technical
science and vice president for the coordination of scientific
work performed by the Academies of the Republics of the Soviet
Union and their branches in the USSR, outlined the tasks to
be performed by the Academy of Science of the USSR and
characterized the part to be played by the various Academies
and their branches with respect to the planning of scientific
problems. He pointed out the necessity of improving biblio-
graphical work, above all with respect to catalogues. He
suggested that a wider scope be given to the exchange of books
and microfilms among libraries and also that the standard
of education librarians be improved.

CARD 1/3

PA - 2483

The Tasks to be achieved by the Libraries of the Branches of the Academy of Science of the USSR.
(Sadatschi bibliottetschnoj raboty w filialach akademii nauk S.S.S.R. Russian.)

The activity of libraries must be on an equal footing with that of scientific institutes and must be under the direct supervision of the president of the respective branch library. The report delivered by W.I. Abramowa, director of the department of special libraries, dealt with the aid to be rendered by libraries to their branches in dealing with scientific problems.

The basic stock of books of branch libraries have increased by 1/3 in the course of 3 years. It is, however, pointed out that in the case of numerous libraries there have not been sufficient supplies of new foreign books.

Some libraries in the East, as eg. in Karelia and elsewhere, scientific research institutes and also the biological institutes of branch libraries in the Ural have stocks which have as yet not been sufficiently well examined. The systematical and alphabetical catalogues and book lists of nearly all libraries are in sore need of being re-edited. Bibliographical work is not satisfactory, and its level is not up to the

CARDS 2/3

PA - 2483

The Tasks to be achieved by the Libraries of the Branches of the Academy of Science of the USSR.
(Sadatschi bibliottetschnoj raboty w filialach akademii nauk S.S.S.R. Russian.)

standards of scientific institutes. There is lack of coordination among branch libraries and other institutes of the Academy of Science, public libraries and military libraries.

In the course of further discussions an increase of subventions for the purchase of new books and a more intense utilization of existing stocks, including foreign stocks, was demanded.

ASSOCIATION: not given

PRESENTED BY: -

SUBMITTED: -

AVAILABLE: Library of Congress.

CARD 3/3

SVERDLOV, L.M.; KLOCHKOVSKIY, Yu.V.; KUKINA, V.S.

Vibration spectra and potential energy constants of halogen derivatives of ethylene [with summary in English]. Inzh.-fiz. zhur. no.12:43-53 ' 58. (MIRA 11:12)

1. Avtodorozhnyy institut, g. Saratov i Vsesoyuznyy avtodorozhnyy zaochnyy institut, g. Saratov.
(Ethylene--Spectra)

AUTHORS: Sverdlov, L. M., Borisov, M. G., SOV/48-22-9-3/40
Klochkovskiy, Yu. V., Kragnov, Ye. P., Kukina, V. S.,
Tarasova, N. V.

TITLE: Theory of the Vibration Spectra of Unsaturated Compounds
(Teoriya kolebatel'nykh spektrov nepredel'nykh soyedineniy)

PERIODICAL: Izvestiya Akademii nauk SSSR. Seriya fizicheskaya, 1958,
Vol 22, Nr 9, pp 1023 - 1025 (USSR)

ABSTRACT: On the basis of abundant experimental information on
unsaturated compounds the authors tried to generalize
the conclusions drawn from it in two directions.
The determination of the characteristic frequencies
of some structural groups with a double bond and the
observation of the mutual influence of the structural
elements. To solve these problems, normal oscillations
and the constants of the potential energy were computed
by means of the theory of the small vibrations of
polyatomic molecules (Refs 1-2). Partial results of
these computations have been published already before
(Ref 3). The basic results of the present paper can be condensed

Card 1/4

Theory of the Vibration Spectra of Unsaturated Compounds SOV/48-22-9-3/40

as follows: The substitution of the hydrogen atoms by alkyl radicals in ethylene leaves the field of the remaining ethylene groups as well as the field of the alkyl radicals almost unchanged. The geometrical distribution of the alkyl radicals with respect to the double bond plays an essential role with regard to the spectrum. The calculations show that in the case of two double bonds that are separated by at least two single bonds the former ones exert almost no influence on each other. On the basis of the computation of the oscillation frequency of cyclopentene the spectrum of the molecule combination dispersion was for the first time interpreted with success. The frequencies and the force constants of some bromine-, chlorine-, and fluorine-substituents of ethylene were computed theoretically. Because of comprehensive data on the spectra of the deuterio-substituted molecules it was possible to carry out an exact computation of the force constants. The good agreement between the computed and the observed frequencies proves the correctness of the whole system of constants. Compared with the halogen

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Theory of the Vibration Spectra of Unsaturated Compounds SOV/48-22-9-3/40

substituents of saturated hydrocarbons the stability of the C-Br-, C-Cl-, and C-F-bonds in unsaturated compounds is somewhat higher. For the first time

$\frac{\partial P_i}{\partial Q_j}$ was computed in the first approximation of the

optical valence scheme. On this occasion μ_{CH} and μ'_{CH}

had, as expected, the same values for the oscillations of all types of symmetry. Thus the calculation has shown that the optical valence scheme only in first approximation is applicable to the computation of the intensities in infrared spectra. There are 4 references, 3 of which are Soviet."

ASSOCIATION: Saratovskiy avtodorozhnyy institut (Saratov Highway Institute); Vsesoyuznyy avtodorozhnyy zaochnyy institut (All-Union Highway Institute for Correspondence Courses)

Card 3/4

S/051/60/009/006/005/018
E201/E191

AUTHORS:

Sverdlov, D.M., Klochkovskiy, Yu.V., Kukina, V.S.,
and Mezhuyeva, T.D.

TITLE:

Vibrational Spectra and Potential Energy Constants of
Halogenated Ethylenes. 1 Monochloroethylene,
Monofluoroethylene, 1,1-dichloroethylene,
1,1-dibromoethylene and their Deuterated Derivatives

PERIODICAL: Optika i spektroskopiya, 1960, Vol.9, No.6, pp 728-733

TEXT:

Sverdlov, Klochkovskiy and Kukina (Ref.1) showed that the vibrational spectra of halogenated ethylenes can be calculated using the force constants of ethylene (Ref.2) and halogenated methanes (Ref.3). The present paper extends this work to calculation of normal vibrations and potential energy constants of monochloroethylene and $\text{CH}_2=\text{CDCl}$, 1,1-dichloroethylene, 1,1-dibromoethylene and $\text{CBr}_2=\text{CHD}$, $\text{CBr}_2=\text{CD}_2$, monofluoroethylene and its seven deuterated derivatives whose formulae are given in the middle of page 728. For the purpose of this calculation the authors used the force constants of ethylene and halogenated methanes, as well as the force constants of halogenated ethylenes reported in the earlier paper (Ref.1). The calculations were

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S/051/60/009/006/005/018
E201/E191

Vibrational Spectra and Potential Energy Constants of Halogenated Ethylenes. Monochloroethylene, Monofluoroethylene, 1,1-dichloroethylene, 1,1-dibromoethylene and their Deuterated Derivatives.

carried out by the method of Yel'yashevich and Stepanov (Ref.3). Natural vibrational coordinates (Figs 1, 2) were used. Tables 1-4 give the calculated frequencies and interpretation of the vibrational spectra of monofluoroethylene and its seven deuterated derivatives (Table 1), of monochloroethylene and $\text{CH}_2=\text{CDCl}$ (Table 2), of 1,1-dibromoethylene and its two deuterated derivatives (Table 3), and of 1,1-dichloroethylene (Table 4). The calculated and experimentally observed frequencies agreed quite well. The published interpretations of the vibrational spectra were either confirmed or modified. Parameters of the force fields of the halogenated ethylenes were calculated. There are 2 figures, 4 tables and 18 references: 4 Soviet, 10 English, 1 German, 1 French, 1 international and 1 Japanese.

SUBMITTED: March 28, 1960

Card 2/2

KLOCHKOVSKIY, Yu.V.; KUKTINA, V.S.; SVERDLOV, L.M.

Vibrational spectra and constants of the potential energy of tetrafluoroethylene, tetrachloroethylene, tetrabromoethylene, trifluoroethylene, 1,1-difluorochloroethylene, 1-fluoro-1-chloroethylene, cis- and trans-dibromoethylene and their deuterium-substituted derivatives. Zhur. fiz. khim. 39 no.8:1912-1921 Ag '65.

(MIRA 18:9)

1. Saratovskiy politekhnicheskii institut.

KOVALEVA, V.P.; NUKINA, Ye.D.; KABANOV, V.A.; KARGIN, V.A.

