LOMAKIN, Ye.I.

Comparative evaluation of the efficient methods for the use of hops in brewing. Khar. prom. no.4:38-39 O-D '65.
(MIRA 18:12)

BUDAGOV, Yu.A.; DZHELEPOV, V.P.; IVANOV, V.G.; LOMAKIN, Yu.F.; FLAGIN, V.B.; SHLYAPNIKOV, P.V.

[Gas hydrodynamic design of the mechanism of pressure variation in a large-scale bubble chamber] Gidrogazodinamicheskii raschet mekhanizma izmeneniia davleniia bol'shoi puzyr'kovoi kamery. Dubna, Izd-vo Ob"edinennyi in-t iadernykh issledovanii, 1963. 18 p. (MIRA 16:10)
(Bubble chamber) (Fluid dynamics)

ACCESSION NR: AP4018366 S/0120/64/000/001/0061/0068

AUTHOR: Bogomolov, A.V.; Budagov, Yu. A.; Vasilenko, A.T.; Dzhelepov, V.P.; Dyakov, N.I.; Ivanov, V.G.; Kladnitskiy, V.S.; Lepilov, V.I.; Lomakin, Yu. F.; Moskalev, V.I.; Flyagin, V.B.; Shetet, T.I.; Shlyapnikov, P.V.

TITLE: Meter-long bubble chamber in a magnetic field

SOURCE: Pribory* i tekhnika eksperimenta, no. 1, 1964, 61-68

TOPIC TAGS: bubble chamber, meter long bubble chamber, 10 Gev particle beam, bubble chamber in magnetic field, electromagnet bubble chamber

ABSTRACT: A bubble chamber with a sensitive volume of 1×0.5×0.38 m is described. The chamber is intended for studying the particle beams up to 10 Gev obtained from the OIYaI proton synchrotron. The chamber design was described earlier (Yu. A. Budagov, et al. International Conference on High-Energy Acceleration and Instrumentation, Berkeley, 1960); more details are supplied in the present article. Propane or some other liquid suitable for a particular experiment may serve as a working fluid. The chamber is placed in a 17-kilo-oersted magnetic field derived from a 2,200-kw electromagnet. The error in a

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ACCESSION NR: AP4018366

5-Gev/s-pulse measurement, evaluated from multiple scattering in propane, is ± 3.2%. In 1963, the chamber was installed at the output of the magnetic circuit of a π^--meson beam whose energy lies between 4 and 7 Gev. "The authors consider it their duty to thank V. N. Sergiyenko, N. I. Frolov, K. A. Baycher, and the personnel of the experimental shop for their help in building the outfit. The authors are thankful to V. I. Veksler, N. I. Pavlov, and I. V. Chuvilo for their assistance in constructing the magnetic circuit of the π^--meson beam. We are indebted to A. S. Strel'tsov, B. Ye. Gritskov, B. V. Rozhdestvenskiy, and L. N. Fedulov for designing and building the magnet. The authors are deeply grateful to [illegible], V. A. Lebedev, and S. P. Zunin who spent much effort and skill in all stages of constructing and aligning the outfit." Orig. art. has: 8 figures.

ASSOCIATION: Ob"yedinenny*y institut yaderny*kh issledovaniy (Joint Institute of Nuclear Studies)

SUBMITTED: 22Mar63 DATE ACQ: 18Mar64 ENCL: 00

SUB CODE: NS NO REF SOV: 003 OTHER: 002

Card 2/2

ACCESSION NR: AP4033105 S/0120/64/000/002/0046/0050

AUTHOR: Budagov, Yu. A.; Dzhelepov, V. P.; Ivanov, V. G.; Lomakin, Yu. F.; Flyagin, V. B.; Shlyapnikov, P. V.

TITLE: Hydrodynamics of bubble chambers

SOURCE: Pribory* i tekhnika eksperimenta, no. 2, 1964, 46-50

TOPIC TAGS: hydrodynamics, nuclear research, bubble chamber, bubble chamber theory

ABSTRACT: The hydrodynamics of the process of expansion in a typical bubble chamber is mathematically described. The pressure variation along the chamber-neck axis is:

$$\frac{\partial \mathcal{P}}{\partial x} = -\rho \frac{\partial w}{\partial t} \mp \rho w \frac{\lambda_\Sigma w}{2D},$$

where w is the velocity of the incompressible (ρ = const) liquid in a constant cross-section $F = \pi D^2/4$ tube. After linearization and simplification, the equation yields this solution: $P(t) = \left(P_0 \cos \omega t + P_0 \frac{b}{\omega} \sin \omega t\right) e^{-bt}$. Here, the ratio b/ω

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ACCESSION NR: AP4033105

is a dimensionless parameter that characterizes the role of friction in a bubble chamber. For practical chambers, the condition $b/\omega \ll 1$ can be represented by $(V_0/D^3) \ll 3{,}000$. The gas expansion (as the pressure changes) occurs simultaneously with the liquid expansion in the chamber. This combined process is also described by a set of equations from which design formulas are derived. The method was used to design a 1-meter bubble chamber in the Joint Nuclear Research Institute. "The authors are indebted to I. A. Charny*y for his attention and numerous useful discussions which greatly helped in formulating and solving some of the problems in the hydrodynamics of transient motion." Orig. art. has: 1 figure and 17 formulas.

ASSOCIATION: Ob"yedinenny*y institut yaderny*kh issledovaniy (Joint Nuclear Research Institute)

SUBMITTED: 01Jun63 DATE ACQ: 11May64 ENCL: 00

SUB CODE: NS NO REF SOV: 005 OTHER: 002

Card 2/2

L 8581-65 EWT(m) DIAAP/AFWL

ACCESSION NR: AP4048496 S/0120/64/000/004/0056/0065

AUTHOR: Budagov, Yu. A.; Dzhelepov, V. P.; Ivanov, V. G.; Lomakin, Yu. F.; Flyagin, V. B.; Shlyapnikov, P. V. 13

TITLE: Hydrogasdynamic computation of a mechanism for variation of the pressure in a large bubble chamber 19

SOURCE: Pribory* i tekhnika eksperimenta, no. 4, 1964, 56-65

TOPIC TAGS: hydrogasdynamic computation, bubble chamber, pressure variation mechanism, construction parameter, pneumonic device

Abstract: The article presents a hydrogasdynamic method for computing the basic parameters of construction of a bubble chamber and the mechanism for variation of the pressure, which was used during development of the meter bubble chamber at the Joint Institute of Nuclear Research. The mathematical description of the processes of pressure variation within the chamber and in the system of the pneumonic devices is sufficiently general; consequently, the method described is applicable to the computation of various constructional schemes and is of practical interest. There are eight figures, one of which shows the detailed construction of the mechanism for variation of pressure.

Card 1/2

L 8581-65
ACCESSION NR: AP4048496

ASSOCIATION: Ob"yedinennyy institut yaderny*kh issledovaniy (Joint Institute of Nuclear Research)

SUBMITTED: 08Aug63	ENCL: 00	SUB CODE: NP, MM
NO REF SOV: 012	OTHER: 007	IPRS

Card 2/2

BUDAGOV, Yu.A.; DZHELEPOV, V.P.; IVANOV, V.G.; LOMAKIN, Yu.F.; FLYAGIN, V.B.; SHLYAPNIKOV, P.V.

Hydrodynamic study of the operating conditions of bubble chambers. Prib. i tekh. eksp. 9 no.5:55-60 S-O '64.
(MIRA 17:12)

L 00069-66 EWT(m) DIAAP

ACCESSION NR: AP5021328 UR/0120/65/000/004/0042/0045
539.1.073.3

AUTHOR: Budagov, Yu. A.; Dzhelepov, V. P.; Lomakin, Yu. F.; Flyagin, V. B.; Shlyapnikov, P. V.

TITLE: Hydrodynamics of the resonant bubble chamber

SOURCE: Pribory i tekhnika eksperimenta, no. 4, 1965, 42-45

TOPIC TAGS: proton accelerator, particle accelerator component, synchrotron, hydrodynamics, proton resonance

ABSTRACT: The authors proposed earlier that the speed of bubble chambers be increased by the excitation of periodic pressure oscillation within the working substance with frequencies equal to the resonant frequency of the liquid filling the chamber. In the present article, considering the bubble chamber as a special kind of volume resonator, the authors examine more closely the hydrodynamics of the processes of excitation within the liquid of undamped periodic pressure oscillations with the aim of increasing the speed of bubble chambers. The applicability of such chambers in proton synchrotron experiments is discussed. Expressions of practical interest are derived, and they connect the basic con-

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L 00069-66

ACCESSION NR: AP5021328

2

structive and hydrodynamic parameters of resonant chambers. Results show that there are no essential obstacles to a successful excitation and maintainance of the oscillations. Orig. art. has: 15 formulas and 2 figures.

