"APPROVED FOR RELEASE: 06/06/2000 CIA-RDP86-00513R000102830004-3

AUTHORS: Babikova, Yu. F., and Gruzin, P. L. 126-2-10/35

TITLE: Study of the electrolytic transfer of carbon in steel by means of radioactive tracers. (Izucheniye elektroliticheskogo perenosa ugleroda v stali metodom radioaktivnykh indikatorov).

PERIODICAL: Fizika Metallov i Metallovedeniye, 1957, Vol.5, No.2, pp. 255-260 (USSR)

ABSTRACT: Literary data are available on investigations of electro-diffusion of carbon into austenite. Attempts by Guterman, V. M. (Ref.5) to establish electrolytic transfer of carbon into ferrite were unsuccessful. Diffusion data published by Gruzin, P. L. (Ref.6) indicate that the mobility of carbon atoms in ferrite is greater than in austenite. Therefore, it could be expected that electro-diffusion of carbon should take place in ferrite and that it could be detected if a proper technique is used. In this work the main object of investigation was α-iron. The specimens consisted of iron foils whereby the iron contained the following: 0.03% C; 0.04% Mn; 0.009% S; 0.13% Si; 0.005% P. The specimens consisted of 5 to 8 mm wide, 0.08 to 0.15 mm thick and 50 mm long strips which were copper-plated

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throughout their entire length, except for a central section 1 to 5 mm long intended for case hardening with radioactive carbon. The case hardening was effected in special copper containers placed into evacuated quartz tubes using charcoal and $BaCO_3$ with radioactive $C^{14}$ as the carburizing agent. Fig.2 shows a photo of the general view of the set-up for electro-diffusion annealing; Fig.3 shows a photo of the vacuum part of the apparatus for electro-diffusion annealing, which was carried out in molten salts at the temperatures 550 to 800°C. The graph, Fig.1, shows the distribution of the radio-active carbon along the length of the specimen after case hardening; the graph, Fig.4 shows the distribution of the radio-activity on the cathode and the anode sections of the specimen, before and after heating, at a temperature of 600°C for ten minutes. Fig.5 shows the distribution of radio-activity at the ends of the specimen before and after diffusion annealing at 700°C for fifty minutes. Table 1 gives the number of carbon transfers for the ferrite for the temperatures 800, 700, 600 and 550°C, whilst Table 2 gives the values of carbon cathion charge:



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170-2-10/39

Study of the electrolytic transfer of carbon in steel by means of radioactive tracers.

for the ferrite for the same temperatures. The here described method of determining the carbon transfer number in alloys, based on utilising $C^{14}$, permits detection of the transfer of carbon in steels under the effect of the electrical field and to determine the degree of ionisation of its atoms. It was established that the carbon atoms in the ferrite are in the form of cathions and the cathion charge of the carbon is approximately equal to four elementary units of the electric charge.
There are 5 figures, 2 tables and 10 references, 7 of which are Slavic.

SUBMITTED: March 7, 1957.

ASSOCIATION: Institute of Metal Technology and Metal Physics TsNIIChM. (Institut Metallovedeniya i Fiziki Metallov TsNIIChM)
Moscow Physico-Engineering Institute.
(Moskovskiy Inzhenerno-fizicheskiy Institut).

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"APPROVED FOR RELEASE: 06/06/2000 CIA-RDP86-00513R000102830004-3

BABIKOVA, Yu.F.; GRUZIN, P.L.

Diffusion in nickel-base solid solutions. Issl. po zharopr. splav. 3:109-112 '58. (MIRA 11:11)
(Diffusion) (Solutions, Solid) (Nickel alloys)

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"APPROVED FOR RELEASE: 06/06/2000 CIA-RDP86-00513R000102830004-3

SOV/137 [illegible] 4054

Translation from: Referativnyy zhurnal. Metallurgiya, 1959, Nr 2, p 248 (USSR)

AUTHORS: Gruzin, P. L., Babikova, Yu. F., Borisov, Ye. V., Zemsk[illegible], S. V., Peregudov, N. P., Polikarpov, Yu. A., T[illegible]rkina, A. N., Fed[illegible], G. B., Shumilov, M. A.

TITLE: Study of the Mobility of Carbon Atoms in Steel and Alloys Using $C^{14}$ Isotope (Izucheniye podvizhnosti atomov ugleroda v sta[illegible] [illegible] pri pomoshchi izotopa $C^{14}$)

PERIODICAL: Sb. tr. In-t metalloved. i fiz. metallov Tsentr. [illegible] chernoy metallurgii. 1958, Vol 5, pp 327-365

ABSTRACT: The authors examine methods for investigating the diffusion, electrolytic transfer, and distribution of C in Fe, Ni and some of their alloys. Data were obtained by the direct (autoradiographic) method on the effect of Cr, Ni, Mo, and Si on the diffusion of C in ferrite; Ni and Si have appreciably less effect on the diffusion of C than the carbide-forming Cr and Mo. It was established that the diffusion mobility level changes very little when the Fe and Ni are highly alloyed; it is displaced only when another base is used, as it happens in Fe-Cr and under these conditions the mobility level of C approaches that of the

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SOV/137-59-2-1054

Study of the Mobility of Carbon Atoms in Steel and Alloys Using $C^{14}$ Isotope

alloying elements. It was experimentally verified that the C in Fe and Ni is in the cation state. It was established that the cation charge can change depending upon the character of the alloying element. Bibliography: 27 references.

M. G.

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"APPROVED FOR RELEASE: 06/06/2000 CIA-RDP86-00513R000102830004-3

BABIKOVA, Yu.F.; GRUZIN, P.L.

Use of the radioactive isotope $C^{14}$ to study the electrolytic transfer of carbon in metals and alloys. Met.i metalloved.chist. met. no.1:200-212 '59. (MIRA 12:10)
(Electrolysis) (Carbon--Isotopes)

APPROVED FOR RELEASE: 06/06/2000 CIA-RDP86-00513R000102830004-3"

"APPROVED FOR RELEASE: 06/06/2000 CIA-RDP86-00513R000102830004-3

FEDOROV, G.B.; BABIKOVA, Yu.F.; GRUZIN, P.L.; ZHOMOV, F.I.; RYABOVA, G.G.