Polymerizat'on of pyridine in a complex with zinc chloride. *Vysokom.*
soed. 6 no.9:1676-1683 S '64. (MIRA 17:10)

1. Moskovskiy gosudarstvennyy universitet imeni Lomonosova.

DMITRIYEVSKIY, V.I., doktor tekhn. nauk, prof.; ETINGOF, M.N., kand. tekhn. nauk; KUKINOV, A.G., kand. tekhn. nauk; BEKNEV, V.S., kand. tekhn. nauk; SHERSTYUK, A.N., kand. tekhn. nauk

Concerning K.F. Shpital'nik's book "Semiographical methods for determining the parameters of air in a centrifugal compressor stage." Reviewed by V.I. Dmitrievskii and others.
Teploenergetika 11 no.10:93-95 O '64. (MIRA 18:3)

1. Tsentral'nyy ordena Lenina nauchno-issledovatel'skiy institut aviatsionnogo motorostroyeniya imeni P.I. Baranova (for Dmitriyevskiy, Etingof). 2. Tsentral'nyy aerogidrodinamicheskij institut imeni N.Ye. Zhukovskogo (for Kukinov). 3. Moskovskoye vyssheye tekhnicheskoye uchilishche (for Beknev). 4. Moskovskiy ordena Lenina energeticheskij institut (for Sherstyuk).

KUKINOV, A. M.

AID Nr. 994-7 20 June

IMPROVEMENT OF NOISE IMMUNITY OF BINARY MESSAGE TRANSMISSION (USSR)

Kukinov, A. M., and D. S. Lebedev. IN: Akademiya nauk SSSR. Izvestiya. Otdeleniye tekhnicheskikh nauk. Tekhnicheskaya kibernetika, no. 2, Mar-Apr 1963, 17-21.
S/280/63/000/002/003/021

To improve the noise immunity of binary information transmitted along a symmetrical binary channel, it is proposed that the initial message be

Card 1/3

AID Nr. 994-7 20 June

IMPROVEMENT OF NOISE IMMUNITY OF BINARY [Cont'd]

8/280/61/000/002/003/021

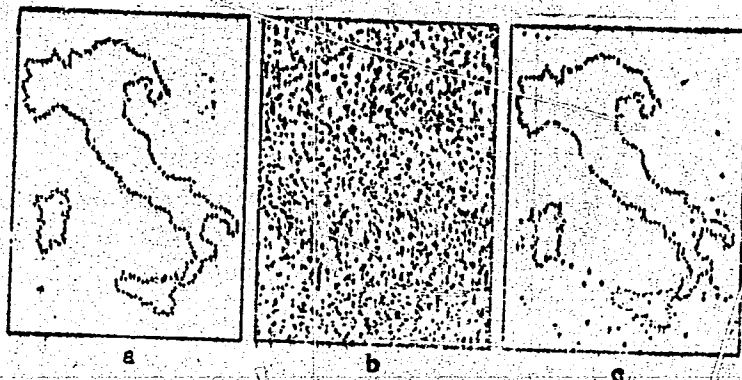


Fig. 3. a - initial message; b - message transmitted along the channel with background noise and without coding; c - message transmitted along the same channel applying proposed method.

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AID Nr. 994-7 20 June

IMPROVEMENT OF ~~NOISE~~ IMMUNITY OF BINARY(Cat'd) s/280/63/000/002/003/021

coded with subsequent decoding of the message received. An accumulation method is suggested in which statistical condensation is utilized. A series of calculations was made to determine the optimum number of message copies that can be sent with a minimum error probability. The illustration compares message transmission according to the proposed method and transmission without the use of coding. [DW]

Card 3/3

L 25092-65 EWT(d)/TDB(j)/T/ESD-2/EWP(1) Po-4/Pq-4/Pg-4/Ph-4/Pk-4/Pl-4 IJP(c)
BB/GG

ACCESSION NR: AT40/9773

S/2945/64/000/016/0048/0056

AUTHOR: Kukdnov, A.M.; Favn, V.S.

53
B-1

TITLE: Modeling of a pattern recognition method using an electronic computer

SOURCE: AN SSSR, Institut problem peredachi informatsii. Problemy* peredachi informatsii, no. 16, 1964. Teoriya peredachi informatsii (Theory of information transmission), 48-56

TOPIC TAGS: electronic digital computer, pattern recognition, character recognition

ABSTRACT: The paper describes an experimental verification of the method of pattern recognition developed earlier by the author (Izvestiya Akad. Nauk SSSR, Otdel Tekhnich. Nauk, Energetika i avtomatika, No. 2, 1962). For modeling the method, the "Strela" electronic digital computer of the Vy*chislitel'nyy tsentr AN SSSR (Computer center of the Academy of sciences SSSR) was used. One thousand projections, collected at random from photographs, were sampled. On the basis of this sampling, all the stages of the recognition process were modeled. The method of calculating the standard deviation of the significant features is described as well as the algorithms used for modeling the recognition process. A comparison of the experimental results obtained

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Card

L 25092-65

ACCESSION NR: AT4049773

with the results calculated by theoretical formulas has shown that the latter differ by a factor not exceeding 1.5 and this is considered to be a good agreement for the problem examined. The paper concludes that the described method of modeling the Feyn technique of pattern recognition using a computer has furnished an experimental verification of the validity of the principles of pattern recognition employed in Feyn's method. Orig. art. has: 3 figures, 2 tables, and 24 formulas.

ASSOCIATION: none

SUBMITTED: 20Dec62

ENCL: 00

SUB CODE: DP

NO REF SOV: 001

OTHER: 000

Card 2/2

KUKINOV, V.M.; MASOKIN, V.I.; ZHURIN, N. Ya.; RODZEVILLO, I.T.

New equipment and progressive technology. Bezop. truda v
prom. 8 no. 9:31-33 S '64 (MIRA 18:1)

1. Nachal'nik Gubkinskoy rayonnoy gornotekhnicheskoy inspektsii
(for Kukinov). 2. Shakhta imeni Gubkina (for Masokin, Zhurin,
Rodzevillo).

KUKINSKI, A.

KUKINSKI, A. Trends in the development of industrial geography. p. 533.

Vol. 28, no. 3, 1956

ATLAS POLSKICH STROJOW LUDOWYCH

Poland

So: East European Accession, Vol. 6, No. 5, May 1957

KUKIRSKIY, A.P.; ZIMKINA, T.M.; BRYTOV, I.A.

Fine structure of X-ray M-absorption edges of krypton and
N-absorption edges of xenon. Izv. AN SSSR, Ser. fiz. 28 no. 5:
772-779 My '64. (MIRA 17:6)

1. Fizicheskiy fakul'tet Leningradskogo gos.darstvennogo
universiteta.

KUKIRSKIY, P. I.

USSR/ Physics - Ions

Card 1/1 : Pub. 22 - 15/60

Authors : Kuznetsov, M. I.; Kukirskiy, P. I., Academician; and Perfilov, N. A.

Title : Dependence of a lithium ion charge on ion speed

Periodical : Dok. AN SSSR 100/4, 665-667, Feb 1, 1955

Abstract : Experiments were conducted to establish a law of dependence of a lithium ion charge on the velocity of the ion. The results show that the experimental equation introduced by N. Bohr, for such calculations, $\gamma v_i \approx v_e$ is correct only to a certain degree of approximation. Five references: 4 French and 1 USA (1950-1953). Graphs; table.

Institution : Acad. of Sci., USSR, The V. G. Khlopin Radiation Institute

Submitted :

KUKIS, S. I.

KUKIS, S. I. -- "The Introduction of the European Spindle Tree in Altay Region." Min Higher Education USSR, Leningrad Order of Lenin Forestry Academy imeni S. M. Kirov, Leningrad, 1956.. (Dissertation for the Degree of Candidate in AGRICULTURAL SCIENCES).

SO: KNIZHNAYA LETOPIS' (Book Register), No. 42, October 1956, Moscow.

COUNTRY : USSR
SUBJECT : Cultivated Plants. Commercial. Oleiferous.
Super-Bearing.
REF. SOURCE: Ref Zhur-Biologiya, No. 5, 1959, No. 20410
Author : Eukis, S.I.
INST. : Altay Agric. Inst.
TITLE : Characteristics of the Growth, Productivity
and Gutta-Producing Ability of European
Euonymus in Altayskiy Kray.
ORIG. PUB.: Tr. Altaysk. s.-kh. in-ta, 1957, vyp. 5,
87-95
ABSTRACT : It has been concluded from a 5 year study of
euonymus culture in the forest regions of
Altayskiy Kray that this culture is promising
under conditions of plantation growing using
varietal material with higher than 5% gutta
content in the roots. Wartybark euonymus
was not of the same quality as the European.
The euonymus plantations should be placed
on soils with light and medium mechanical
compositions, using only local seed for

CARD : 1/2

Cultivated Plants.