ASSOCIATION: Ob"yedinennyy institut yadernykh issledovaniy, Dubna (Joint Institute of Nuclear Research) 55

SUBMITTED: 19Jun64 ENCL: 00 SUB CODE: NP, ME

NO REF SOV: 001 OTHER: 001

Card 2/2

LOMAKIN, Yu.F.

Primary multiple gastric tumors. Zdrav. Kazakh. 21 no.6:69-70 '61. (MIRA 15:2)

1. Iz kafedry patologicheskoy anatomii (zav. - prof. P.P.Ochkur) Kazakhskogo meditsinskogo instituta.
(STOMACH--TUMORS)

LOMAKIN, Yu.F.

Cancer of the stomach. Trudy Inst. klin. i eksp. khir. AN Kazakh. SSR 8:51-55 '62. (MIRA 17:7)

LOMAKIN, Yu.F.

Comparative morphology of some cancerous tumors and their metastasis. Trudy Inst. klin. i eksp. khir. AN Kazakh. SSR 8:103-106 '62. (MIRA 17:7)

S/123/62/000/014/007/020
A004/A101

AUTHORS: Malinkina, Ye. I., Geller, Yu. A., Lomakin, V. N.

TITLE: Hardenability of alloyed steel

PERIODICAL: Referativnyy zhurnal, Mashinostroyeniye, no. 14, 1962, 27, abstract 14B151 (In collection: "Metodika i praktika metallogr. issled. instrum. stali". Moscow, Mashgiz, 1961, 94 - 108)

TEXT: The authors present the results of investigating the possibility of using the face hardening method to determine the hardenability of alloyed tool steel, and also nomograms for the conversion of the hardenability obtained on face samples into the hardenability of cylindrical specimens subjected to volumetric hardening with oil-quenching at 20°C and in hot media. The steel grades 9 XC (9KhS), XBГ (KhVG) and X (Kh) were investigated. It was found that the face hardening method is fully applicable for determining the hardenability of alloyed tool steel. The nomograms for determining the hardenability, plotted for the case of quenching in oil and in molten salts, make it possible according to the given face test, to determine the hardness in the center and in any spot

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S/123/62/000/014/007/020
A004/A101

Hardenability of alloyed steel

of the specimen cross section of any diameter, the magnitude of the critical diameter and thickness of the hardened layer on specimens of any diameter, and also the necessary hardenability depth according to the face test, in order to obtain the required depth of the hardened layer and the required core hardness on components of a given diameter. There are 12 figures.

E. Spivak

[Abstracter's note: Complete translation]

Card 2/2

RASHKOVSKAYA, Ye. A.; LOMAKINA, A. K.; USENKO, L. T.

Solubility isotherms of the systems KBr - KNO_3 - H_2O and KI - KNO_3 - H_2O at 25 C. Ukr. khim. zhur. 28 no.5:574-577 '62. (MIRA 15:10)

1. Khar'kovskiy nauchno-issledovatel'skiy institut osnovnoy khimii.

(Systems(Chemistry)) (Solubility)

RAYKHSHTAT, G.N.; LEYKINA, R.F.; KARASEVA, M.F.; KARPOVA, G.V.; GEDE, E.O.; LOMAKINA, A.Ye.

Study of colienteritis occurrence in day nurseries. Zhur. mikrobiol., epid. i immun. 40 no.11:143 N '63. (MIRA 17:12)

1. Iz sanitarno-epidemiologicheskoy stantsii Sverdlovskogo rayona Moskvy.

LOMAKINA, G. A.

57-27-7-26/40

AUTHORS: Lomakina, G. A., Vodakov, Yu. A., Naumov, G. P., Maslakovets, Yu. P.

TITLE: A Valve Photocell of Cadmium Telluride. (A Preliminary Report) (Ventil'nyy fotoelement iz tellurida kadmiya. (Predvaritel'noye soobshcheniye)).

PERIODICAL: Zhurnal Tekhnicheskoy Fiziki, 1957, Vol. 27, Nr 7, p. 1594 (USSR)

ABSTRACT: For the production of p-n transitions n-type plates of CdTe with an area of 1 to 2 qcm consisting of several (3 to 5) crystals were used. Their specific conductivity was $\sigma \approx 40$ Ohm^{-1}. cm^{-1}, thermal-EMK $\alpha \simeq 200$ μV/ degree. The width of the forbidden zone was 1,34 eV. The thin p-layer was formed by means of thermal diffusion of elements of the first group of the periodic law. The ohmic contact on the n-layer was obtained by melting of indium and on the p-layer by melting of gold. The p-n transitions obtained in this manner were very "directed" with a distinctly marked saturation in the inverse direction. In sunlight with 30 mW/qcm the photo-EMK of this photoelectric

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57-27-7-26/40

A Valve Photocell of Cadmium Telluride
(A Preliminary Report)

cell amounted to more than 500 mV and the short-circuit amperage 2 mA/qcm. The loaded part of the volt-ampere characteristic in this connection approached the rectangular form. The efficiency of such a photoelectric cell has the order of magnitude of 2 %. This value, however, is by far no boundary value for photocells of CdTe. The maximum of the spectral sensitivity of the obtained photocells lay within the boundaries of 0.75 to 0.78 μ and the long-wave boundary of photosensitivity was 0.9 μ. The photoelectric cells of cadmium-telluride possess a high sensitivity as compared to X-rays.

ASSOCIATION: Institute for Semiconductors AS USSR, Leningrad
(Institut poluprovodnikov AN SSSR, Leningrad)

SUBMITTED: January 30, 1957

AVAILABLE: Library of Congress

Card 2/2 1. Photoelectric cells-Development 2. Photoelectric cells-Design
3. Cadium-telluride-Applications

S/181/60/002/01/01/035
B008/B011

9.4160

AUTHORS: Vodakov, Yu. A., Lomakina, G. A., Naumov, G. P., Maslakovets, Yu. P.

TITLE: A Photocell Made of Cadmium Telluride With a p-n Junction

PERIODICAL: Fizika tverdogo tela, 1960, Vol. 2, No. 1, pp. 3 - 7

TEXT: The authors report on the properties of a new cadmium-telluride photocell. Cadmium-telluride crystals with a cubic modification were used for its preparation. The light characteristics of the CdTe photocells are similar to those of Ge and Si photocells, which have a p-n junction. Fig. 1 shows the characteristics of the CdTe cell for an irradiation of 4, 30, 300 and 3,000 lux. Current-voltage characteristics of the CdTe photocell are shown in Fig. 2 for room temperature, in Fig. 3 for +50°C, and in Fig. 4 for +101°C. According to their character, they are similar to those of silicon photocells. Fig. 5 shows the temperature dependence of the electromotive force, of short-circuit current, and of the maximum capacitance yielded to the outer circuit under continuous exposure. Fig. 6 shows the characteristics of another

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A Photocell Made of Cadmium Telluride With a p-n Junction

S/181/60/002/01/01/035
B008/B011

photocell at a relatively short exposure. Fig. 7 shows the temperature dependence of the short-circuit current, of the electromotive force and of the maximum capacitance yielded to the outer circuit. Fig. 8 shows, in relative units, the spectral sensitivity of the CdTe photocell referred to an equal amount of quanta and to an equal incident radiation energy. Cadmium-telluride photocells with p-n junction are very sensitive to ultraviolet and X rays. CdTe photocells have at present an efficiency of 4% and can be utilized for solar batteries. The lower efficiency is compensated by their simpler and less expensive preparation. Due to their spectral sensitivity and a high duty factor of the characteristics, they might be used to solve some technical problems. The authors thank T. L. Koval'chik for his discussion of experimental results and G. B. Dubrovskiy for his examination of the spectral sensitivity of the photocells. B. K. Subashev is also mentioned. There are 8 figures and 6 references, 4 of which are Soviet.