Radioactive-tracer techniques in the study of the mobility, interatomic interaction, and distribution of elements in zirconium and its alloys. Izv.vys.ucheb.zav.;khim. i khim.tekh. 3 no.3: 395-401 '60. (MIRA 14:9)

1. Moskovskiy inzhenerno-fizicheskiy institut, kafedra metallurgii i metallovedeniya.
(Zirconium alloys) (Radioactive tracers)

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"APPROVED FOR RELEASE: 06/06/2000 CIA-RDP86-00513R000102830004-3

S/089/60/009/003/011/014
B006/B063

AUTHORS: Gruzin, P. L., Babikova, Yu. F.

TITLE: Application of Radioactive Isotopes and Nuclear Radiations in Metallurgy

PERIODICAL: Atomnaya energiya, 1960, Vol. 9, No. 3, pp. 223 - 225

TEXT: The present article gives a survey of the Soviet plants at which radioisotopes and nuclear radiation sources are successfully used as well as of the various fields of application. Radioisotopes and nuclear radiation were first used in metallurgy in 1948-49. Among the various fields of application are to be mentioned the use of isotopes as indicators (tracer technique), nuclear radiation as a power source, and the use of isotopes for the control and automation of technological processes. The Novo-Tul'skiy metallurgicheskiy zavod (Novo-Tula Metallurgical Plant) and the Kuznetskiy metallurgicheskiy kombinat (Kuznetsk Metallurgical Plant) were the first to use radioisotopes. One of the principal problems in the production of pig-iron was to find new methods for an increase in the efficiency of blast furnaces and the automation of

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individual units. In this connection, radioisotopes were used for control purposes, especially for the determination of the most favorable conditions. The plant imeni Dzerzhinskiy achieved great success with the use of a radiometric instrument that checks the charge level in blast furnaces. This plant in conjunction with the Tsentral'nyy nauchno-issledovatel'skiy institut chernoy metallurgii (Central Scientific Research Institute of Ferrous Metallurgy) developed and tested a method of checking the charge material. Analogous work was carried out at the Kuznetsk Metallurgical Kombinat. Further work has been carried out for the control of the enrichment of iron ore and the sintering of agglomerates. The Kuznetsk Metallurgical Kombinat developed a radiometer that is suited for determining the density of agglomerates. The Kuznetsk Metallurgical Kombinat, the plants imeni Dzerzhinskiy, "Azovstal'", Makeyevskiy metallurgicheskiy zavod (Makeyevka Metallurgical Plant), and others employ radiometric methods to check the wear and tear of the fireclay lining of blast-furnaces. The annual amount saved by radiometric control at the Plant imeni Dzerzhinskiy and at the Institut ekonomiki AN SSSR (Institute of Economics of the AS USSR) was calculated to be some million rubles. The Magnitogorskiy metallurgicheskiy kombinat im. Il'icha (Magnitogorsk



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Application of Radioactive Isotopes and Nuclear Radiations in Metallurgy

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Metallurgical Kombinat imeni Il'ich) is also mentioned in this connection. Radioisotopes are also much used in steel production. Slag formation in open-hearth furnaces was investigated at the Magnitogorsk Metallurgical Kombinat by a radiometric method. Similar investigations were performed at the "Azovstal'" Plant and the Stalinskiy metallurgicheskiy zavod (Stalino Metallurgical Plant). The two last-mentioned plants and the "Zaporozhstal'" Plant use radioisotopes to determine the melting rate and to check the weight of liquid steel during the melting process in open-hearth furnaces. The nature of non-metallic inclusions in steel was examined with the help of radioisotopes at the plants of the Kuznetsk and and Magnitogorsk Metallurgical Kombinats as well as at the kombinat im. Serova (Kombinat imeni Serov), the Stalino and Chelyabinsk Plants, the plants "Serp i molot", "Dneprospetsstal'", "Elektrostal'", and at various institutes. The Kuznetsk and Makeyevka Metallurgical Kombinats and the "Azovstal'" Plant devised a method of checking the wear and tear of the fireclay lining of open-hearth furnaces. Radiometric examinations of the flow of metal during the rolling process were carried out at the Kuznetsk Metallurgical Kombinat and the Stalino Metallurgical Plant. Iron and tin radioisotopes were used to develop a new tinning technique which was

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"APPROVED FOR RELEASE: 06/06/2000 CIA-RDP86-00513R000102830004-3

Application of Radioactive Isotopes and Nuclear Radiations in Metallurgy

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tested by the Novo-Moskovskiy zavod (Novo-Moskovsk Plant) and the "Zaporozhstal'" Plant. The Central Scientific Research Institute of Ferrous Metallurgy designed a radiometric level-meter for liquid metal. Such level-meters and level-regulators are in use at the Khar'syzskiy trubnyy zavod (Khartsyzsk Tube Mill), the Kalinin Plant imeni May 1, the Sinarskiy trubnyy zavod (Sinara Tube Mill), and the Mogilevskiy metallurgicheskiy zavod (Mogilev Metallurgical Plant). The Leningradskiy staleprokatnyy zavod (Leningrad Steel Rolling Mill) and the Izhorskiy zavod (Izhora Plant), for example, made considerable savings by using radiometric thickness gauges and controllers for rolled stock. The non-ferrous metallurgical industry also makes use of radioisotopes for control purposes, such as, e.g., the Yuzhno-Ural'skiy nikelevyy kombinat (South Ural Nickel Kombinat). The Volkhovskiy alyuminiyevyy zavod (Volkhov Aluminum Plant) and the Dneprovskiy titano-magniyevyy zavod (Dnepr Titanium - Magnesium Plant) use radioactive densimeters for automation purposes. The use of radioisotopes for the production of high-purity metals was tested by the plants "Ukrtsink" and Novosibirskiy olovozavod (Novosibirsk Tin Plant).

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"APPROVED FOR RELEASE: 06/06/2000 CIA-RDP86-00513R000102830004-3

RYABOVA, G.G.; BABIKOVA, Yu.F.; GRUZIN, P.L.

Distribution and electrodiffusion of tin in zirconium alloys. Met. i metalloved. chist. met. no. 2:115-127 '60. (MIRA 13:12)
(Zirconium alloys--Metallography)
(Diffusion)

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28061 S/137/61/000/[illegible]
A[illegible]/A[illegible]

188100 1160 1418 1138

AUTHORS: Babikova, Yu. F., Gruzin, P. L.