Ms. JOUR : *Tr. zhurnalov, No. 5, 1959, no. 20410*

SOURCE :
INST. :
TITLE :

UNCL. INTL:

ABSTRACT : sowing and surrounding the plantations with :
5-6 rows of forest shelterbelt to protect it
from the cold. The output of root bark in
Altayskiy Krai ranges up to 12.4% of the
weight of the above-ground part of the bush.
--A.G. Vereshchagin

CLASS: 2/2

USSR / Cultivated Plants. Plants for Technical Use. M-8
Sugar Plants.

Abs Jour: Ref Zhur-Biol., 1958, No 16, 73057.

Author : Kukis, S.

Inst : Not given.

Title : Valuable Commercial Shrubs.

Orig Pub: S.kh. Sibiri, 1958, No 1, 74-77.

Abstract: The European spindle tree does not grow, in the natural conditions of Western Siberia but observations conducted at stationary plots and plantations established in Altayskiy Kray, confirmed its good capacity for survival and ability to yield gutta. Flowering and fruit bearing began in 4-5 years. Frost resistance of plants obtained from seeds of local selection is increased. The possibility is

Card 1/2

101

USSR / Cultivated Plants. Plants for Technical Use. M-6
Sugar Plants.

Abs Jour: Ref Zhur-Biol., 1958, No 16, 73057.

Abstract: confirmed for cultivation of spindle tree in the
Altay and its further advancement in the east.

Card 2/2

YAKOVLEV, N.N.; Primalni uchastiye: GURAL'NIK, R.M., vrach; KUKISHEV, S.P.,
vrach; KUZNETSOV, M.M., vrach; MAR'YANOVSKIY, D.M., vrach;
SELIVANOVA, T.M., vrach; STEPANOVA, Ye.S., vrach; VOLKOV, V.M.,
shef-povar

Diet for athletes during the 17th Olympic games in Rome. Vop.
pit. 20 no.3:47-51 My-Je '61. (MIRA 14:6)

1. Iz Leningradskogo nauchno-issledovatel'skogo instituta fizicheskoy
kul'tury.

(ATHLETES--NUTRITION)

(ROME--OLYMPIC GAMES)

LYUNIVYY, S.D. ; KUKISHEV, V.A.

Transfer of elevations at points of triangulation. Geod. i kart.
no.7:21-22 J1 '60. (MIRA 13:9)
(Triangulation) (Leveling)

KUKISHEVA, A. P.

Hosiery

Packing and marking knit goods and hosiery products. Leg. prom. 12 no. 9, 1952.

9. Monthly List of Russian Accessions, Library of Congress, December ¹⁹⁵²~~1953~~, Uncl.

S/032/60/026/012/004/036
B020/B056

AUTHORS: Kuznetsov, V. I., Kukisheva, T. N.

TITLE: Photometric Determination of Uranium by Means of the Reagent Arsenazo

PERIODICAL: Zavodskaya laboratoriya, 1960, Vol. 26, No. 12, pp. 1344-1346

TEXT: Among the well-known reagents to uranium (VI), arsenazo, which, with uranium, gives an intensive yellow complex, is the most sensitive. In the present paper, a rapid method of determining uranium in substances of complex composition is described, which is based upon a single extraction of uranium by means of methylethyl ketone and the photometric recording of the uranium complex with arsenazo. As extracting agents, n-butyl alcohol, ethyl acetate, methylethyl ketone and cyclohexanone, and as desalinating agents, ammonium, magnesium, and calcium nitrates of different concentrations in 0.5 N HNO_3 were investigated. From saturated $\text{Ca}(\text{NO}_3)_2$ - or MgCO_3 -solutions in 0.5 N HNO_3 , uranium is extracted by means of ethylacetate, cyclohexanone, and methylethyl ketone with distribution coefficients

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Card 1/3

Photometric Determination of Uranium by Means
of the Reagent Arsenazo

S/032/60/026/012/004/036
B020/B056

of 170, 230, and 700. The distribution coefficients for Cu, Al, V(IV), and Fe(III) vary between 0.03 and 0.14. When using methylethyl ketone, the concentration coefficient of uranium may be increased to about 23.000, which is further improved by the introduction of complexon III into the solution extracted. Cu, Al, V(IV), Ti, Fe, and Bi do not disturb at a ratio of U:Me of 1:400, 1:500, 1:70, 1:80, 1:600, and 1:500. Uranyl arsenazate decomposes immediately under the action of H_2O_2 , whereas the arsenazates of the other elements, with the exception of vanadium and partly also of thorium, remain unchanged. Titanium does not turn yellow with H_2O_2 at $pH \approx 5$. The effect produced by a 30-fold excess of zirconium may be removed by precipitation in form of its phosphate with a $pH \approx 2$. Orthophosphoric acid in quantities of up to 3 g/l exerts no essential influence upon the extraction of uranium. During extraction from 0.1-0.2 N HNO_3 in the presence of complexon III, a 200-fold excess of thorium does not disturb. In the case of beryllium excesses of up to 1 : 200, the sample must be opened up with a mixture of nitric acid and hydrofluoric acid, and must be concentrated by evaporation until it dries. Sulfates, chlorides, phosphates, and fluorides at concentrations of up to

Card 2/3

Photometric Determination of Uranium by Means
of the Reagent Arsenazo

S/032/60/026/012/004/036
B020/B056

5, 15, 3 and 0.5 g/l relative to free acids do not disturb. The method described was checked on several samples, which contained different quantities of uranium. The results are given in a table. There are 1 table and 11 references: 7 Soviet, 2 Japanese, 1 Dutch, and 1 US.

Card 3/3

S/075/62/017/004/004/006
I017/I242

AUTHORS: Kuznetsov, V.I., Basargin, N.N. and Kukisheva, T.N.

TITLE: Photometric determination of titanium in the presence of uranium using dichlorochromotropic acid

PERIODICAL: Zhurnal analyticheskoy khimii, v. 17, no. 4, 1962, 457-459

TEXT: A method is proposed for the determination of traces of titanium in the presence of large amounts of uranium. The colorimetric properties of solutions of uranium and titanium dichlorochromotropic complexes were studied at various pH's. The direct separation is based on the fact that at pH 1-2 titanium

Card 1/2

S/075/62/017/004/004/006
I017/I242

Photometric determination.

forms a characteristic red complex with dichlorochromotropic acid. The selectivity of the dichlorochromotropic acid is based on the difference in pH's for optimal reaction, the ratio of sensitivities between the titanium and the uranium complexing reactions, and the differences in the absorption spectra. In the determination of 0.01-0.1% titanium in uranium the experimental error does not exceed 4%. There are 2 figures and 2 tables. ✓

ASSOCIATION: Institut geokhimii i analiticheskoy khimii im. V.I. Vernadskogo AN SSSR (Institute of Geochemistry and Analytical Chemistry, im V.I. Vernadsky AS USSR)
Moscow

SUBMITTED: September 16, 1961

Card 2/2

BASARGIN, N.N.; KUKISHEVA, T.N.; SOLOV'YEVA, N.V.

Photometric determination of titanium in the presence of beryllium with 2,7-dichlorochromotropic acid. Zhur. anal. khim. 19 no.5:553-555 '64. (MIRA 17:8)

1. Institut geokhimi i analiticheskoy khimii imeni Verradskogo AN SSSR, Moskva.

ACCESSION NR: AP4038914

8/0075/64/019/005/0553/0555

AUTHOR: Basargin, N. N.; Kukishcheva, T. N.; Solov'yeva, N. V.