01251

A Photocell Made of Cadmium Telluride With a p-n Junction

S/181/60/002/01/01/035
B008/B011

ASSOCIATION: Institut poluprovodnikov AN SSSR, Leningrad
(Institute of Semiconductors, AS USSR, Leningrad)

SUBMITTED: April 9, 1959

X

Card 3/3

S/181/60/002/01/03/035
B008/B011

9.4160
24.7700

AUTHORS: Vodakov, Yu. A., Lomakina, G. A., Naumov, G. P., Maslakovets, Yu. P.

TITLE: Properties of p-n Junctions in Cadmium Telluride Photocells

PERIODICAL: Fizika tverdogo tela, 1960, Vol. 2, No. 1, pp. 15-22

TEXT: The current-voltage characteristics of cadmium telluride photocells were thoroughly studied by means of a circuit (Fig. 1) consisting of the current source, a diode, a current generator (which simulates the photocurrent), a resistor connected in series, and a shunt (Figs. 1 to 10). The technique used for the preparation of cadmium telluride photocells leads to the formation of a p-n junction. The depth of its position can be regulated. In the resulting p-type layer the minority carriers have a very short lifetime, and the electrical conductivity of the layer is poor. For this reason it plays the part of a filter with respect to the incident radiation, and is the main cause responsible for the high resistances. The authors obtained photocells with p-n junctions, whose current-voltage

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characteristics at room temperature complied quantitatively with Shockley's theory which considers a recombination in the p-n junction. Near the surface, such characteristics are very difficult to obtain. Their form is in most cases distorted by a "hump". A tunnel effect is assumed to occur in CdTe photocells on narrow points of the p-n junctions. By applying the suitable technique it is possible to obtain a p-n junction with a relatively high efficiency even near the surface, both on a low and a high exposure level. An efficiency of 4% was attained with the best photocells in the sunlight although, with a band width of 1.4 ev, the conversion coefficient of solar radiation into electric energy should be considerably higher. This low efficiency is for a large part explained by the presence of a semitransparent metal electrode through which only about 50% of the incident light passes. The second factor affecting the efficiency of CdTe photocells, is the short lifetime both in p-type and n-type CdTe. The efficiency could be only increased by prolonging the lifetime of the minority carriers in p-type and n-type cadmium telluride. An increase of up to 7% should be expected in this case. This, however, would entail, due to a complicated technique, a considerable increase in the cost of the photocell. When preparing photocells with an efficiency

Properties of p-n Junctions in Cadmium Telluride Photocells

S/181/60/002/01/03/035
B008/B011

of about 4% it is, however, possible to restrict oneself to relatively simple methods of preparation. The authors thank B. Ya. Moyzhes for discussing the results. There are 10 figures and 7 references, 2 of which are Soviet.

ASSOCIATION: Institut poluprovodnikov AN SSSR, Leningrad (Institute of Semiconductors, AS USSR, Leningrad)

SUBMITTED: April 9, 1959

Card 3/3

S/181/60/002/01/13/035
B008/B011

24.7700

AUTHORS: Vodakov, Yu. A., Lomakina, G. A., Naumov, G. P., Maslakovets, Yu. P.

TITLE: Investigation of the Surface Layers on Cadmium Telluride Crystals

PERIODICAL: Fizika tverdogo tela, 1960, Vol. 2, No. 1, pp. 55-61

TEXT: The authors describe experiments made for the investigation of the surface layers of cadmium telluride (Figs. 1-6). The diffusion coefficient is calculated in an appendix. The mechanism of the formation of p-type surface layers was investigated. The respective conductivity in CdTe is due to an admixture of elements of groups I and V or by the presence of Cd vacancies. The most likely is the formation of Cd vacancies or the disappearance of the donor impurity from the surface, which, in the case of p-type CdTe partly compensates the acceptor impurity. Two mechanisms may be assumed which, in the air and at a temperature of 200°C, lead to the formation of Cd vacancies: The one is the diffusion of oxygen into the surface layer and, hence, formation of

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metalloid excess therein. The second mechanism is the disappearance of cadmium from the surface layer; also this process can be strongly influenced by the presence of oxygen. Compared to the glowing in the air, pre-heating in deoxidized argon or hydrogen has a somewhat inhibiting effect on the diffusion process, but all the same, p-type conductive layers are formed. Also in this case, the influence of oxygen is not excluded. In the authors' opinion, the stimulating main factor is atmospheric oxygen. It was not clarified, however, which type of influence predominates here. On longer standing in the air or on pre-heating up to a correspondingly high temperature, the properties of CdTe are irreversibly changed only from the surface. Important changes in volume properties start occurring when the processes beginning from the surface penetrate the material to a considerable depth. The same phenomena can be observed in n-type CdTe crystals with low resistivity. Strikingly high is the diffusion coefficient of acceptor impurity (appendix), which raises the surface layer conductivity. Its height can be explained by the great number of vacancies and mechanical tensions in the crystal lattice, occurring in consequence of the treatment and etching of the surface. The authors thank B. Ya. Moyzhes

Invectigation of the Surface Layers on Cadmium Telluride Crystals

S/181/60/002/01/13/035
B008/B011

and T. L. Koval'chik for assistance given. There are 6 figures and 3 references: 1 Soviet.

ASSOCIATION: Institut poluprovodnikov AN SSSR, Leningrad (Institute of Semiconductors, AS USSR, Leningrad)

SUBMITTED: April 9, 1959

4

Card 3/3

S/181/62/004/003/043/045
B101/B102

AUTHORS: Lomakina, G. A., and Vodakov, Yu. A.

TITLE: Phonon drag effect in α-SiC crystals

PERIODICAL: Fizika tverdogo tela, v. 4, no. 3, 1962, 820 - 822

TEXT: Because of the high thermal conductivity of SiC a special method was developed of measuring the thermo-emf in n-type and p-type α-SiC crystals. In rectangular, 0.5 mm thick specimens of monocrystalline SiC (resistivity up to 10^4 ohm·cm) two pits with a diameter less than 0.5 mm were produced by means of ultrasound, the distance of the pits from each other being greater than their diameter. Electrical contacts were fit into the bottom of the pits and chromel-alumel thermocouples were pressed in. The measured temperature coefficient α_e of thermo-emf for n-type and p-type specimens was not consistent with the equation of Pisarenko:
$\alpha_e = (k/e)\left\{A + \ln\left[2\,(2\pi m^* k/h^2)^{3/2}\right] - \ln n + (3/2)\ln T\right\}$ where $m_n^* = 0.6\ m_o$; $m_p^* = 1\ m_o$ or $2m_o$, A = 2. The deviations are explained by phonon drag

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S/181/62/004/003/043/045
B101/B102

Phonon drag effect...

which may arise due to the high thermal conductivity of SiC. The phonon drag effect α_{ph} calculated according to C. Herring (see below) for specimens with carrier concentrations of $5.6 \cdot 10^{16}$ cm^{-3} and $2.7 \cdot 10^{17}$ cm^{-3} gave a linear dependence $\alpha_{ph} = BT^{-2.3}$. In n-type SiC with a carrier concentration of $3.6 \cdot 10^{18}$ cm^{-3} a deviation from the straight line was observed which is caused either by degeneracy or by saturation. For p-type SiC, at temperatures higher than room temperature, α_{ph} was linear just as in n-type SiC, but owing to the low hole mobility its value was higher. The considerable decrease of α_{ph} at lower temperatures cannot be explained by the vanishing of phonon drag since at the same time the thermo-emf becomes smaller than α_e. It is assumed that the thermo-emf in p-type SiC is reduced by an additional electrical conductivity caused by an impurity band. There are 2 figures and 3 references: 1 Soviet-bloc and 2 non-Soviet-bloc. The two references to English-language publications read as follows: I. A. Lely a. F. A. Kröger, Semiconductors and phosphors, New York, 525, 1958; C. Herring, Semiconductors and

Card 2/3

Phonon drag effect... S/181/62/004/003/043/045
B101/B102

phosphors, New York, 184, 1958.