TITLE: Electrodiffusion of carbon in zirconium

PERIODICAL: Referativnyy zhurnal, Metallurgiya, no. 4, 1961, [illegible] (V sb. "Metallurgiya i metallovedeniye [illegible] Atomizdat, 1960, 128-133)

TEXT: The author gives the data of the study of [illegible] zirconium under the action of an electric field. The samples were [illegible] of Zr-foils. In the central part of the samples was produced [illegible] mm length, containing a radioactive isotope of the element [illegible] was studied. This zone is, for high temperatures, a [illegible] transfer. For the study of the C-transfer, the zone was [illegible] pin point welding of a Zr-wire containing the radioactive [illegible] formation of the radioactive zone on the sample the [illegible] on both sides of the zone, constituting the origin of the [illegible] The electrodiffusive annealing of the samples was conducted [illegible] under a vacuum of $\sim 10^{-5}$ mm/Hg, at 900, 1,000, 1,100 and 1,200 [illegible]

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28061 [illegible]

Electrodiffusion of carbon in zirconium

and 4 hours respectively. The samples were heated by a [illegible] density. After annealing a redistribution of radioactivity was [illegible] the cathodic and anodic sections of the samples. [illegible] to the cathode was displayed. This points to the fact that [illegible] Zr-crystal lattice in ionized state in the form of [illegible] temperature-dependence obtained of the C-transfer number [illegible] unalloyed austenite shows that the electromobility of [illegible] Fe by more than an order of magnitude. One supposes that [illegible] great (possibly < 1). The transfer numbers for 900 and 1,[illegible] high value in comparison with that which could be expected [illegible] 1,100 and 1,200°C. Such anomaly of dependence of the temp[illegible] is explained by the influence of the structure factor [illegible] at high temperature. The results obtained prove that the [illegible] possibly its transfer are chiefly of a boundary nature. [illegible] confirmed by the data of autoradiography.

A. [illegible]

[Abstracter's note: Complete translation]

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"APPROVED FOR RELEASE: 06/06/2000 CIA-RDP86-00513R000102830004-3

S/755/61/000/003/003/027

AUTHORS: Babikova, Yu. F., Ryabova, G. G., Gruzin, P. L.

TITLE: Distribution of carbon additions in zirconium and titanium.

SOURCE: Moscow. Inzhenerno-fizicheskiy institut. Metallurgiya i metallovedeniye chistykh metallov. no.3. 1961, 28-33.

TEXT: The paper deals with the problem of the nonuniformities of the C distribution in microvolumes of alloys. The investigation of the local character of the distribution of additive elements in Zr, Ti, and their alloys is of especial interest because these metals exhibit inferior high-temperature properties despite their elevated m.p. C especially impairs the corrosion resistance of Zr at high temperatures. The present investigation utilized the method of contact radioautography with concurrent metallography. Radioactive $C^{14}$ was introduced into the metal by drilling a blind hole into an ingot, depositing a suitable amount of radioactive $BaCO_3$, plugging the hole with a stopper of the parent metal, and remelting the ingot in an arc furnace in an atmosphere of Ar. The resulting ingot was then subjected to various forms of high-temperature treatment. The amount of radioactive C thus introduced into iodide Zr did not exceed 0.005 wt.%. Similar tests were made on technical Ti with a C (including radioactive-C) content not exceeding 0.2%. It is apparent from the radioautographs and microstructural photos adduced that the C distribution in the two alloys is extremely nonuniform. Hot forging reduces the grain size, but does not change

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the C distribution. Quick cooling after anneal at T above the $\alpha \rightarrow \beta$ phase-transformation T leads to formation of a martensitic structure in both metals in which the C is distributed along the boundaries of the $\beta$-phase grains and along the internal interfaces formed as a result of the $\beta \rightarrow \alpha$ transformations. Slow cooling after anneal in the $\beta$-region of Zr preserves the nonuniformity of the C distribution in the solid solution, with C remaining along the boundaries and subboundaries of the Zr. Not so in Ti (with the greater C content): According to the phase diagram, a slow cooling from the $\beta$-phase region of Ti leads to the separation of a C-rich $\delta$-phase in which almost all of the C of the alloy is concentrated. Thus a two-phase structure (which can be frozen by quick anneal from the ($\beta + \delta$) region) comes into being in Ti. Heat treatment in the $\alpha$-region (e.g., 20 hrs at 800°C) renders the C distribution in both Zr and Ti uniform, since at that anneal T the C enters the solid solution in either metal. In the absence of an accurate Zr-C phase diagram somewhat hypothetical remarks are made on a peritectoid reaction, based on the greater solubility of C in the Zr $\alpha$-phase, which has a closely packed hexagonal lattice, than in the body-centered cubic $\beta$-phase. The more uniform distribution of C in Ti, after 20 hrs at 800°C, is attributed to the greater mobility of the C atoms. There are 4 figures and 3 references (all Russian-language: 1 Soviet, 1 translation from US-AEC data, and 1 translation from an English-language book by "Shvoppe," entitled "The Structure and Properties of Metals").

ASSOCIATION: MIFI (Moscow Engineering Physics Institute).

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"APPROVED FOR RELEASE: 06/06/2000 CIA-RDP86-00513R000102830004-3

S/137/62/000/001/006/237
A060/A101

AUTHORS: Gruzin, P.L., Babikova, Yu.F., Gerasimchuk, G.S., Lebedev, A.K., Rozhavskiy, G.S. Fedorov, G.B.

TITLE: The present state and future plans for the application of radioactive isotopes and nuclear radiations in metallurgy and mining industry

PERIODICAL: Referativnyy zhurnal. Metallurgiya, no. 1, 1962, 6, abstract 1V42 (V sb. "Radioakt. izotopy i yadern. izlucheniya v nar. kh-ve SSSR, v. 3", Moscow, Gostoptekhizdat, 1961, 117 - 125)

TEXT: Radioactive isotopes are used at the Kuznetsk, Magnitogorsk, Donetskiy, Makeyevka plants, and also at "Azovstal'", the plant imeni Dzerzhinskiy, and others. The most promising directions of research are as follows: 1) the determination of the technological characteristics of steel smelting furnaces; 2) the study and control of the process of metal deformation; 3) the elaboration of special radiometric and activation methods for determining the degree of im-

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purity contamination of metals and semiconductors; 4) the study of the distribution of elements in diffusion microvolumes, of destruction processes, of loss of strength in metals, etc.

N. Yudina

[Abstracter's note: Complete translation]



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"APPROVED FOR RELEASE: 06/06/2000 CIA-RDP86-00513R000102830004-3

BABIKOVA, Yu. F.; GRUZIN, P. L.; MINAYEV, V. M.; SAMOSADNYY, V. T.