TITLE: Photometric determination of titanium in the presence of beryllium using 2,7-dichlorochromotropic acid

SOURCE: Zhurnal analiticheskoy khimii, v. 19, no. 5, 1964, 553-555

TOPIC TAGS: titanium analysis, spectrophotometry, titanium, beryllium, chemical analysis, 2,7 dichlorochromotropic acid

ABSTRACT: The described method enables rapid and sufficiently accurate determination of microgram quantities of titanium (IV) in the presence of 10,000 fold or greater amounts of beryllium. The success of this method results from the fact that beryllium forms a weak colorless complex with 2,7-dichlorochromotropic acid and also because the optimum pH values for the reaction of this reagent with beryllium and titanium are different. The alloy samples were dissolved in HCl, heated on a hot plate with 1 ml of concentrated H₂SO₄ to fumes, the pH was adjusted to 1.0 using quinaldine red and the optical density of the solution was measured upon addition of 5 ml of 1% solution of 2,7-dichlorochromotropic acid. Photometric

Card

1/2

ACCESSION NR: AP4038914

measurements were conducted with a green filter (490 millimicrons) using reagent solution for comparison. The values for the concentration of Ti were obtained from the previously prepared calibration graph. The time required for one determination is about 25 - 30 min. In determinations of 10 micrograms of titanium in the presence of 10,000 fold excess of Be, the standard deviation was 5.6 %. Orig. art. has: 1 table and 2 figures.

ASSOCIATION: Institut geokhimi i analiticheskoy khimii im. V. I. Vernadskogo AN SSSR, Moskva (Institute of Geochemistry and Analytical Chemistry the Academy of Sciences SSSR)

SUBMITTED: 17Jul63

ENCL: 00

SUB CODE: IC

NO REF SOV: 005

OTHER: 001

Card

2/2

KUKIZ, TADEUSZ

ABGAROWICZ, Anna; GALAZKA, Artur; KUKIZ, Tadeusz

Vaccines & anti-diphtheria vaccination in Poland during 1955 & 1956.
IV. Comparative evaluation of 4 Polish vaccines in laboratory studies.
Przegl. epidem., Warsz.11 no.4:357-364 1957.

1. Z Zakładu Epidemiologii Państowego Zakładu Higieny w Warszawie.
(DIPHTHERIA, imminol.
vaccines, comparative effectiveness of 4 vaccines
in guinea pigs (Pol))

KUKIZ, Tadeusz; MIKULSKI, Zbigniew

Tetanus in Poland in the light of the world situation. Przegl.
epidem. 14 no.2:117-126 '60.

1. Z Zakładu Epidemiologii Państwowego Zakładu Higieny Kierownik:
prof. dr J.Kostrzewski i Departamentu Sanitarno-Epidemiologicznego
Ministerstwa Zdrowia Dyrektor: dr H.Wiorowa
(TETANUS statist)

GALAZKA, Artur; KUKIZ, Tadeusz; ABGAROWICZ, Anna

Use of various methods in an attempted evaluation of the diphtherial and tetanic component in 3 diphtheria-tetanus-whooping cough vaccines of domestic production. Przegl.epidem. 15 no.2:163-178 '61.

1. Z Zakladu Epidemiologii Panstwowego Zakladu Higieny w Warszawie
Kierownik: prof. dr J. Kostrzewski.

(TETANUS immunol) (DIPHTHERIA immunol)
(WHOOPING COUGH immunol) (VACCINES)

ABGAROWICZ, Anna, dr; GALAZKA, Artur; KUKIZ, Tadeusz (Warszawa)

Studies on the immunizing properties of the tetanus
component of enteric tetanus vaccines produced in Poland.
Zesz probl nauki Pol 23 241-250 '61.

KUKIZ, Tadeusz

Specific prevention of tetanus. Pol. tyg. lek. 17 no.18:727-731
30 Ap '62.

1. Z Zakładu Epidemiologii PZH w Warszawie; kierownik: prof. dr Jan
Kostrzewski.

(TETANUS immunol) (VACCINATION)

KUKK, E. G.

Cand Biol Sci - (diss) "Flora of fresh-water blue-green algae of the Estonian SSR." Tartu, 1961. 21 pp; (Inst of Zoology and Botany of the Academy of Sciences Estonian SSR, Tartu State Univ); 300 copies; free; (KL, 5-6, sup, 184)

KUKK, E. I., Cand of Agric Sci -- (diss) "Formation and differentiation of apple blossom buds in Estonian SSR." Tallin, 1957, 22 pp (Estonian Scientific Research Institute of Soil Sciences and Fertilization), 100 copies (KL, 37-57, 104)

USSR/Cultivated Plants - Fruits. Berries.

M-6

Abs Jour : Ref Zhur - Biol., No 20, 1958, 91792

Author : Kukk, E.

Inst : Institute of Reclamation and Utilization of Irrigated Land in Polli.

Title : The Use of Organic Fertilizers in Fruit Bearing Orchards.

Orig Pub : Sotsialistlik Pollumajandus, 1957, No 3, 122-123.

Abstract : In the experiments conducted by the Institute of Reclamation and Utilization of Irrigated Land in Polli, the application into 1 hectare of compost consisting of 200 centners of peat from bottom land bogs, of 100 centners of manure, 3 centners of P_c , 1 centner of K_x and 2 centners of shale ashes produced a greater fertilizing effect than 30 tons of manure. The placement in early spring or after the blooming of the fruit trees of 2-3 pails of

Card 1/2

USSR/Cultivated Plants - Fruits, Berries.

11-8

Abs Jour : Ref Zhur - Biol., No 9, 1958, 39489

Author : Kulck, E.

Inst : AN EstSSR, (Scientific Research Institute of Agriculture and Melioration)

Title : The Formation and Differentiation of Embryos of Apple Tree Flowers in the Estonian SSR.

Orig Pub : Izv. AN EstSSR, ser. Biol., 1957, 6, No 2, 177-187.

Abstract : Observations of the Estonian Scientific Research Institute of Agriculture and Melioration in 1952-1955 showed that the formation of flower embryos in apple trees of the standard assortment of the republic takes place from the end of June up to the middle of August and lasts for 70-100 days. This process occurs earlier with summer, fall and local varieties than with those of winter and other

Card 1/2

- 144 -

Abs Jour : Ref Zhur - Biol., No 9, 1958, 39489

regions. The formation of flower embryos in the southern part of the republic takes place 20-25 days earlier than in the northern part. Dates of the beginning of this process may vary depending on meteorological conditions up to 24 days. It as well as P and K influence the course of this process. -- I.K. Fortunatov

APPROVED FOR RELEASE 08/23/2000 CIA-RDP86-00513R000927310009

Card 2/2

KUKK, E.

Land utilization methods in orchards. p/ 177.

SOTSIALISTLIK POLUMAJANDUS. Tallinn, Hungary. Vol. 13, no. 4, Apr. 1958.

Monthly List of East European Accessions (EEAT), ^{Vol. 13, no. 4} LC, No. 4, July 1959.

Uncl.

KUKK, E. G.

Blue-green algae of the Estonian S.S.R. Bot.mat.Otd.spor.rast.
12:23-30 Ja '59. (MIRA 12:12)
(Estonia--Algae)

KUKK, E,

AGRICULTURE

Periodical: SOTSIALISTLIK PÖLLUMAJANDUS. Vol. 14, no. 1, Jan. 1959

KUKK, E. How we are achieving large apple yields. p. 19.

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

KALDA, A.; KUKK, E.; MASING, V.; TRASS, H.; VAGA, A.; ARAK, A., red.

[Botany; textbook for schools of higher learning in three parts] Botaanika, õpik kõrgematele koolidele. Tallinn
Valgus. Pt.1. 1965. 428 p. [In Estonian]

(MIRA 18:12)

G. KUNK.

"The District Council of Klovarda and the Libraries." p. 29 (A Konyvtaros. Vol. 3, no. 5, May 1953 Budapest.)

Vol. 2, no. 9
SO: Monthly List of East European Accessions./Library of Congress, Sept 1953, Uncl.

KUKK, K.

Organizing the work of tractors on the collective farm. p. 156.

SOTSIALISTLIK POLNUMAJANDUS. Tallinn, Hungary. Vol. 13, no. 4, Apr. 1958.

Monthly List of East European Accessions (EEAI), LC, No. 12, July 1959. *Vol. 8 12 Dec*

Uncl.

KUKK, K.I., inzhener.

Antivibration dampers for overhead lines. Avtom., telem. i sviaz'
no.3:46 Mr '57. (MLRA 10:4)

(Electric lines)

USTINSKIY, A.A., kandidat tekhnicheskikh nauk; KUKK, E.I., inzhener.