ASSOCIATION: Institut poluprovodnikov AN SSSR, Leningrad (Institute of Semiconductors AS USSR, Leningrad)

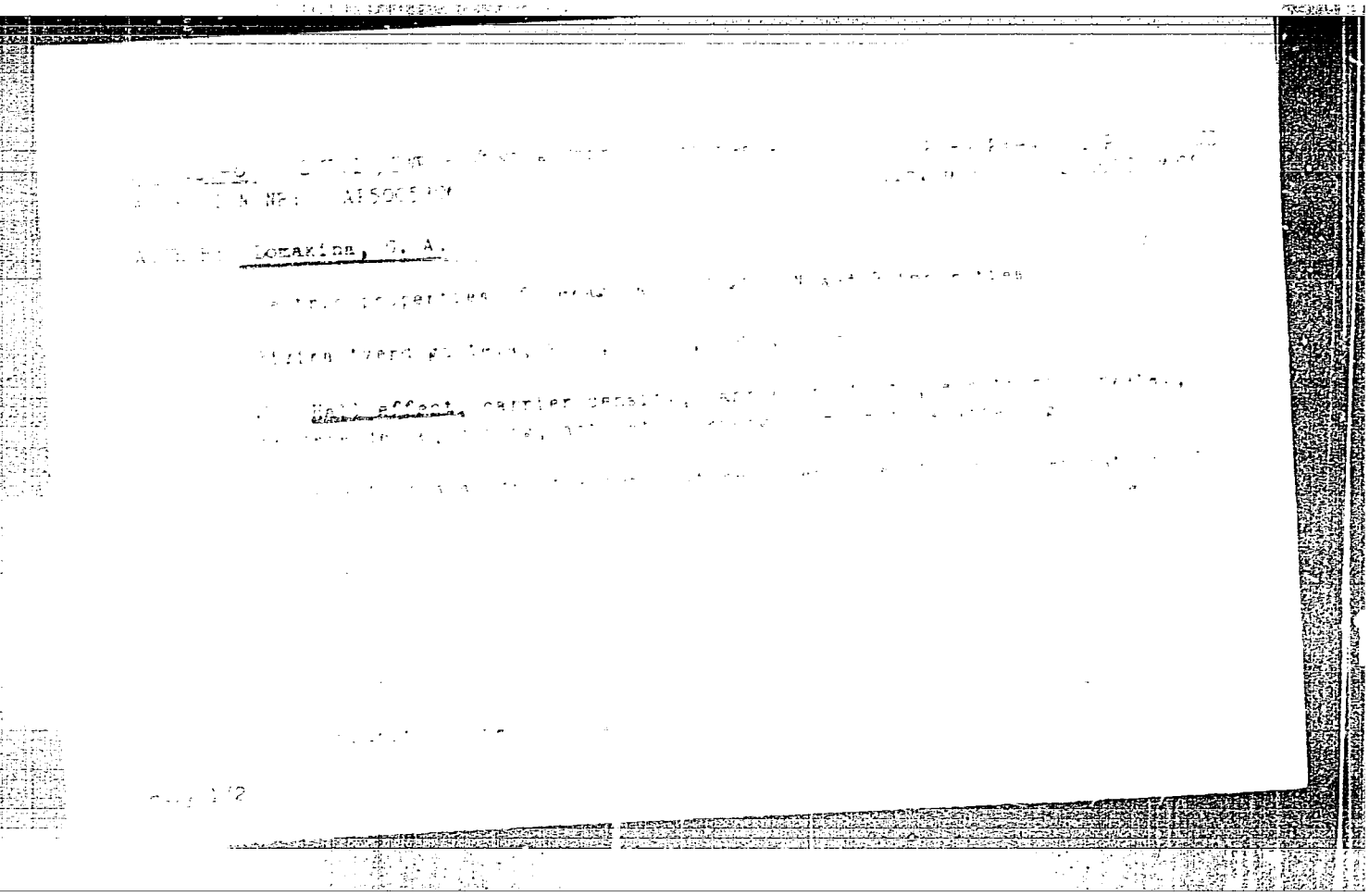
SUBMITTED: December 25, 1961

Card 3/3

LOMAKINA, G.A.; VODAKOV, Yu.A.

Effect of phonon entrainment in α-SiC crystals. Fiz. tver. tela 4 no.3:820-822 '62. (MIRA 15:4)

1. Institut poluprovodnikov AN SSSR, Leningrad.
(Silicon carbide crystals) (Thermoelectricity)



ACCESSION NR: AP5005306

are [illegible] in MeV)

$$\Delta E = 0.15 - 5.5 \times 1[illegible]^{-4} (N_A + n [illegible]$$

$$\Delta E = 0.39 - 5.5 \times 10^{-8} N_D [illegible]$$

[illegible] that the deeper acceptor level in the [illegible] crystals is due to the boron [illegible] [illegible] calculation of the [illegible] samples, [illegible] [illegible] [illegible] a small degree of compensation. I thank [illegible] for [illegible] [illegible], A. V. Petrov, and all the members of the laboratory for help [illegible] V. F. [illegible] [illegible] [illegible]ures and 3 formulas.

[illegible]: Institut poluprovodnikov AN SSSR, Leningrad (Institute of Semiconductors, AN SSSR)

SUBMITTED: 13Jun64 ENCL: 00 SUB CODE: SS

NR REF SOV: 000 OTHER: 011

Card 2/2

L 30172-66 EWT(m)/EWP(t)/ETI IJP(c) JD

ACC NR: AP6012512 SOURCE CODE: UR/0181/66/008/004/1296/1298

66
63
B

AUTHOR: Lomakina, G. A.

ORG: Institute of Semiconductors, AN SSSR, Leningrad (Institut poluprovodnikov AN SSSR)

TITLE: On certain features of Hall curves of n-type α-SiC

SOURCE: Fizika tverdogo tela, v. 8, no. 4, 1966, 1296-1298

TOPIC TAGS: silicon carbide, Hall effect, temperature dependence, carrier density, conduction electron, impurity level

ABSTRACT: The purpose of the investigation was to ascertain the causes of deviations of the temperature dependence of the free-carrier density in n-type α-SiC at low temperatures, wherein the conduction-electron density begins to decrease more slowly with decreasing temperature and becomes practically independent of the temperature at 100K. Experiments by the author have also shown that these deviations begin at higher temperatures in samples having low concentration of nitrogen and acceptor impurities. The author analyzes three causes of such deviations and the Hall curves: 1. Inhomogeneity of the investigated crystals. 2. A mechanism whereby the sample becomes short circuited either on the surface or by the impurity conductivity. 3. The presence of shallow donor

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L 30172-66

ACC NR: AP6012512

impurities with activation energy such that it becomes depleted even at liquid-nitrogen temperature. Tests by the author have shown that the first two factors can be eliminated, and that the third is responsible for the observed deviations. The author thanks Yu. P. Maslakovets for guidance, Yu. A. Vodakov for help with the work and a discussion of the results, and M. B. Reyfman for supplying the crystals. Orig. art. has: 2 figures.

SUB CODE: 20/ SUBM DATE: 16Nov65/ ORIG REF: 003/ OTH REF: 003

Card 2/2

LOMAKINA, G. G.

Category: USSR/Fitting Out of Laboratories. Instruments, Their Theory, H. Construction and Use

Abs Jour: Referat Zhur-Khimiya, No 9, 1957, 31120

Author : Tolmachev V. N., Lomakina G. G.
Inst : Khar'kov University
Title : Study of Errors of Spectrographic Method of Securing Absorption Spectra of Solutions in the Ultraviolet Region.

Orig Pub: Uch. zap. Khar'kovsk. un-ta, 1956, 71, 111-118

Abstract: It was ascertained experimentally, that on continuous operation of a spark generator, assembled according to the simplest scheme, during the recording of blackening marks and spectra under study on the same plate, the relative error in blackening of spectrum lines does not exceed 2-4%. By means of standard solutions of sodium picrate and potassium chromate it was found that errors in optical densities of the solutions do not exceed errors in blackening of lines. It was ascertained that these errors increase with decreasing exposure.

Card : 1/1 -3-

Lomakina, G. G.

TOLMACHEV, V.N.; LOMAKINA, G.G.

Spectrophotometric determination of the dissociation constants of sodium 1,8 dioxy-2-(2-oxyazobenzene)-3,6-naphthalene disulfonate [with summary in English]. Zhur. fiz. khim. 31 no.5:1027-1032 My '57. (MIRA 10:11)

1. Khar'kovskiy gosudarstvennyy universitet im. A.M. Gor'kogo.
(Chemical tests and reagents)
(Sodium organic compounds)

Lomakina, G.G.

TOLMACHEV, V.N.; LOMAKINA, G.G.