"Special Uses of the Gamma Spectrometer in Activation Analysis."

report submitted for All-Union Conf on Nuclear Spectroscopy, Tbilisi, 14-22 Feb 64.

MIFI (Moscow Engineering Physics Inst)

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"APPROVED FOR RELEASE: 06/06/2000 CIA-RDP86-00513R000102830004-3

WIERSZYŁŁOWSKI, Jerzy; REBANDEL, Zofia; BABILAS, Walenty

Experiments in applying chemical substances as a control of dropping plum sets. Prace nauk roln i lesn 12 no.1:41-46 '62.

1. Chair of Pomology, Higher School of Agriculture, Poznan.

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"APPROVED FOR RELEASE: 06/06/2000 CIA-RDP86-00513R000102830004-3

POLAND

WIERSZYLLOWSKI J., REBANDEL Z., BABILAS W.
Department of Pomology at the College of Agriculture (Zaklad Sadownictwa Wyzszej Szkoly Rolniczej), Poznan.

"Influence of 2,4,5-T and Gibrescol on the Shedding of Fruit and yield of the Black Spaniard Sour Cherry".

Warsaw, Bulletin de l'Academie Polonaise des Sciences, Serie des Sciences Biologiques Vol XI, No 4, 1963; pp 191-197.

Abstract [English article, Russian summary]: The authors report on the results of experiments conducted over one year in applying 2,4,5-T and gibrescol preparates to sour cherries. Various concentrations were tested over varying periods of time. It was found, that both preparates retarded the shedding of fruits and increased the fertility of the Black Spaniard cherry. The effectiveness of the preparates depends chiefly on their concentration, period and frequency of application. While 2,4,5-T speeded up the ripening by 19 days, gibrescol delayed it by 7 - 25 days; the fruits obtained were parthenocarpic, their size was equal or smaller than that of the controlled crops and they showed a favorable pip to fruit weight ratio. Seventeen bibliographical references are listed: 4 Polish and 13 English (USA, England).

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"APPROVED FOR RELEASE: 06/06/2000 CIA-RDP86-00513R000102830004-3

WIERSZYLLOWSKI, Jerzy [illegible] Anna

Certain changes occurring in seeds of Prunus [illegible] var. divaricata Bailey during the stratification process under 6°C steady temperature. Prace nauk roln i lesn 14 no.[illegible] [illegible]

1. Department of Pomology, College of Agriculture, Poznan. Head Doc. Dr J. Wierszyllowski.

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BABILIUS, Vincas, dots., kand. tekhn. nauk; BIELIUNAS, Ksaveras, dots., kand. tekhn. nauk; NOVODVORSKIS, Andrius, dots., kand. tekhn. nauk; MELNIENE, D., red.; SARKA, S., tekhn. red.

[Study of metals] Metalotyra. Vilnius, Valstybine politines ir mokslines literaturos leidykla, 1961. 217 p. (MIRA 15:3)
(Metals)

APPROVED FOR RELEASE: 06/06/2000 CIA-RDP86-00513R000102830004-3"

"APPROVED FOR RELEASE: 06/06/2000 CIA-RDP86-00513R000102830004-3

GRIN', Igor' Mikhaylovich[Hrin', I.M.], dots.; ALEKSANDROVSKIY, O.Ya. [Aleksandrovs'kyi, O.IA.], red.; VISHNEVYY, V.V.[Vyshnevyi, V.V.], red.; BABIL'CHANOVA, G.O.[Babil'chanova, H.O.], tekhn. red.

[Wooden elements]Derev'iani konstruktsii. Kyiv, Derzhbudvydav URSR, 1962. 237 p. (MIRA 16:3)

(Building, Wooden)

APPROVED FOR RELEASE: 06/06/2000 CIA-RDP86-00513R000102830004-3"

"APPROVED FOR RELEASE: 06/06/2000 CIA-RDP86-00513R000102830004-3

BABILEV, F.V.; NIKONOV, G.K.

Coumarins of the roots of Phloiodicarpus villosus Turcz.
Khim. prirod. soed. no.5:353-356 '65. (MIRA 18:12)

1. I Moskovskiy ordena Lenina meditainskiy institut imeni I.M. Sechenova i Vsesoyuznyy nauchno-issledovatel'skiy institut lekarstvennykh i aromaticheskikh rasteniy. Submitted March 29, 1965.

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"APPROVED FOR RELEASE: 06/06/2000 CIA-RDP86-00513R000102830004-3

BABILODZE, Kasiane Matveyevich

[Potentials for increasing labor productivity in tea leaf production] [Rezervy povysheniia proizvoditel'nosti truda v proizvodstve chainogo lista. Tbilisi] 1963. 250 p. [In Georgian] (MIRA 17:5)

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"APPROVED FOR RELEASE: 06/06/2000 CIA-RDP86-00513R000102830004-3

GVANTSELADZE, V.S.; CHOCHUA, N.Sh.; BABILODZE, L.I.; DARIALASHVILI, A.A.

Determination of the activity of the rheumatic process. Trudy Inst. klin. i eksper. kard. AN Gruz. SSR 8:467-473 '63. (MIRA 17:7)

1. Institut kardiologii AN GruzSSR, Tbilisi.

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"APPROVED FOR RELEASE: 06/06/2000 CIA-RDP86-00513R000102830004-3

BABIN, A., polkovnik, kand. istoricheskikh nauk

More creative work in conducting seminars. Komm. Vooruzh. Sil 4 no.17: 38-42 S '64. (MIRA 17:12)

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BELOUS, L.Kh., st. nauchn. sotr.; KAZANSKIY, Yu.P.; VDOVIN, V.V.; KLYAROVSKIY, V.M.; KUZNETSOV, V.P.; NIKOLAYEVA, I.V.; NOVOZHILOV, V.I.; SENDERZON, E.M.; AKAYEV, M.S.; BABIN, A.A.; BERDNIKOV, A.I.; GORYUKHIN, Ye.Ya.; NAGORSKIY, M.P.; PIVEN', N.M.; BAKAROV, G.Ye.; GEBLER, I.V.; SMOLYANINOV, N.M.; SMOLYANINOVA, S.I.; YUSHIN, V.I.; D'YAKONOVA, N.D.; REZAPOV, N.M.; KASHTANOV, V.A.; GOL'BERT, A.V.; SIDOROV, A.P.; GARBASH, A.A.; BYKOV, N.S.; BORODIN, L.V.; AYCHKOV, L.F.; KUCHIN, M.I.; SHAKHOV, F.N., glav. red.; SHIAKOVSKAYA, L.I., red.