Multichannel radio relay systems. Avtom.elen. i svias' no.719-14
J1 '57. (MLRA 1018)

(Radio relay systems)

KUKK, K.I., inzh.; USTINSKIY, A.A., kand.tekhn. nauk

Receiving and transmitting equipment of a radio relay line. Avtom.,
telem. i svyaz' 2 no.5:5-9 My '58. (MIRA 11:5)
(Radio relay systems)

ZBAR, N.R.; KUKK, K.I., vedushchiy konstruktor; EHEL', I.I., vedushchiy konstruktor

Circuit for duplex connection of dial telephones. Avtom. telem.
i sviaz' 3 no.1:14-16 Ja '59. (MIRA 12:1)

1. Nachal'nik oddela provodnoy svyazi konstruktorskogo byuro
Glavnogo upravleniya signalizatsii i svyazi (for Zbar).
(Telephone, Automatic)

KHAYKOV, Aron Zalmanovich; KUKK, K.I., *otv. red.*; KOKORIN, Yu.I.,
red.

[Power amplifiers using multicavity klystrons] Moshchnye
usiliteli na mnogorezonatornykh klistronakh. Moskva, Izd-
vo "Sviaz'," 1964. 167 p. (MIRA 17:11)

ACC NR: AT7005782

SOURCE CODE: UR/2807/66/000/238/0003/0018

AUTHORS: Kukk, P. L.; Syugis, A. Yu.; Varvas, Yu. A.; Lippmaa, E. T.

ORG: none

TITLE: Investigation of the noise spectrum of polycrystalline cadmium sulfide

SOURCE: Tallinn. Politehnicheskiiy institut. Trudy. Seriya A, no. 238, 1966. Sbornik statey po khimii i khimicheskoy tekhnologii (Collection of articles on chemistry and chemical engineering), no. 15, 3-18

TOPIC TAGS: *noise spectrum, radio noise,* photoelectric effect, photoresistor, photodiode, photoconductor, cadmium sulfide / S-092 photoresistor

ABSTRACT: The noise spectrum of polycrystalline cadmium sulfide photoresistor S-092 was investigated. This work supplements the results of Yu. A. Varvas and P. L. Kukk (Trudy TPI, seriya A, No. 230, str. 109, 1965). A brief literature survey of pertinent papers dealing with the theory of experimental determination of noise in CdS photoresistors is presented, and a schematic of the experimental installation is included. The experimental results are shown graphically (see Fig. 1). It was found that the noise photocurrent in the resistor S-092 may be represented by the expression

$$S_i = \text{const. } U \gamma \Phi P_f^{-1/2}$$

Card 1/2

UDC: 621.315.022

ACC NR: AT7005782

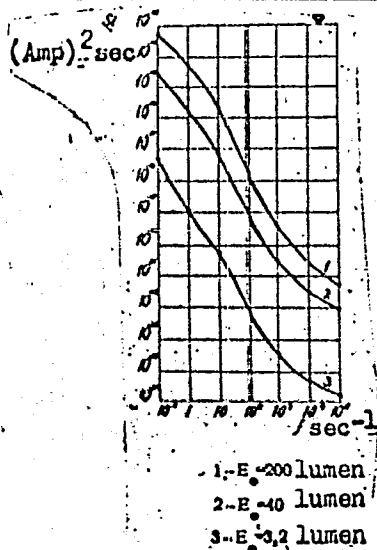


Fig. 1. Noise spectrum density S_1 as a function of the light intensity E_0 and of noise frequency f

where U is the imposed voltage, ϕ - the light density in watts/cm², and f - the frequency of the incident light. It was found that the particular position of the measuring electrodes had no noticeable effect on the shape of the noise spectrum. Orig. art. has: 8 graphs and 10 equations.

SUB CODE: 20/

SUBM DATE: none/

ORIG REF: 016/

OTH REF: 061

Card 2/2

L 18424-66 EWT(1)/EWT(m)/EWP(t) IJP(c) JD/AT

ACC NR: AT6003224

SOURCE CODE: UR/2807/64/000/215/0237/0243

AUTHORS: Kukk, P. L.; Varvas, Yu. A.

61

ORG: *none*

B+1

TITLE: On the possibility of determining the lifetime of photoelectrons and the quantum yield in polycrystalline cadmium sulfide

SOURCE: Tallinn. Politekhicheskiy institut. Trudy, Seriya A, no. 215, 1964. Sbornik statey po khimii i khimicheskoy tekhnologii (Collection of articles on chemistry and chemical engineering), no. 11, 1964, 237-243

TOPIC TAGS: semiconductor theory, semiconductor material, photoconductor, photoconductivity, cadmium sulfide, cadmium compound

ABSTRACT: Expressions for the lifetimes and the quantum yields of ^{21, 24, 55}photoelectrons in polycrystalline cadmium sulfide were derived. The investigation is an extension of a previously published work of the authors (Priblizhennyy metod opredeleniya vremeni zhizni neravnovesnykh elektronov v sul'fide kadmiya. Trudy TPI, seriya A, No. 210, 257, 1964). The derivation is based on the model in which the crystal is illuminated by a steady light source of high intensity ϕ_0 . Superimposed on this

Card 1/4

UDC: 537.311.33

2

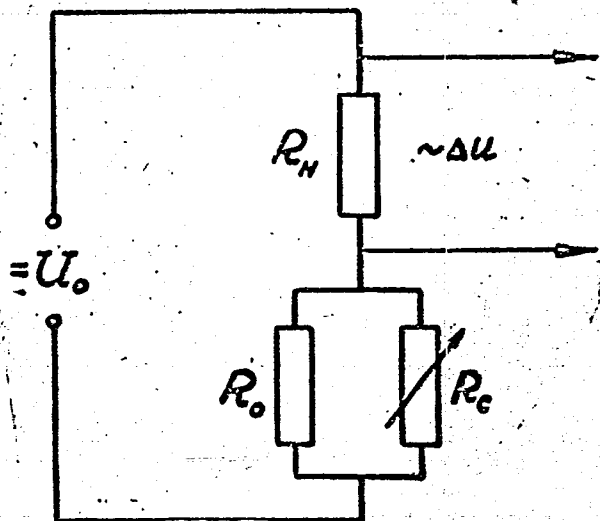
L 18424-66

ACC NR: AT6003224

light is a high frequency $\sim 10^5$ cyo/sec light signal having a \square -shape and of much lower intensity, ϕ_0 . Under these conditions, the photoconductor is equivalent to the circuit (see Fig. 1).

Fig. 1. Equivalent scheme. R_H - load resistor, R_H and R_c - equivalent resistances representing the specimen, U_0 - applied voltage, Δu - signal voltage.

$$Y = \frac{1}{T} \int r_c(t) dt.$$



Card 2/4

L 18424-66

ACC NR: AT6003224

Three expressions for the different relations between R_0 and R_H are derived in

$$\begin{aligned}
 R_n = R_0 & \quad \tau \approx \frac{TR_n U_0}{16\Delta u R_{co}}; \\
 R_n \ll R_0 & \quad \tau \approx \frac{TR_n U_0}{4\Delta u R_{co}}; \\
 R_n \gg R_0 & \quad \tau \approx \frac{TU_0 R_0^2}{4\Delta u R_n R_{co}}
 \end{aligned}$$

where τ is the lifetime of the photoelectrons, T is the period of the interrupted light signal, and R_{co} is the additional resistance of the crystal due to uninterupted ϕ_c . Expressing R_0 and R_{co} in terms of the semiconductor parameters

$$\begin{aligned}
 R_0 &= \rho \frac{d}{S}; \\
 \rho &= \frac{1}{ne\mu}
 \end{aligned}$$

where ρ is the specific resistance of the specimen, d is the interelectrode distance, S is cross-sectional area of the excited layer, n is the concentration of free electrons, e is the electronic charge, and μ the electron mobility, the following expression for the quantum yield \mathcal{S} is derived as

Card 3/4

L 18424-66

ACC NR: AT6003224

$$\beta = \frac{4\lambda u}{TR_n U_e e \mu \phi_c}$$

The influence of several effects, e.g., nonlinear recombination, diffusion into deeper crystal layers, and incomplete population of the deeper energy levels of the crystal, on the lifetime and on the quantum yield are discussed in an attached note. Orig. art. has: 1 graph and 24 equations.

SUB CODE: 20, 07/ SUBM DATE: none/ ORIG REF: 016/ OTH REF: 008

Card 4/4 mc

L 18423-66 EWT(1)/EWT(m)/EWP(t) IJP(e) JD/AT
ACC NR: AT6003225 (N) SOURCE CODE: UR/2807/64/000/215/0245/0247

AUTHORS: Kukk, P. L.; Varvas, Yu. A.