Spectrophotometric investigation of the interaction between sodium 1,8-dioxy-2-(2'-oxyazobenzene)-3,6-naphthalenedisulfonate and magnesium ions (with summary in English). Zhur.fiz.khim. 31 no.7:1600-1605 Jl '57. (MIRA 10:12)

1. Khar'kovskiy universitet im. A.M.Gor'kogo i Khar'kovskiy institut Sovetskoy torgovli.
(Spectrophotometry) (Sodium salts) (Magnesium)

AUTHORS: Lomakina, G.G., Tolmachev, V.N., Shimanskaya, M.V., Slavinskaya, V.A. 32-24-6-13/44

TITLE: News in Brief (Korotkiye soobshcheniya)

PERIODICAL: Zavodskaya Laboratoriya, 1958, Vol 24, Nr 6, p. 694 (USSR)

ABSTRACT: G.G. Lomakina and V.N. Tolmachev of Khar'kov State University (Khar'kovskiy gosudarstvennyy universitet) recommend the application of acid chromium dark-blue as a coloring agent for colorimetrical determinations of magnesium- and aluminum alloys. Together with magnesium this coloring agent forms a colored complex of the composition MgR_2. The most sensitive reaction is attained with pH = 9.5 - 10.5, in which case the relative error is 0.5 - -3.5%, and sensitivity increases with an increased purity of the coloring agent. The calibration curves can be plotted according to solutions of magnesium chloride of etalon samples of aluminum alloys.

M.V. Shimanskaya and V.A. Slavinskaya of the Institute of Organic Chemistry of the Academy of Sciences Latvian SSR (Institut organicheskoy khimii Akademii nauk Latviyskoy SSR) suggested a method of photocolorimetric quantitative determination of

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furfurole in the presence of aliphatic aldehydes of carboxylic acids. The well-known reaction between furfurole and acetic acid aniline is used and the method of investigation developed by Ponomarev is employed on this occasion. After reaction lasting $1^h45'$ at 15^o between a sodium chloride-, acetic acid-, and aniline solution with furfurole, the solution is colorimetrized on a photocolorimeter FEK-M with a green light filter. The weight-limit ratios between furfurole and formic- and maleic acid, formaldehyde and acetic aldehyde which do not act upon the optical density of the coloring of the compound of furfurole with acetic acid aniline are determined.

1. Magnesium--Determination 2. Aluminum alloys--Determination
3. Colorimetry 4. Furfurals--Quantitative analysis

5(4) SOV/76-33-4-9/32

AUTHORS: Tolmachev, V. N., Lomakina, G. G., Shtuchkina, L. A.

TITLE: Spectrophotometric Investigation of the Reaction Between Sodium-1,8-dioxy-2-(2'-oxyazobenzene)-3,6-naphthalene Disulphonate With Zinc Ions (Spektrofotometricheskoye issledovaniye reaktsii vzaimodeystviya 1,8-dioksi-2-(2'-oksiazobenzol)-3,6-naftalindisul'fonata natriya s ionami tsinka)

PERIODICAL: Zhurnal fizicheskoy khimii, 1959, Vol 33, Nr 4, pp 808-812 (USSR)

ABSTRACT: It was already found (Ref 1) that compound (I) mentioned in the title (the so-called acid chrome dark blue) forms a stable complex compound with magnesium which made it possible to elaborate a colorimetric Mg-determination in aluminum alloys (Ref 2). In the present case the reaction of the dye with zinc was investigated by means of the working method (Refs 1, 3) already described. $ZnSO_4$ was used and the absorption curves of the solutions with (I) were recorded at different zinc concentrations (Fig 1) at a pH = 9.2, 10.3 and 11.5. The diagram shows that all absorption curves intersect each other at one point (λ = 590 mμ) which indicates a certain equilibrium

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Spectrophotometric Investigation of the Reaction Between Sodium-1,8-dioxy-2-(2'-oxyazobenzene)-3,6-naphthalene Disulphonate With Zinc Ions

in the solution. It was found that the maximum optical density is attained at pH ≈ 10. The coefficient of molar absorption of the complex compound (ε = 45,400 ± 900) and the value of the instability constant for the radical ZnR_2^{6-} K = $3.3.10^{-11}$ were found from the measurements of the optical density and the pH of the solutions (Table) according to an equation (12) for λ = 570 mμ. On the basis of the experimental data obtained it is assumed that (I) may be used for the colorimetric determinations of zinc. There are 4 figures, 1 table, and 7 references, 5 of which are Soviet.

ASSOCIATION: Khar'kovskiy gosudarstvennyy universitet im. A. M. Gor'kogo (Khar'kov State University imeni A. M. Gor'kiy)

SUBMITTED: September 9, 1957

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05832
SOV/76-33-10-30/45

5(4)
AUTHORS: Tolmachev, V. N., Lomakina, G. G.

TITLE: Spectrophotometric Analysis of the Reaction of Sodium-1,8-dioxy-2-(2'-oxyazobenzene)-3,6-naphthalene Disulphonate With Potassium, Strontium, and Barium Ions

PERIODICAL: Zhurnal fizicheskoy khimii, 1959, Vol 33, Nr 10, pp 2302 - 2305 (USSR)

ABSTRACT: Previous articles dealt with the investigation of the dissociation constant (Ref 1) and the complex compounds with magnesium (Ref 2) and zinc (Ref 3) of the afore-mentioned dye. The authors investigated here the complex compounds with calcium, strontium, and barium with the help of spectrophotometry. The composition of the resultant complex compounds was determined at various pH-values by Ostromyslenskiy's method. The following complex compounds were obtained: CaR_2^{6-}, SrR_2^{6-}, and BaR_2^{6-}. In order to determine the instability constants, the authors measured the optical densities at various concentrations of the metal ions and of the dye in various solvents. Measurements were made on a UM-2 monochromator. The

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Spectrophotometric Analysis of the Reaction of Sodium-1,8-dioxy-2-(2'-oxyazobenzene)-3,6-naphthalene Disulphonate With Potassium, Strontium, and Barium Ions SOV/76-33-10-30/45

constants (Table) were $5.3.10^{10}$ and $7.7.10^{8}$. The complex compounds lose in stability with decreasing electronegativity of the ions in the following order: $Ca^{2+} > Sr^{2+} > Ba^{2+}$. There are 4 figures, 1 table, and 7 references, 5 of which are Soviet.

ASSOCIATION: Khar'kovskiy gosudarstvennyy universitet im. A. M. Gor'kogo (Khar'kov State University imeni A. M. Gor'kiy)

SUBMITTED: March 28, 1958

Card 2/2

LOMAKIN, S. I., Grad Student -- (KL) "Spectrophotometric investigation of complex compounds formed by ferrous salts of the second group of the Mendeleyev periodic system with 4-dioxy -4-(2-hydroxyazo-benzene)-3,6-naphthaline disulfonic acid (Chromotrope dark blue)," Khar'kov, 1950, 18 pp (Khar'kov State Univ im. A. M. Gor'kiy) (KL, 35-50, 123)

LOMAKINA, G.G.; TOLMACHEV, V.N.

1,8-Dihydroxy-2-(2'-Hydroxyazobenzene)-3,6-naphthalene sodium disulfonate as a possible reagent for the photometric determination of magnesium, zinc, and cadmium. Izv. vys. ucheb. zav; khim. i khim. tekh. 3 no. 5:819-822 '60. (MIRA 13:12)

1. Khar'kovskiy gosudarstvennyy universitet imeni A.M.Gor'kogo. Kafedra tekhnicheskoy khimii.
(Magnesium--Analysis) (Zinc--Analysis)
(Cadmium--Analysis)

TOLMACHEV, V.N.; LOMAKINA, G.G. (Khar'kov)

Spectrophotometric study of reactions between sodium 1,8-dihydroxy-(2-hydroxyazobenzene)-3,6-naphthalene disulfonate and cadmium and mercury ions. Zhur. fiz. khim. 34 no.3:627-632 Mr '60.
(MIRA 13:11)

1. Khar'kovskiy gosudarstvennyy universitet imeni A.M. Gor'kogo.
(Cadmium compounds) (Mercury compounds)

TOLMACHEV, V.N.; LOMAKINA, G.G.; SERPUKHOVA, L.N.

Relation between the absorption spectra of complex compounds and their stability in aqueous solutions. Ukr.khim.zhur. 27 no.5:584-592 '61. (MIRA 14:9)

1. Khar'kovskiy gosudarstvennyy universitet im. A.M. Gor'kogo.
(Complex compounds—Spectra)

LOMAKINA, L. A.