[West Siberian iron ore basin] Zapadno-Sibirskii zhelezorudnyi bassein. Novosibirsk, Red.-izd. otdel Sibirskogo otdeniia AN SSSR, 1964. 447 p. (MIRA 17:12)

1. Akademiya nauk SSSR. Sibirskoye otdeleniye. Institut geologii i geofiziki. 2. Institut geologii i geofiziki Sibirskogo otdeleniya AN SSSR (for Belous, Kazanskiy, Vdovin, Klyarovskiy, Kuznetsov, Nikolayeva, Novozhilov, Senderzon). 3. Institut gornogo dela (for Akayev). 4. Novosibirskoye geologicheskoye upravleniye Ministerstva geologii i okhrany nedr SSSR (for Babin, Berdnikov, Goryukhin, Nagorskiy, Piven').

(Continued on next card)

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BELOUS, N.Kh.----(continued). Card 2.

Tomskiy politekhnicheskiy institut (for [illegible] Smolyaninov, Smolyaninova). 5. Sibirskiy [illegible] issledovatel'skiy institut geologii, geofiziki i mineral'nogo syr'ya (for Yushin, D'yakonova, Rozanov, Kashtanov, Gol'bert). 6. Institut ekonomiki sel'skogo khozyaystva (for Garnash). 7. Sibirskiy metallurgicheskiy institut (for Bykov, Borodin, Kychkov). 8. Tomskiy inzhenerno-stroitel'nyy institut (for Kuchin). 9. Chlen-korrespondent AN SSSR (for Shakhov).

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"APPROVED FOR RELEASE: 06/06/2000 CIA-RDP86-00513R000102830004-3

BABIN, A.S.; SVERDLOV, V.Ya.

Regenerative braking system of the N80 electric locomotive. Sbor. nauch. trud. EINII 2:13-23 '62. (MIRA 16:8)

(Electric locomotives--Brakes)

APPROVED FOR RELEASE: 06/06/2000 CIA-RDP86-00513R000102830004-3"

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"APPROVED FOR RELEASE: 06/06/2000 CIA-RDP86-00513R000102830004-3

BABINSKI, S.

A conference on drainage problems in forestry. p. 22

SYLWAN. (Wydzial Nauk Rolniczych i Lesnych Polskiej Akademii Nauk i Polskie Towarzystwo Lesne) Warszawa, Poland (Journal on forestry issued by the Section of Agricultural and Forestry Sciences, Polish Academy of Sciences; and the Polish Society of Forestry; with English and Russian summaries. Includes supplements; Biuletyn Instytutu Badawczego Lesnictwa, bulletin of the Forest Research Institute; Biuletyn Instytutu Technologii Drewna, bulletin of the Institue of Wood Technology; Przeglad Dokumentacyjny Drzewnictwa, documentation of the Institue of Wood Technology; and Prezeglad Dokumentacyjny Lesnictwa, documentatoin of the Forest Research Institue. Monthly)
Vol. 101, no. 7, July 1957

Monthly List of East European Accessions (EEAI), LC, Vol. 8, no. 6, June 1959
Uncl.

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"APPROVED FOR RELEASE: 06/06/2000 CIA-RDP86-00513R000102830004-3

HENCNER, Zygmunt; JABLONSKI, Leon; BABILONSKI, Stanislaw

Sensitivity of Klebsiella strains to certain antibiotics and sulfonamides. Polski tygod.lek. 15 no.50:1913-1915 12 D '60.

1. Z Zakladu Mikrobiologii Lekarskiej A.M. w Lublinie; kierownik: prof.dr J.Parnas.
(KLEBSIELLA pharmacol)
(ANTIBIOTICS pharmacol)
(SULFONAMIDES pharmacol)

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"APPROVED FOR RELEASE: 06/06/2000 CIA-RDP86-00513R000102830004-3

BABILYUS, V.

22476 Babilyus, V. Opyt Polucheniya V Mestnykh Usloviyakh Lit'ya S Vysokimi Mekhanicheskimi Pokazatelyami. Trudy Tekhn. Fak. Kaunassk. Gos. Un-Ta 1, 1949, S 199-210 - Na Litov. Yaz Rezyume Na Rus. Yaz — Bibliogr: 7 Nazv

So: Letopis' 30, 1949

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"APPROVED FOR RELEASE: 06/06/2000 CIA-RDP86-00513R000102830004-3

BABILYUS V.

22475 Babilyus V. -- Davleniye Gazov V Forme V Raznykh Usloviyakh Lit'ya Trudy Tekhn Fak. Kaunassk Gos Un-Ta i, 1949 S 211-26 -- Na Litov Yaz - rezyume Na Rus. Yaz Bibliogr: 6 Nazv

So: Letopis' No 30, 1949

APPROVED FOR RELEASE: 06/06/2000 CIA-RDP86-00513R000102830004-3"

"APPROVED FOR RELEASE: 06/06/2000 CIA-RDP86-00513R000102830004-3

BABILYUS, V. V.

"The Effect of the Physicochemical Properties of the Molding Mixture, the Cast Iron, and the Casting Conditions of Gas Shock." Cand Tech Sci, Inst of Chemistry and Chemical Technology, Adad Sci Lithuanian SSR, Vil'nyus, 1954. (RzhKhim, No 7, Apr 55)

SO: Sum. No. 704, 2 Nov 55 - Survey of Scientific and Technical Dissertations Defended at USSR Higher Educational Institutions (16).

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"APPROVED FOR RELEASE: 06/06/2000 CIA-RDP86-00513R000102830004-3

BABIN, A.A.; BABINA, Ye.A.

Kolpashevo-Bakchar region of the West Siberian iron-ore basin.
Mat.po geol. Zap.-Sib.niz. no.3:131-151 '62. (MIRA 16:12)

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"APPROVED FOR RELEASE: 06/06/2000 CIA-RDP86-00513R000102830004-3

45123

S/712/62/027/000/003/015
A001/A101

24.6710

AUTHORS: Babin, A. I., Luk'yanov, S. Yu., Severnyy, A. B., Sidorov, G. G., Sinitsyn, V. I., Steshenko, N. V.