ORG: none

60
B+1

TITLE: The threshold sensitivity of polycrystalline cadmium sulfide

SOURCE: Tallinn. Politekhniicheskiy institut. Trudy, Seriya A, no. 215, 1964.
Sbornik statey po khimii i khimicheskoy tekhnologii (Collection of articles on chemistry and chemical engineering), no. 11, 1964, 245-247

TOPIC TAGS: semiconductor theory, semiconducting material, photoconductor, photoconductivity, cadmium sulfide, cadmium compound

ABSTRACT: An expression for the ^{21, 44, 55}photoconductivity in polycrystalline cadmium sulfide is derived as

$$\Phi_{c \min} \approx \frac{16\sqrt{3}}{\pi} \sqrt{\frac{\phi_0 A T}{h d l}}$$

The derivation is based on the work of Yu. A. Varvas and P. L. Kukk (Trudy TPI, seriya A, No. 210, 253, 1964), where ϕ_0 is the intensity of the steady illumination, ϕ_{\min} is the intensity of the superimposed Π -shaped light signal, T is the period of the superimposed light impulses, τ is the lifetime of the photocurrent, and all
Card 1/2

UDC: 537.311.33 2

L 18423-66
ACC NR: AT6003225

0

the other symbols are taken from the above reference. The expression was tested experimentally by the procedure described by P. L. Kukk and Yu. A. Varvas (O vozmozhnosti opredeleniya vremeni zhizni fotoelektronov i kvantovogo vykhoda v polikristallicheskom sul'fide kadmiya. Sm. nast. sbornik, str.). It was found that the predicted threshold sensitivity agreed with the measured sensitivity to within 20%. It is concluded that in order to increase the threshold sensitivity one must have $\beta \approx 1$, a narrow line, i.e., Δf small, and a large photosensitive surface. Orig. art. has: 8 equations.

SUB CODE: 20/ SUBM DATE: none/ ORIG REF: 002/ OTH REF: 015

Card 2/2 mo

L 01010-66 EWT(m)/EWP(t)/EWP(b) EJP(e) JD

ACCESSION NR: AR5012293

UR/0058/65/000/003/E081/E081

SOURCE: Ref. zh. Fizika, Abs. 3E595

25
B

AUTHOR: Varvas, Yu. A.; Kukk, P. L.

TITLE: Shot noise in polycrystalline cadmium sulfide

CITED SOURCE: Tr. Tallinsk. politekhn. in-ta, v. A, no. 210, 1964, 253-256

TOPIC TAGS: cadmium sulfide, photoconductor, shot noise, thermionics, polycrystal, semiconductivity

TRANSLATION: Noises were measured in polycrystalline CdS at a frequency of 1 Kc. Polycrystalline specimens of CdS alloyed with Cu and Cl were used in the form of pressed and sintered tablets 6 mm in diameter and 1 mm thick. The electrodes were applied by the vacuum vaporization method. In, Sn and Ga produce "noiseless" ohmic contacts. It is shown that the noises which are measured are shot noises.

SUB CODE: EC, SS

ENCL: 00

Card 1/1 *DP*

L 1679-66 EWT(1)/EWT(m)/EWP(t)/EWP(b) IJP(c) JD/AT

ACCESSION NR: AR5014414

UR/0058/65/000/004/E083/E083

SOURCE: Ref. zh. Fizika, Abs. 4E622

AUTHOR: Varvas, Yu. A.; Kukuk, P. L. *44.85* *59*

TITLE: An approximation method for determining the lifetime of nonequilibrium electrons in cadmium sulfide

CITED SOURCE: Tr. Tallinsk. politekhn. in-ta, v. A, no. 210, 1964, 257-266 *44.85*

TOPIC TAGS: carrier lifetime, photosensitivity, cadmium sulfide, electron recombination, polycrystal

TRANSLATION: The method is based on excitation of photoconductivity in the specimen by rectangular pulses of light with a period $T \ll \tau$ (τ is the lifetime). Calculation shows that under given conditions in the first approximation the variation in photoconductivity is determined by stationary τ and is independent of the nature of the recombination. Expressions are derived for τ as a function of the characteristics of the specimen and the parameters of the output voltage pulses from a resistor (R_L) connected in series with the sample. Linear and quadratic recombination are *21.48.55*

Card 1/2

L 1679-66

ACCESSION NR: AR5014414

considered and it is shown that at $R_T \ll \bar{R}$ (\bar{R} is the average resistance of the specimen in time T), τ is independent of the type of recombination, while at $R_T = \bar{R}$ the corresponding expressions for τ differ in the numerical coefficient. The method is used for measuring τ in polycrystalline samples of CdS with Cu and Cl impurities. Values of τ range from $1.1 \cdot 10^{-2}$ to $3 \cdot 10^{-3}$ seconds. As was expected, a reduction was observed in τ with an increase in the intensity of illumination. A. Zhdan.

SUB CODE: EM, NP

ENCL: 00

Card 2/2

L 46751-66 EWT(1)/EWT(1)/REG(E)-R/T IJP(c) - PM/AF

ACC NR: AR6001117

SOURCE CODE: UR/0272/65/000/009/0112/0113

AUTHORS: Ross, Kh.; Kukk, V.

48
B

TITLE: Calculation determination of several parameters of Hall detectors

SOURCE: Ref. zh. Metrologiya i izmeritel'naya tekhnika, Abs. 9.32.790

REF SOURCE: Tr. Tallinsk. politekhn. in-ta, v. A, no. 213, 1964, 13-26

TOPIC TAGS: Hall generator, conformal mapping, geometric form

ABSTRACT: The relation between generalized geometric parameters of Hall detectors of various configurations and the input transfer resistances is determined. The problem is solved by the conformal mapping method. Specific calculations for disk and rectangular detectors are produced. It is shown that increasing the Hall angle decreases the effect of the geometry on the electrical characteristics of the detector. Only two generalized geometric quantities are sufficient to find the basic relations. The problem remains to find the relation between actual parameters of the detector. Bibliography of 9 citations. Translation of abstract

SUB CODE: 48 09.12

Card 1/1 MT

UDC: 389:621.317.42:621.382.61

L 31050-66 EWT(m)/EWP(t)/ETI LIP(c) JD

ACC NR: AR5028230

SOURCE CODE: UR/0272/65/000/008/0135/0135

AUTHOR: Vyal'yamyae, G.; Kukc, V.; Rekhepapp, Yu.; Khaak, Kh.;
Kheynríkhsen, V. 13
BTITLE: Some problems in the preparation and study of a mercury
selenide Hall film transmitterSOURCE: ^{v1} Ref. zh. Metrologiya i izmeritel'naya tekhnika, Abs. 8.32.938REF SOURCE: Tr. Tallinsk. politekhn. in-ta, v. A., no. 213, 1964,
3-12TOPIC TAGS: Hall effect, metal film, mercury ^{compound} ~~compound~~, zinc plating,
selenide, Hall transmitterABSTRACT: Experimental samples of mercury selenide Hall film trans-
mitters were prepared by the vacuum process method without interrup-
tion of the vacuum during the operation. The study showed that it is
advisable to make the contacts of zinc. The stability of the trans-
mitters with zinc contacts is higher than with contacts made of silver
paste. Moreover, the contacts were not previously (before the paste
was applied) exposed to air. A table giving the basic parameters of
HgSe transmitters and their various characteristics is also included.SUB CODE: 7009 ~~7009~~ / SUBM DATE: noneCard 1/1 *pld*

UDC 389.621.317.7:621.382.61

L 10624-66 EMI(m)/EIC/EPE(n)-2/ENG(m)/ENP(t)/EWP(b) IJP(c) RDW/JD/WK/JG
ACC NRI AR5023527 SOURCE CODE: UR/0275/65/000/008/B038/B038

SOURCE: Ref. zh. Elektronika i yeye primeneniye, Abs. 8B311 41

AUTHOR: Vyal'yamyae, G.; Kukk, V.; Rekhepapp, Yu.; Khaak, Kh.; Kheyndrikhsen, V. B

TITLE: Some problems in manufacturing from mercury selenide and testing film-type Hall generators

CITED SOURCE: Tr. Tallinsk. politekhn. in-ta, Seriya A, No. 213, 1964, 3-12

TOPIC TAGS: Hall generator, mercury compound, selenide 21 21

TRANSLATION: Experimental lots of HgSe film-type Hall generators were prepared by a vacuum vaporization method without disturbing the vacuum during the manufacturing process. It is proven that the generators with zinc contacts have higher stability than those with silver-paste contacts. Principal parameters of HgSe generators are tabulated. Bib 7.

SUB CODE: 10

Card 1/1

UDC: 621.382.61:546.23'49 2

KURE, YA.A. [KURE, J.]; PALIN, U.V. [PALIN, V.]; LASH, I.I.