Tobacco - Bibliography

Works on tobacco and makhorka published in 1951. Tabak 13 no. 2, 1952

Monthly List of Russian Accessions, Library of Congress, June 1952. UNCLASSIFIED.

LOMAKINA, L.A.

Tobacco -Bibliography

Notes on works on tobacco and makhorka culture published in 1951. Tabak 13 no. 1, 1952.

Monthly List of Russian Accessions, Library of Congress, June 1952. UNCLASSIFIED.

[illegible], I. A.

Tobacco Curing

Notes on works about tobacco and makhorka growing which were published in 1951.
Tabak 13 No. 4 1952.

MONTHLY LIST OF RUSSIAN ACCESSIONS. Library of Congress, October 1952. UNCLASSIFIED.

LOMAKINA, L. A.

Bibliography - Tobacco

Brief review of works on tobacco and makhorka growing, published in 1951-1952. Tabak 14, No. 1, 1953.

9. Monthly List of Russian Accessions, Library of Congress, June 1953, Uncl.

USSR/Microbiology. Antibiosis and Symbiosis. Anti- F-2
biotics.

Abs Jour : Ref Zhur - Biol., No 14, 1958, No 62332

Author : Lomakina L.A.
Inst : -
Title : Use of Antibiotics in the Struggle with Tobacco Diseases.

Orig Pub : Tabak, 1957, No 3, 61-62

Abstract : No abstract

Card : 1/1

LOMAKINA, L.A. (g. Krasnodar)

New herbicides for tobacco hotbeds. Zashch. rast. ot vred. i bol. 3. no.5:54 S-O '58. (MIRA 11:10)
(Tobacco) (Herbicides)

LOMAKINA, L.A.

Cytovirin, a new antibiotic (from "Phytopathology," no.9, 1957). Zashch. rast. ot vred. i bol. 4 no.2:50 Mr-Ap '59. (MIRA 16:5)

(Antibiotics)

LOMAKINA, L.A.

Nematocidal effect of sugar. Zashch. rast. ot vred. i bol. 7 no.12:51-52 D '62. (MIRA 16:7)

(Nematocides) (Sugar)

LOMAKINA, L.A.

Substances of vegetable origin as inhibitors of the tobacco mosaic virus. Zashch. rast. ot vred. i bol. 7 no.10:48-49 O '62. (MIRA 16:6)

(Growth-promoting substances)
(Tobacco mosaic virus)

LOMAKINA, L.N.; TARASEVICH, N.I.

Determination of palladium by means of triazoles. Vest.Mosk.un Ser.mat., mekh., astron., fiz., khim. 12 no.3:217-222 '57. (MIRA 11:3)

1.Kafedra analiticheskoy khimii Moskovskogo gosudarstvennogo universiteta.

(Palladium) (Triazole)

5 (2)

AUTHORS: Lomakina, L. N., Tarasevich, N. I. SOV/55-58-6-19/31

TITLE: Investigation of the Analytical Properties of 2-Mercaptobenzimidazol (Izucheniye analiticheskikh svoystv 2-merkaptobenzimidazola). The Microdetermination of Platinum, Palladium, Rhodium, and Iridium by 2-Mercapto-benzimidazol (Mikroopredeleniye platiny, palladiya, rodiya i iridiya 2-merkaptobenzimidazolom)

PERIODICAL: Vestnik Moskovskogo universiteta. Seriya matematiki, mekhaniki, astronomii, fiziki, khimii, 1958, Nr 6, pp 149-154 (USSR)

ABSTRACT: In this paper an investigation of the compounds of platinum (IV), palladium (II), rhodium (III), iridium (IV) with the reagent mentioned in the title, as well as an investigation of the possibility of a quantitative determination of these metals by means of the reagent investigated is carried out. A scheme for the synthesis of the reagent is given, and figure 1 shows the shape of the crystals formed by it. It is difficultly soluble in H_2O and in acids. Qualitative

Card 1/3 investigations of its reactivity showed that it reacts with

several elements in an acid medium, with some also in ammonia, and with the elements of the platinum group in acetic acid (pH = 3.27-7), and in the presence of mineral acids. An amorphous precipitation is formed, which forms the crystals shown by figure 2 by recrystallization (with Pd). The comparative characteristics of the compounds obtained are given by table 1. Reactivity with the reagent decreases from platinum -Pd - Rh to iridium. Further, investigations were carried out of the dependence of the compounds of the four metals with 2-mercaptobenzimidazol upon the hydrogen concentration of the precipitation solution. The data of the analysis are given by table 2. It was shown by the investigations carried out that the four metals form two different compounds with the reagent (within the range of pH-values of 4-7); in this case hydrogen of the sulphhydril group is probably replaced by the metal, and on the other hand, the said metals react with the reagent in a similar manner as with the amines in which they form compounds of the type $m(amine) \cdot MeCl_n$ in a highly acid

Investigation of the Analytical Properties of 2-Mercaptobenzimidazol. The Microdetermination of Platinum, Palladium, Rhodium, and Iridium by 2-Mercaptobenzimidazol

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medium and in the presence of free mineral acids. According to the properties of the compounds obtained, the authors succeeded in working out 2 gravimetric methods of determination of elements of the platinum group: 1) From an acetate buffer mixture containing no other ions and the reagent and a 0.5% caustic soda solution, and heating up to 70-80° (Table 3), and 2) from a mineral acid (1-5% per unit of volume), the reagent, and a 0.5% caustic soda solution, and heating up to 60-70° (Table 4). The error committed in these methods did not exceed ±0.05 mg of 0.2-2 mg of the metal to be determined. There are 2 figures, 4 tables, and 5 references, 4 of which are Soviet.

ASSOCIATION: Kafedra analiticheskoy khimii (Chair for Analytical Chemistry)

SUBMITTED: January 2, 1958

Card 3/3

LOMAKINA, L. N.

32-2-36/60

AUTHORS: Lomakina, L. N. , Agasyan, P. K.

TITLE: A Combination Electrode for Potentiometrical Micro-Titration (Kombinirovannyy elektrod dlya potentsiometricheskogo mikro-titrovaniya)

PERIODICAL: Zavodskaya Laboratoriya, 1958, Vol. 24, Nr 2, pp. 219 - 220 (USSR)

ABSTRACT: The combination microelectrode according to B. I. Frid (reference 1) was improved by some modifications, e.g. an interposed layer of filter paper or a shift of the polished section is proposed for the purpose of preventing an etching of the polished section by crystal formation, (KCl or K_2SO_4). The interspace is in this case filled up by agar-agar and a solution of KCl. By immersing the lower part of the electrode into the electrolyte an extended storage is secured. These modifications proved to be necessary in the case of titrating small amounts according to different potentiometric methods. There are 1 figure, and 1 reference, which is Slavic.

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32-2-36/60

A Combination Electrode for Potentiometrical Micro-Titration

ASSOCIATION: Moscow State University imeni M. V. Lomonosov
(Moskovskiy gosudarstvennyy universitet im. M. V. Lomonosova)

AVAILABLE: Library of Congress

1. Electrodes-Design 2. Titration-Equipment

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AUTHORS: Lomakina, L.N., Tarasevich, N.I., Agasyan, P.K. 32-3-8/52

TITLE: The Micropotentiometric Determination of Silver by Means of Triazoles (Mikropotentsiometricheskoye opredeleniye serebra s pomoshch'yu triazolov)

PERIODICAL: Zavodskaya Laboratoriya, 1958, Vol. 24, Nr 3, pp. 270-273 (USSR)

ABSTRACT: The present paper describes a method applying benzotriazole and bromobenzotriazole for the determination of microquantities of silver; the second-named reagent was found to be the better. For potentiometric titration a microelectrode recommended by Frid (Reference 3) in a slightly modified form was used. It was found that the potential jumps in the neutral medium are greater than in the acid medium, and that better titration results are obtained with nitric acid than with sulphuric- or acetic acid. By means of bromobenzotriazole it is possible to determine quantities of 0,01 mg/ml silver. The presence of copper, lead, nickel, cobalt, thallium and zinc does not disturb the determination in the medium of nitric acid, or

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in the presence of trilon B, whereas iodide-, cyanide-, and thiosulfate ions exercise a disturbing effect. In weakly ammoniacal solutions silver can be determined also in the presence of chlorine ions. There are several tables showing results obtained by investigation and some titration curves. There are 2 figures, 4 tables, and 5 references, 4 of which are Slavic.