TITLE: An investigation of hydrogen lines broadening in a powerful pulse discharge

SOURCE: Akademiya nauk SSSR. Krymskaya astrofizicheskaya observatoriya. Izvestiya, v. 27, 1962, 52 - 70

TEXT: Emission hydrogen spectrum of solar flares shows a great similarity with the spectrum of high-temperature hydrogen plasma glowing in a pulse discharge of high intensity. Therefore, the latter spectrum was investigated in the present study by methods used in studying physical processes on the Sun. At first the problem of broadening of hydrogen emission is considered. The equipment used and the methods of carrying out measurements are described in detail. Discharge was studied with the aid of a spectrograph with a diffraction echelle-grating (dispersion ~1.5 Å/mm). The main results of the spectrophotometric study of broadening of hydrogen emission ($H_\alpha$ - $H_\varepsilon$) wings are as follows: 1) The

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emission of hydrogen line wings (extending to 30 - 40 Å), when observed in the spectra of a self-constricted pinch perpendicular in direction, turns out to be broadened due mainly to the linear Stark-effect (at the initial pressure $p_0$ = = 0.1 mm Hg); 2) at $p_0$ = 0.5 mm Hg the emission extends to 50 - 80 Å and is broadened in the wing, probably due mainly to the quadratic Stark-effect; 3) when the spectra are observed along the plasma pinch, the broadening of hydrogen emission in the wings of the lines is due to macroscopic motions of the plasma with velocities of the order of $10^8$ cm/sec. The intensity variations in the wings are well explained by the hypothesis on the jet-type plasma motion directed along the discharge axis with velocity gradients; 4) when the spectra are observed outside the axis of discharge, the broadening of hydrogen emission (at $p_0$ = 0.1 mm Hg) is entirely due to the linear Stark-effect in both transversal and longitudinal direction (next to the pinch). The mechanism of hydrogen emission broadening in a powerful discharge is similar to broadening of emission lines of solar flares. The variation of intensity in the line wings depends essentially on the direction along which the spectrum of plasma emission is observed. It is concluded that the analogy between the powerful pulse discharges in laboratory conditions and the phenomenon of chromospheric flares on



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An investigation of hydrogen lines... S/712/62/027/000/003/015
A001/A101

the Sun, is based on the close physical essence of both phenomena. There are 12 figures and 2 tables.

SUBMITTED: May 1961

Card 3/3

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"APPROVED FOR RELEASE: 06/06/2000 CIA-RDP86-00513R000102830004-3

41282

S/035/62/000/010/031/128
A001/A101

AUTHORS: Babin, A. N., Luk'yanov, S. Yu., Severnyy, A. B., Sidorov, G. G., Sinitsyn, V. I., Steshenko, N. V.

TITLE: Investigation of hydrogen line broadening in a powerful pulse discharge

PERIODICAL: Referativnyy zhurnal, Astronomiya i Geodeziya, no. 10, 1962, 50, abstract 10A356 ("Izv. Krymsk. astrofiz. observ.", 1962, v. 27, 52 - 70)

TEXT: The authors have taken spectra of a powerful pulse hydrogen discharge by means of a spectrograph with a diffraction echelette-grating (dispersion ~1.5 A/mm). A spectrophotometric study of broadening of hydrogen emission wings ($H\alpha$ - $H\beta$) leads to the following results: 1) In observations of spectra of a self-pinched column in perpendicular direction, emission of wings of hydrogen lines (extending to 30 - 40 A) proves to be broadened due to the linear Stark-effect (at the initial pressure $p_0$ = 0.1 mm Hg); 2) at $p_0$ = 0.5 mm Hg emission extends up to 50 - 80 A and is broadened in the wing mainly due,

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probably, to the quadratic Stark-effect; 3) in observations of spectra along the plasma column, broadening of hydrogen emission in wings of the lines is caused by macroscopic motions of the plasma with speeds of $\sim 10^8$ cm/sec. The variation of intensity in wings is well explained by the assumption of oriented, along discharge axis, motion of plasma of jet-type with velocity gradients; 4) in observations beyond the dischage axis, both in the transverse and longitudinal direction (alongside of the column), broadening of hydrogen emission (in case of $p_0$ = 0.1 mm Hg) is fully caused by the linear Star-effect. A comparison of the cited results with the data on emission broadening in lines of solar flares points to analogous causes of broadening and on the dependence of the broadening aspect on direction along which the observation is being performed. There are 9 references.

Author's summary

[Abstracter's note: Complete translation]



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"APPROVED FOR RELEASE: 06/06/2000 CIA-RDP86-00513R000102830004-3

BABIN, A.N.; [illegible]

Distribution of hydrogen atoms [illegible] pulsed discharge. Izv. Kry. astrofiz. obs. [illegible]

APPROVED FOR RELEASE: 06/06/2000 CIA-RDP86-00513R000102830004-3"

"APPROVED FOR RELEASE: 06/06/2000 CIA-RDP86-00513R000102830004-3

FIKSEL', G.K., inzh.; KUROCHKA, A.L., inzh.; BABIN, A.S., inzh.

Some practical aspects of operating VL23 series electric locomotives. Elek. i tepl. tiaga 3 no.2:33-37 F '59. (MIRA 12:4)

(Electric locomotives)

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"APPROVED FOR RELEASE: 06/06/2000 CIA-RDP86-00513R000102830004-3

KUROCHKA, A.K., inzh.; BABIN, A.S., inzh.

Electric circuits for the VL23 electric locomotive with recuperation. Elek. i tepl. tiaga 3 no.3:29-31 Mr '59. (MIRA 12:5)

(Electric locomotives)

APPROVED FOR RELEASE: 06/06/2000 CIA-RDP86-00513R000102830004-3"

"APPROVED FOR RELEASE: 06/06/2000 CIA-RDP86-00513R000102830004-3

BABIN, A. V., Cand Med Sci (diss) -- "The functional state of the pressor centers during and after hemotransfusion shock". Kishinev, 1959. 10 pp (Min Health Moldavian SSR, Kishinev State Med Inst), 250 copies (KL, No 15, 1960, 139)

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"APPROVED FOR RELEASE: 06/06/2000 CIA-RDP86-00513R000102830004-3

SOV/137-58-7-14035

Translation from: Referativnyy zhurnal, Metallurgiya, 1958, Nr 7, p 7 (USSR)

AUTHOR: Babin, A. Ye.