State of the surface of cadmium and lead electrodes during
cathodic hydrogen evolution in alkaline solutions. Izv. vys.
ucheb. zav.; khim. i khim. tekhn. 7 no.1:583-587 '84.

(MIRA 17:12)

I. Kafedra neorganicheskoy khimii Tatarskogo gosudarstvennogo
universiteta.

ACCESSION NR: AT4016066

S/2698/63/000/000/0223/0228

AUTHOR: Kukkonen, E. Ya.; Kaplunovskiy, G. A.; Magnitskiy, O. N.; Gulyayev, B. B.

TITLE: Effect of the characteristics of the technological process on the properties of heat-resistant metal castings

SOURCE: Soveshchaniye po teorii lityyny*kh protsessov. 8th, 1962. Mekhanicheskiye svoystva litogo metalla (Mechanical properties of cast metal). Trudy* soveshchaniya. Moscow, Izd-vo AN SSSR, 1963, 223-228

TOPIC TAGS: refractory metal, heat resistant alloy, alloy casting, molybdenum alloy, tungsten alloy, carbon containing alloy, titanium alloy, cast metal property

ABSTRACT: The lack of industrial flow processes for manufacturing heat-resistant metals has led to insufficient knowledge of the properties of these castings. The authors investigated the influence of the methods of melting, casting parameters and other features on the properties of alloy castings containing titanium and molybdenum. The metals were cast in a DVP-15 vacuum electric oven with an electric arc in a carbon crucible. Parts are currently made of molybdenum by plastic bending of castings obtained by electric arc fusion of special packs of molybdenum and crystallization in water-cooled copper molds. Melting of molybdenum with a tungsten electrode and casting in centrifugal copper molds ensures the highest quality of dense molybdenum castings with fine structure. Orig. art. has: 6 figures and 3 tables.

GULYAYEV, B.B.; MAGNITSKIY, O.N.; DEMIDOVA, A.A.; Primali
uchastiye: KAPLUNOVSKIY, G.A.; KUKKONEN, E.Ya.; BUTALOV,
L.V., kand. tekhn. nauk, retsenzent

[Castings of high-melting metals] Lit'e iz mugoplavkikh me-
tallov. Moskva, Izd-vo "Mashinostroenie," 1964. 291 p.
(MIRA 17:5)

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ACQUISITION NUMBER: AT4048343

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Author: E. Ya. Kaplanovskiy, G. A.; Demidov, A. A.; Magovitskiy, O. N.

TITLE: The effect of gases on the quality of titanium alloy castings

SOURCE: AN SSSR. Komissiya po tekhnologii mashinostroyeniya. Gazy v litom
metalle (Gases in cast metals). Moscow, Izd-vo Nauka, 1964, 150-153

TOPIC TAGS: cast titanium, titanium alloy casting, blowhole formation, gas saturation, titanium porosity, oxygen adsorption, nitrogen adsorption, hydrogen adsorption, mold material, mold temperature

ABSTRACT: The authors note that the principal requirement in the production of titanium castings is to safeguard the metal against contamination, particularly by oxygen, hydrogen and nitrogen. This requirement predetermines the basic specifications of the entire technological process of the production of titanium alloy castings. In the mold materials only the most chemically stable oxides are used: silicon dioxide, electrocorundum and magnesite. The lining materials must contain a minimum amount of those components which react actively with titanium. The metal is melted in a vacuum in a cooled crucible with a lining of the same alloy as that which is being melted. Particularly attention was paid in this article to:
1) the effect of the mold materials and the mold temperature during teeming on
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the gas content and the mechanical properties of the metal of the castings; 2) the effect of the metal of the consumed electrode and of other factors on the development of blowholes in thin-walled titanium castings. The effect of the mold materials was studied on the basis of castings prepared by the melted model method, with the gas content in the castings determined by the vacuum-smelting method. The basic titanium contained 0.0150% oxygen. The mold material of lowest quality, from the point of view of minimal oxygen contamination of the metal, was found to be zirconium dioxide and melted magnesite. The higher the temperature at the metal - mold boundary, the more intensive the interaction, the increase in the oxygen content in the casting metal as the temperature of molds of different refractory materials was increased being extremely significant. The authors give 150 - 250C as the optimal mold temperature. The distribution of gases throughout the section of the casting was investigated by measuring the microhardness, with the discovery that the surface layers of the casting showed the highest degree of contamination. A study was made of the effect of different technological factors on the susceptibility of the casting to the development of blowholes by means of casting disks of varying thickness, with the disks so obtained checked for the presence of blowholes by x-ray. Thin-walled castings were found to be especially vulnerable to this type of gas-originated surface flaw. This statement is developed in detail in the article. A comparison of disks obtained from metal smelted in $1 \cdot 10^{-1}$ and at $1 \cdot 10^{-3}$ mm Hg or from metal which had undergone special

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vacuum degasification indicated that the basic charge has a considerable effect on the formation of blowholes in the castings: with degasified metal, the quantity of blowholes decreases noticeably. In disks without blowholes, defects in the form of shrinkage porosity are observed, while this type of defect is absent when blow-

holes are present. The authors also state that the number of blowholes in the casting depends on the configuration of the casting and the method employed in

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ENCL: CO

SUB CODE: MM

NO REF SOV: 000

OTHER: 000

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E

AUTHOR: Kaplunovskiy, G. A.; Kukkonen, E. Ya.; Demidova, A. A.; Magnitskiy, O. N.;
S. S. Doctor of technical sciences. Professor

Effect of a gaseous medium during melting and treatment of the metal

SOURCE: AN SSSR. ²⁷ Komissiya po tekhnologii mashinostroyeniya. Gazy* v litom metalie
(Gases in cast Metals). Moscow, Izd-vo Nauka, 1964, 167-171

TOPIC TAGS: cast chromium, gas saturation, chromium melting, chromium refining,
chromium, oxygen adsorption, hydrogen adsorption, zirconium dioxide, rare
earth admixture

ABSTRACT: After noting that the principle cause of chromium brittleness is gaseous im-
purity, the authors report the results of studies on the effect of gaseous medium on the
logical conditions for the smelting of chromium, from the point of view of ensuring a mini-
mum gas content in the cast metal. The metal was smelted in an OKB-495m high-vacuum
furnace in a rammed crucible of zirconium dioxide. As the basic material, un-

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0.002-0.050% N₂. The experimental melts were made in an inert argon atmosphere, since due to the high chromium vapor pressure at the melting temperature (63.5 mm Hg). It is not possible to melt the metal in a vacuum. For the purpose of decomposing the nitrides and removing the adsorbed gases, the chromium was aged at 750, 1200 and 1400C for 30 minutes at each temperature, and also in the melted state. The chromium was poured

into a mold in order to exclude any effect of the mold material on the gas content of the metal. Further details regarding the technique of aging and melting are given in the report. Conditions which ensure the absence of coronal discharge in the vacuum at high temperatures were also determined during the development of specific smelting conditions.

During the melting 5 kg of chromium lasted up to 2000 hours. The results of the analysis of the content of oxygen and nitrogen in the cast chromium as a function of temperature and duration of exposure. Oxygen content was found to increase somewhat, in comparison with the base content, together with the time of aging. The nitrogen content decreased with aging for 30 minutes at 750-1200C. Experiments showed that the optimal aging regime for cast metal is 1200C and 30 minutes. In the cast metal the hydrogen content stood at

0.002-0.005%. It was also found that a larger amount of hydrogen is absorbed by the metal from mixtures of the oxide type as approximately 0.005% after the first (0.66%). For the purpose of studying the effect of the mold on the gas-saturation of the chromium, samples were poured into

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molds of different refractory materials, and a table is given in the article illustrating the dependence of the oxygen content in the castings on the mold material used. The authors indicate that the microhardness of the chromium is not changed by the mold material. The use of rare-earth elements to enhance the mechanical properties of cast chromium is discussed in some detail. Data are presented which indicate that the content of non-metallic inclusions in cast chromium without admixtures reaches 0.661%, while an analysis of the non-metallic inclusions showed the presence of oxides of the Cr₂O₃ type and oxides of the rare-earth elements. In this way, the rare-earth elements are found to have a refining effect. The article concludes with a brief discussion of a special study which was made to determine the optimal argon pressure for high-quality stock. The authors show that the structure of chromium, smelted and teemed at an argon pressure of 600 mm Hg, is finer than that of chromium poured at 300, 80-80, and 1.2 mm. According to some writers, a fine-grain structure reduces the temperature threshold of chromium brittleness. Orig. art. has: 3 figures and 3 tables.