ASSOCIATION: Moscow State University imeni M.V.Lomonosov (Moskovskiy gosudarstvennyy universitet im. M.V.Lomonosova)

AVAILABLE: Library of Congress

1. Silver-Micropotentiometric determination 2. Benzotriazole-Applications 3. Bromobenzotriazole-Applications

Card 2/2

LOMAKINA, L.N., TARASEVICH, N.I.

Spectrophotometric investigation of the conditions for preparing a rhodium complexonate. Vest. Mosk. un. Ser. 2: khim. 15 no.2: 58-63 Mr-Ap '60. (MIRA 13:6)

1. Kafedra analiticheskoy khimii Moskovskogo universiteta.
(Rhodium compounds)

LOMAKINA, L.N.; ALIMARIN, I.P.

Constants of the acid dissociation of 1,2,3-benzotriazole, Br-benzotriazole, and mercaptobenzimidazole. Vest. Mosk. un. Ser. 2:Khim. 20 no.5:58-63 S-O '65. (MIRA 18:12)

1. Kafedra analiticheskoy khimii Moskovskogo gosudarstvennogo universiteta. Submitted Nov. 10, 1964.

LOMAKINA, L.Ya.; RAZVYAZKINA, G.M.; SHUBNIKOVA, Ye.A.

Cytological and histological changes in the fat body of the cicada Psammotettix Striatus Fall, infected with the winter wheat mosaic virus. Vop. virus 8 no.2:168-172 Mr-Ap'63 (MIRA 16:12)

1. Moskovskiy gosudarstvennyy universitet i Vsesoyuznyy nauchno-issledovatel'skiy institut fitopatologii.

YEPIFANOVA, O.I.; ZOSIMOVSKAYA, A.I.; LOMAKINA, L. Ya; GRUSHINA, N.V.; SMOLENSKAYA, I.N.

Comparative study of the duration of mitosis and interkinesis in tissues of mice with the aid of colchicine and irradiation. Biul.eksp.biol. i med. 55 no.1:96-100 Ja'63. (MIRA 16:7)

1. Iz laboratorii eksperimental'noy tsitologii i tsitokhimii Instituta radiatsionnoy i fiziko-khimicheskoy biologii (dir. akademik V.A.Engel'gardt) AN SSSR Moskva. Predstavlena deystvitel'nym chlenom AMN SSSR V.A.Engel'gartom.
(KARYOKINESIS) (COLCHICINE—PHYSIOLOGICAL EFFECT)
(RADIATION—PHYSIOLOGICAL EFFECT)

1. LOMAKINA, M. I., MEDVEDEVA, V. I.

2. USSR (600)

4. Moths

7. Fall webworm (Hyphantia cunea).
Sad i og. No.10, 1952

9. Monthly List of Russian Accessions, Library of Congress, January 1953. Unclassified.

LOMAKINA, N. B.

Mbr., Zool. Inst., Acad. Sci., -c1949-.

"Forms of Ancient Amphipoda of the Pontoporsia Family Which are New for the USSR," Dok. AN, 68, No. 6, 1949.

LOMAKINA, N.B.

New species of Cumacea from the Far Eastern seas. Trudy zool.inst. 12: 155-170 '52. (MLRA 6:6)

(Pacific Ocean--Cumacea)

AKUMUSHKIN, I.I.; BARANOVA, Z.I.; BRODSKIY, K.A.; VIRKETIS, M.A.; VOLODCHENKO, N.I.; GALKIN, Yu.I.,; GUR'YANOVA, Ye.F.; DOGEL' V.A.; D'YAKONOV, A.M.; ZEVINA, G.B.; IVANOV, A.V.; KIR'YANOVA, Ye S.; KOBYAKOVA, Z I.; KOLTUN, V.M.; KONZHUKOVA, Ye.D.; KOROTKEVICH, V.S.; KLYUGE, G.A.; LOZINA-LOZINSKIY, L.K.; LOMAKINA, N.B.; NAUMOV, D.V.; PERGAMENT, T.S.; RESHETNYAK, V.V.; SAVEL'YEVA, T.S.; SKARLATO, O.A.; SOKOLOV, I.I.; STRELKOV, A.A.; TARASOV, N.I.; USHAKOV, P.V.; SHCHEDRINA, Z.G. YAKOVLEVA, A.M.; USHAKOV, P.V., obshchiy rukovoditel'; PAVLOVSKIY, Ye.N., akademik, redaktor; STRELKOV, A.A. redaktor; BRODSKIY, K.A., redaktor; ARONS, R.A., tekhnicheskiy redaktor.

[Atlas of invertebrates of the Far East seas of the U.S.S.R.] Atlas bespozvonochnykh dal'nevostochnykh morei SSSR. Moskva, Izd-vo Akad.nauk SSSR, 1955. 240 p., 66 plates. (MLRA 8:10)

1. Akademiya nauk SSSR. Zoologicheskiy institut.
(Soviet Far East--Invertebrates)

LOMAKINA, N.B.

Cumacea of the Far Eastern seas. Trudy Zool.inst. 18:112-165 '55. (Cumacea) (MLRA 9:2)

LOMAKINA, N.B.

Pavlovskeola campylaspoides, representative of a new genus of Cumacea, Nannastacidae. Trudy Zool.inst. 21:190-192 '55.
(MLRA 9:5)

(Cumacea)

LOMAKINA, N.B.

Cumaceans of Far Eastern seas. Trudy probl.i tem.sov. no.6:81-82 '56.
(MLRA 9:11)

1. Zoologicheskiy institut AN SSSR.
(Soviet Far East--Cumacea)

LOMAKINA, N.B., kand.biolnauk

Euphausiid crustaceans (Euphausiacea) collected by the Soviet Antarctic Expedition. Inform.biul.Sov.antark.eksp. no.3:37-38 '58. (MIRA 12:4)

1. Zoologicheskiy institut AN SSSR.
(Euphausiidae)

LOMAKINA, N.B.

Cumacea of the region covered by explorations of the Kurile-Sakhalin Expedition. Issl. dal'nevost. mor. SSSR no.5:205-216 '58. (MIRA 12:3)
(Sakhalin--Cumacea) (Kurile Islands--Cumacea)

LINDBERG, G.U.; SHCHEDRINA, Z.G.; DOGEL', V.A.; RESHETNYAK, V.V.; STRELKOV, A.A.; KOLTUN, V.M.; MAUMOV, D.V.; IVANOV, A.V.; BYKHOVSKIY, B.Ye. ZHUKOV, Ye.V.; PERGAMENT, T.S.; KOROTKEVICH, V.S.; USHAKOV, P.V.; KLYUGE, G.A.; ANDROSOVA, Ye.I.; GOSTILOVSKAYA, M.G.; BRODSKIY, K.A.; GUSEV, A.V.; TARASOV, N.I.; GUR'YANOVA, Ye.F.; VAGIN, V.L.; LOMAKINA, N.B.; BULYCHEVA, A.I.; KOBYAKOVA, Z.I.; LOZINO-LOZINSKIY, L.K.; YAKOVLEVA, A.M.; GALKIN, Yu.I.; SKARLATO, O.A.; AKIMUSHKIN, I.I.; D'YAKONOV, A.M.; BARANOVA, Z.I.; SAVEL'YEVA, T.S.; SKALKIN, V.A.

List of the fauna of marine waters of southern Sakhalin and southern Kuriles. Issl.dal'nevost.mor.SSSR no.6:173-256 '59.
(MIRA 13:3)

1. Zoologicheskiy institut AN SSSR.
(Sakhalin--Marine fauna)
(Kurile Islands--Marine fauna)

I.MAKINA, N.B.

Euphausid fauna (Euphausiacea) in Antarctic and Notalian regions.
Issl. fauny morei 2:254-334 '64. (MIRA 17:10)

1. Zoologicheskiy institut AN SSSR.

KOMAKINA, N.N.

Myelidacea, Cumacea and Euphausiacea according to materials of Arctic expeditions on the ice-breaker "F. Litke" in 1935, the diesel-electric "Ob" in 1936 and the diesel-electric "Lena" in 1937 and 1938. Trudy AANII 259:241-254 '64.
(MIRA 17:12)

LOMAKINA, N.N., inzh.