TITLE: Flotation of the Oxidized Lead Ore of the Kok-Su Deposit, with Use of Mercaptobenzothiazole (Flotatsiya okislennoy svintsovoy rudy mestorozhdeniya Kok-Su s primeneniyem merkaptobenzotiazola)

PERIODICAL: Byul. tsvetn. metallurgii, 1957, Nr 23, pp 9-11

ABSTRACT: The ore body of this deposit consists chiefly of hornblendes and, to a lesser degree, of quartz schist. The ore includes cerussite, anglesite, plumbojarosite, galena, lead ochers, limonite, smithsonite, calamine, sphalerite, hydrozincite, malachite, chalcopyrite, and covellite. Mercaptobenzothiazole makes for improvement in the flotation process and for diminution in the consumption of frother and xanthate. Its cost is lower than the cost of xanthate and the frothers now used in the mills. Utilization of this substance makes it possible to expand the selection of collectors available for the dressing of oxidized Pb ores. 1. Lead ores--Flotation 2. Thiols--Applications

A. Sh.

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"APPROVED FOR RELEASE: 06/06/2000 CIA-RDP86-00513R000102830004-3

BABIN, Boris Nikolayevich; STEPANOV, Ye.P., red.; KLIMOVA, Z.I., tekhn.red.

[From the history of the collectivization of fishing farms in Astrakhan Province] Iz istorii kollektivizatsii rybolovetskikh khoziaistv Astrakhanskogo kraia. Astrakhan', Izd-vo gazety "Volga," 1958. 75 p. (MIRA 13:3)
(Astrakhan Province--Fisheries--Economic aspects)
(Collective farms)

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"APPROVED FOR RELEASE: 06/06/2000 CIA-RDP86-00513R000102830004-3

BELYAKOV, F.Ye.; BABIN, B.N.; BAL', V.; BOROVKOV, P.N.; VOYEVODIN, I.N.; GUREVICH, G.M.; GORBUNOVA, P.I.; KONNOV, A.S.; KALANTAROVA, M.V.; KASHIRSKIY, A.Ya.; KAZANCHEYEV, Ye.N.; LEKSUTKIN, A.F.; LETICHEVSKIY, N.A.; LOPATIN, S.Z.; MIRSKIY, V.N.; PODSEVALOV, V.N.; SUBBOTINA, V.P.; TANASIYCHUK, N.P.; FEDOTOV, S.D.; FISENKO, K.N.; EL'KIND, I.G.; BOVIN, S.S.; VASIL'YEV, L.T.; DRINKOV, V.D.; DALECHIN, N.I.; DADAGOV, I.A.; YERMOSHINA, V.I.; ZHUKOV, I.V.; ZIMIN, D.A.; IVANNIKOV, A.Ya.; KOVALEV, M.K.; LUGAKOVSKIY, N.L.; NALEVSKIY, A.F.; SEREZHNIKOV, V.K.; SEMIGLASOV, M.D.; SOKOLOV, A.V.; STEPANOV, V.I.; SAKHARIN, G.S.; SAVENKO, P.A.; SOLODOV, V.P.; UMEROV, Sh.Kh.; CHIKINDAS, G.S.; SHCHERBUKHINA, S.N.; DYNKIN, G.Z.; LYSOV, V.S.; OSHEROVICH, A.N.; ROKITSINSKIY, E.V.; BRASLAVSKIY, M.S.; RUDENKO, I.A.; ZHUKOBORSKIY, M.S.; ZHDANOV, I.Ye.; SUSLIN, V.A.; BRUS, A.Ye.; VOLYNSKIY, S.A.; KLYUYEV, V.A.; ISTRATOV, A.G.; TIKHOMIROV, I.F.; BUTYRIN, Ya.N.; VOLYNSKIY, S.A.; MINEYEV, M.F.; MAL'TSEV, V.I.; VIDETSKIY, A.F., kand.tekhn.nauk, glavnyy red.; DEMIDOV, A.N., red.; KRAVETS, A.L., red.; KLIMOVA, Z.I., tekhn.red.

[Industrial Astrakhan] Promyshlennaia Astrakhan'. Astrakhan', Izd-vo gazety "Volga," 1959. 318 p. (MIRA 12:11)

1. Astrakhan (Province) Ekonomicheskiy administrativnyy rayon. (Astrakhan Province--Economic conditions)

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"APPROVED FOR RELEASE: 06/06/2000 CIA-RDP86-00513R000102830004-3

1. BABIN, F. and RIUTOV, D.

2. USSR (600)

4. Refrigeration and Refrigerating Machinery

7. Shortcomings of a valuable book ("Refrigeration of food products." N. A. Golovkin, G. B. Chizhov. Reviewed by F. Babin, D. Riutov). Khol. tekh. 29 no. 4, 1952.

9. Monthly Lists of Russian Accessions, Library of Congress, March 1953, Unclassified.

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"APPROVED FOR RELEASE: 06/06/2000 CIA-RDP86-00513R000102830004-3

BABIN, F., kand.tekhn.nauk; LAZAREV, Ye., kand.tekhn.nauk

Changes in chilled and frozen meat in prolonged storage [with summary in English]. Khol.tekh. 37 no.2:47-49 My-Ap '60. (MIRA 13:10)

1. Leningradskiy tekhnologicheskiy institut kholodil'noy promyshlennosti (for Babin). 2. Leningradskiy institut sovetskoy torgovli im. F.Engel'sa (for Lazarev).
(Meat, Frozen--Storage)

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"APPROVED FOR RELEASE: 06/06/2000 CIA-RDP86-00513R000102830004-3

BABIN, F., dots.; SAKHAROVA, T., assistent

Use of chlorotetracycline for extending the storage life of chilled fish fillet. Khol.tekh. 37 no.4:35-37 Jl-Ag '60. (MIRA 13:11)

1. Leningradskiy tekhnologicheskiy institut kholodil'noy promyshlennosti (for Babin). 2. Leningradskiy institut sovetskoy torgovli im. F.Engel'sa (for Sakharova).
(Fish fillets--Storage) (Tetracycline)

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"APPROVED FOR RELEASE: 06/06/2000 CIA-RDP86-00513R000102830004-3

BABIN, F., dotsent (Leningrad)

"Refrigerating technology of food products" by K.Markova, E.Shkol'nikova. Reviewed by F.Babin. Sov. torg. 36 no.4:34-35 Ap '63. (MIRA 16:5)
(Refrigeration and refrigerating machinery) (Markova, K.)

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"APPROVED FOR RELEASE: 06/06/2000 CIA-RDP86-00513R000102830004-3

BABIN, F.P.