ASSOCIATION: Nons

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ENCL: 00

SUB CODE: MM

NO REF SOV: 002

OTHER: 000

Card 3/3

KUELA, A.

"Modernization of Forges." p. 243, Praha, Vol. 2, no. 6, June 1954.

SO: East European Accessions List, Vol. 3, No. 9, September 1954, Lib. of Congress

KUKLA B.

ALEKSANDROWICZ J., GRABCZYSKA Z., GUTMANOWA I., KUKLA B., JOZWA J., MUGHA T. and
PACHONSKA J. Univ. in Cracow. Wplyw iperytu azotowego na ustepowanie porazen w.
gruzliczym zapaleniu opon miedzgowo-rdzeniowych leczonych streptomycyna the influence
of nitrogen mustard on the regression of paralysis in cerebrospinal meningitis
treated with streptomycin Polsk. Try. Lek. 1949, 4/40 (1181-1182)

A decrease of paralysis in TB spondylitis, observed a few hours after the administration of nitrogen mustard, encouraged the authors to investigate its influence on other paralytic states especially in the course of TB. There regression of paralysis in 6 children treated in Clinic for Children's Diseases in Warsaw. This chemical compound was also found to cure paralysis of the peripheral nerves in meningitis of some weeks standing, but it does not prevent the development of paralysis. Nitrogen mustard was used intravenously in doses of 0.01 g. per kg. body weight daily, repeating doses every 24 hours from 2-3 times. The therapeutic results are perhaps due to the resorptive and anti-inflammatory action of the chemical, or to irritant action on the nervous tissue. The latter hypothesis is confirmed by observations of certain effects on paralysis of various origin (peripheral neuritis, radiculitis, cranial nerve palsy, also in spastic contractures as rheumatoid arthritis) and by some evidence of relief in cases with the clinical symptoms of optic nerve atrophy (observed in the ophthalmological clinical of Jagiel University). It may be that in the phenomena described there is a chain of reactions, one link of which is the specific action of the nervous system and through it, diminution of the clinical symptoms of inflammation.

Aleksandrowicz - Cracow

So: Neurology & Psychiatry Section VIII, Vol. 4, No.1-6

KUKLA, Edward, inz.

Training shops in schools cooperate with industry. Przegł
techn 85 no.50:9 13 D '64.

HUKLA, J.

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(KARTOGRAFICKY PŘEHLED, Vol. 29, No. 2, 1954, Praha, Czechoslovakia)

SO: Monthly List of East European Accessions, (EEAL), 19, Vol. 5
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Konka, ...

GP ✓ The limonitic filling of the cavern near Strašín, Sušice district. J. Kůrka and František Skřivanek. *Věstník ústřed ústavu geol.* 30, 113-20 (1955) (English summary).— The cavern, in cryst. limestone, is a sink-hole filled with sands, clays, and a limonitic layer about 1 m. thick. Chem. analyses show up to 44.2% Fe₂O₃. Michael Felscher

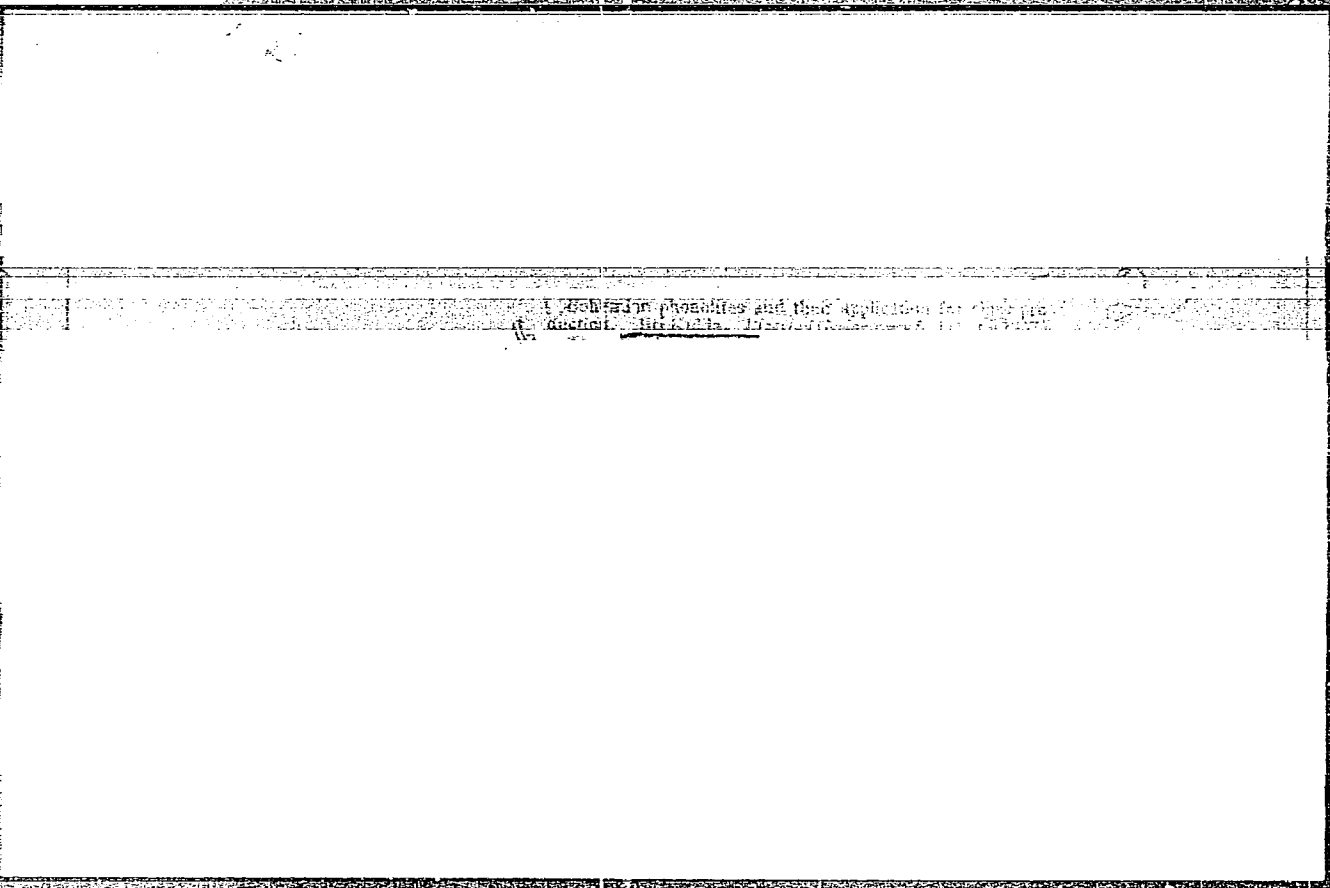
RE

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Methods of prospecting for kaolin deposits. p. 433. (STAVIVO, Vol. 34,
No. 12, Dec 1956, Praha, Czechoslovakia)

SO: Monthly List of East European Accessions (EEAL) LC, Vol. 6, No. 12, Dec 1957. Uncl.



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Academic Degrees: /not given/

Affiliation: Archeological Institute CSAV /Ceskoslovenska akademie ved; Czecho-
slovak Academy of Sciences/ (Archeologicky ustav CSAV), Prague.

Source: Prague, Vestnik Ustredniho Ustavu Geologickeho, Vol XXXVI, No 5, Ju-
ne 1961, pp 369-372.

Data: "Lithologic Index Horizons of the Loess Sections in Czechoslovakia."
/In German/

KUKLA, JOSEF.

"Průvodce motoristy. [Vyd. 1.] Praha, Státní nakl. technické literatury, 1957.
(Guide for motorists. 1st ed. illus. (part col.), maps (part fold. col.))"

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Monthly Index of East European Accessions (EEAI) LC, Vol. 7, No. 8, August, 1958

KUKLA, Marian

Distribution of the blood vessels on the surface and in walls of the digestive system of *Anguilla anguilla* L. *Fol. morph.* 5 no.1: 27-38 1954.

1. Z Zakładu Anatomii Porównawczej im. H. Hoyer, Uniwersytetu Jagiellońskiego w Krakowie. Kierownik: prof. dr Z. Grodzinski.

(GASTROINTESTINAL SYSTEM, blood supply,

*in *Anguilla anguilla*, distribution of blood vessels)

(FISH,

**Anguilla anguilla*, distribution of blood vessels in digestive system)