Determining the number and length of station classification tracks. Vest.TSNII MPS 21 no.2:49-52 '62. (MIRA 15:4)
(Railroads—Hump yards)

LEBEDEVA, T.P.; STRAKOVSKIY, I.I., TISHKOV, L.B.; LOMAKINA, N.N.; ZABELLO, M.L.; SADIKOV, P.P.; PETRUNENKOV, A.Ye.; BELENOV, V.K.; ARUTYUNOV, V.A., inzh., retsenzent; PETROVA, V.L., inzh., red.; BOBROVA, Ye.N., tekhn.red.

[Basic requirements related to the technical equipment of classification yards] Osnovnye trebovaniia k tekhnicheskomu osnashcheniiu sortirovochnykh stantsii. Moskva, Transzheldorizdat, 1963. 218 p. (Its TRUDY, no.270). (MIRA 17:3)

LOMAKINA, N.N.; TRENINA, G.A.

Antibiotics of bacterial origin; from data in foreign periodical literature. Antibiotiki 7 no.4:3-18 '54. (MLRA 7:9)
(Antibiotics)

LOMAKINA, N.N.

USSR/ Medicine - Antibiotics

Card 1/1 Pub. 22 - 42/56

Authors : Brazhnikova, M. G.; Lomakina, N. N.; and Muravyeva, L. I.

Title : Albomycin, its properties and chemical nature

Periodical : Dok. AN SSSR 99/5, 827-830, Dec 11, 1954

Abstract : Albomycin was derived from cultured liquid of ray fungus (Actinomyces subtropicus and isolated in 1949 by G. F. Gauze. It represents an iron containing cyclic polypeptide, it possesses certain basic characteristics and forms salts when in contact with various acids. Chemically pure albomycin sulfate appears in the form of an amorphous powder of brick-red color, is easily soluble in water, less soluble in methanol and insoluble in other organic solvents. The antibacterial activity of that salt, is described. Tables; graph.

Institution: Academy of Medical Sciences USSR, Institute for the Search of New Antibiotics

Presented by: Academician V. N. Shaposhnikov, October 8, 1954

BRAZHNIKOV, M.G.; LOMAKINA, N.N.; GUSEVA, V.G.; KUDRINA, Ye. S.

Recovery, purification, and characteristics of actinomycins formed by various cultures of Actinomyces antagonists [with cummary in French, p.62]Antibiotiki 1 no.4:3-5 Jl-Ag '56. (MLRA 9:11)

1. Institut po izyskaniyu novykh antibiotikov AMN SSSR.
(ACTINOMYCES, cult.
prod. of new actinomycines, secretion, purification & characteristics)
(ANTIBIOTICS
actinomycines, first prod. from four strains of actinomyces, secretion, purification & characteristics)

BRAZHNIKOVA, M.G.; LOMAKINA, N.N.; KUDINOVA, M.K.

Reaction of albomycin with iron. Dokl.AN SSSR 108 no.4:677-679 Je '56. (MIRA 9:9)

1.Institut po izyskaniyu novykh antibiotikov Akademii meditsinskikh nauk SSSR. Predstavlena akademikom V.A. Engel'gardtom.
(ALBOMYCIN) (IRON)

SHORIN, V.A.; YUDINTSEV, S.D.; KUNRAT, I.A.; GOL'DBERG, L.Ye.; PEVZNER, N.S.; BRAZHNIKOVA, M.G.; LOMAKINA, N.N.; OPARYSHEVA, Ye.T.

The new antibiotic actinoidin. Antibiotiki 2 no.5:44-49 S-O '57. (MIRA 10:12)

1. Institut po izuskaniyu novykh antibiotikov AMN SSSR.
(ANTIBIOTICS,
actinoidin, pharmacol. (Rus))

GAUZE, G.F.; PREOBRAZHENSKAYA, T.P.; KOVALENKOVA, V.K.; IL'ICHEVA, N.P.; BRAZHNIKOVA, M.G.; LOMAKINA, N.N.; KOVSHAROVA, I.N.; SHORIN, V.A.; KUNRAT, I.A.; SHAPOVALOVA, S.P.

Crystallomycin, a new antibacterial antibiotic [with summary in English]. Antibiotiki 2 no.6:9-14 N-D '57. (MIRA 11:2)

1. Institut po izyskaniyu novykh antibiotikov AMN SSSR.
(ANTIBIOTICS, preparation of,
crystallomycin, prod. from Actinomyces violaceoniger (Rus))
(ACTINOMYCES
violaceoniger, prod. of antibiotic crystallomycin (Rus))

LOMAKINA, N.N.

BRAZHNIKOVA, M.G.; MIKEŠH, O. [Mikeš, O.]; LOMAKINA, N.N.

Studying the homogeneity of albomycin [with summary in English]. Biokhimiia 22 no.1/2:111-117 Ja-F '57. (MLRA 10:7)

1. Institut khimii Chekhoslovatskoy akademii nauk (Praga) i Institut po izyskaniyu novykh antibiotikov Akademii meditsinskikh nauk SSSR (Moskva)
(ANTIBIOTICS,
albomycin, components (Rus))

BRAZHNIKOVA, M.G.; KOVSHAROVA, I.N.; LOMAKINA, N.N.; MURAV'YEVA, L.I.

Some characteristics of the adsorption and desorption of albomycin on permutit and SDV-3 cation-exchange resin [with summary in English]. Antibiotiki 3 no.6:29-32 N-D '58. (MIRA 12:2)

1. Institut po iskaniyu novykh antibiotikov AMN SSSR.
(ANTIBIOTICS,
albomycin, adsorption & desorption on permutit & cation-exchange resin (Rus))

BRAZHNIKOVA, M.G.; LOMAKINA, N.N.; MURAV'YEVA, L.I.

Production of a highly-active preparation of albomycin. Antibiotiki, 4 no.2:24-29 Mr-Ap '59. (MIRA 12:7)

1. Institut po izyskaniyu novykh antibiotikov AMN SSSR.
(ANTIBIOTICS--
albamycin, prod. of highly active prep. (Rus))

LOMAKINA, N.N.; BRAZHNIKOVA, M.G.

Chemical composition of crystallomycin. Biokhimiia 24 no.3:425-431 My-Je '59. (MIRA 12:9)

1. Institute of New Antibiotics, Academy of Medical Sciences of the U.S.S.R., Moscow.
(ANTIBIOTICS,
crystallomycin, chem. (Rus))

LOMAKINA, N. N., YURINA, M. S., and LAVROVA, M. F.
(USSR)

"A New Antibiotic -- Actinoidin."

Report presented at the 5th International Biochemistry Congress, Moscow, 10-16 Aug 1961

LOMAKINA, N.N.; YURINA, M.S.; LAVROVA, M.F.; BRAZHNIKOVA, M.G.

Actinoidin and its separation into biological[illegible] variants.
Antibiotiki 6 no.7:609-618 Jl '61. (MIRA 15:6)

1. Institut po izyskaniyu novykh antibiotikov AMN SSSR.
(ACTINOIDIN)

BRAZHNIKOVA, M.G.; LOMAKINA, N.N.; LAVROVA, M.F.; TOLSTYKH, I.V.; YURINA, M.S.; KLYUYEVA, L.M.

Isolation and properties of ristomycin. Antibiotiki 8 no.5:392-396 My'63 (MIRA 17:3)

1. Institut po izyskaniyu novykh antibiotikov AMN SSSR.

BRAZHNIKOVA, M. G.; LOMAKINA, N. N.; LAVROVA, M. F.

"The antibiotic ristomycin and its properties."

report submitted for Antibiotics Cong, Prague, 15-19 Jun 64.

Inst for Search for New Antibiotics, AMS USSR, Moscow.

ACC NR: AT6035976 (A, N) SOURCE CODE: UR/0413/66/000/015/0033/0033

INVENTOR: Voronin, G. I.; Arkharov, A. M.; Lomakina, O. A.; Syrovets, M. N. 27

ORG: none

TITLE: A low-pressure apparatus for obtaining liquid oxygen from the air. Class 17, No. 184274

SOURCE: Izobret prom obraz tov zn, no. 15, 1966, 33

TOPIC TAGS: oxygen, liquid oxygen, gas liquefier, liquefaction technique

ABSTRACT: This Author Certificate presents a low-pressure apparatus for obtaining liquid oxygen from the air by low temperature rectification (see Fig. 1). The apparatus consists of an air compressor and of heat exchangers placed consecutively behind the compressor and serving for cleaning and cooling the compressed air, a rectifier with an evaporator for dividing the air into its components, and an external cooler. To increase the efficiency and to lower the cost of the apparatus, the external cooler is placed in front of the rectifier in the stream of the air being

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