(1)

12

**Storage of eggs at low temperature.** F. P. Babin. *Kholodil'noe Prom.* 16, No. 1, 19-20(1938); *Chimie & industrie* 40, 1093.—For prolonged storage the temp. must be maintained at −1 to −2°. The atm. relative humidity must be 74-77% during the first 45 days, 82-85% during the next two and a half months and 87-90% during the last 6-7 months. A. Papineau Couture

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"APPROVED FOR RELEASE: 06/06/2000 CIA-RDP86-00513R000102830004-3

GOLOVKIN, Nikolay Alekseyevich, doktor tekhnicheskikh nauk, professor; CHIZHOV, Georgiy Borisovich, professor, doktor tekhnicheskikh nauk; SHKOL'NIKOVA, Yelizaveta Fedorovna, kandidat tekhnicheskikh nauk; SHCHEKOTOV,P.A., redaktor; MARKH,A.T., professor, retsenzent; KHETAGUROVA,F.V., professor, retsenzent; KHRISTODULO,D.A., professor, retsenzent; BABIN,F.P., dotsent, retsenzent; IL'CHENKO,S.G., dotsent, retsenzent; CHOGOVADZE,Sh.K., dotsent, retsenzent; ROSLOV,G.I., tekhnicheskiy redaktor

[Technology of refrigerating food products] Kholodil'naia tekhnologiia pishchevykh produktov. Moskva, Gos.izd-vo torgovoi lit-ry, 1955. 375 p. (MLRA 9:3)
(Food--Preservation) (Refrigeration and refrigerating machinery)

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"APPROVED FOR RELEASE: 06/06/2000 CIA-RDP86-00513R000102830004-3

BABIN, Fedor Petrovich; TSIFERSON, A.L., red.; EL'KINA, E.M., tekhn. red.

[Fundamentals of refrigeration engineering and refrigeration technology] Osnovy kholodil'noi tekhniki i kholodil'naia tekhnologiia. Moskva, Gos. izd-vo torg. lit-ry, 1961. 188 p. (MIRA 14:8)

(Refrigeration and refrigerating machinery)

APPROVED FOR RELEASE: 06/06/2000 CIA-RDP86-00513R000102830004-3"

"APPROVED FOR RELEASE: 06/06/2000 CIA-RDP86-00513R000102830004-3

AGEYEV, L.M., kand. tekhn. nauk, dotsent; BABIN, F.P., kand. tekhn. nauk, dotsent; SMIRNOV, V.A., doktor tekhn. nauk, prof.; SOFRONOV, G.F., kand. tekhn. nauk, dotsent, red.; IVANOV-RECHNOY, I.Ya., red.; NAUMOV, K.M., tekhn. red.

[Technology of the main branches of industry] Tekhnologiia vazhneishikh otraslei promyshlennosti; uchebnoe posobie dlia vysshikh partiinykh shkol. Pod red. G.V.Sofronova. Moskva, Izd-vo VPSh i AON pri TsK KPSS. Part 4. [Food industry] Pishchevaia promyshlennost'. 1961. 189 p. (MIRA 14:6)

(Food industry)

APPROVED FOR RELEASE: 06/06/2000 CIA-RDP86-00513R000102830004-3"

"APPROVED FOR RELEASE: 06/06/2000 CIA-RDP86-00513R000102830004-3

BABIN, G.

29

Influence of method of processing by-products on their quality. G. Babin and F. Pavlov. *Myasnaya Ind.* 19, No. 3, 20-7(1948). – The processing of lips, ears, and feet of cattle and hogs by two methods was compared. A phys. method comprised scalding, mechanical removal of hair, and singeing. A chem. method comprised cooking in 3% NaOH soln. at 95-100°, to free the hair from the epidermis. The charge is then neutralized with acid. The products are processed to gelatin or glue, fat, etc. The products of the phys. method were of a much higher quality than those from the chem. method. N. M. Piskur

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BABIN G.

CA

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PROCESSES AND PROPERTIES INDEX

**Influence of method of salting on the quality and yield of salted meats** G. Babin. *Myasnaya Ind. S.S.S.R.* 10, No. 6, 12-19(1938). Meat with bone and sausage meat (without bone) were salted with dry salt (12-14% based on green wt. of meat), dry curing salt mixture (8%), and brine. In the graphic presentation of the changes in curing during brine-curing the meat lost about 2% in moisture in 2 days, regained it in 8 days, and after 16 days gained about 5% moisture (based on original wt.). Total gain (moisture plus salt) at 16 days was about 12%. At 4 months the total gain averaged 16%. With dry salting the final wt. averaged 80 to 80% of the original wt. after 4 months. The progress of the changes in all tests is given graphically, and the organoleptic observations on the final products are described. Salted meat is very stable at 3-4° storage, it can be stored 3 months at 15-20° and 1-2 months at 20-25°. In general the yield of carefully salt-preserved meat is 102-105% of the original wt.

M. M. Piskur

ASM-SLA METALLURGICAL LITERATURE CLASSIFICATION

APPROVED FOR RELEASE: 06/06/2000 CIA-RDP86-00513R000102830004-3"

"APPROVED FOR RELEASE: 06/06/2000 CIA-RDP86-00513R000102830004-3

BABIN, G., kandidat tekhnicheskikh nauk.

New practices in the canned meat industry. Mias.ind.SSSR 27 no.3: 60-62 '56. (MIRA 9:9)
(Meat, Canned) (Canning and preserving--Apparatus and supplies)

APPROVED FOR RELEASE: 06/06/2000 CIA-RDP86-00513R000102830004-3"

"APPROVED FOR RELEASE: 06/06/2000 CIA-RDP86-00513R000102830004-3

BABIN, G., kandidat tekhnicheskikh nauk.

How to avoid loose packing of cooked sausages and frankfurters.
Mias. ind. SSSR 27 no.5:31-33 '56. (MLRA 9:11)
(Sausages)

APPROVED FOR RELEASE: 06/06/2000 CIA-RDP86-00513R000102830004-3"

"APPROVED FOR RELEASE: 06/06/2000 CIA-RDP86-00513R000102830004-3

BABIN, G., kandidat tekhnicheskikh nauk.

Breeding hogs of the meat type in the U.S.A. Mias. ind. SSSR 27 no.4:63 '56. (MLRA 9:10)

(United States--Swine)

APPROVED FOR RELEASE: 06/06/2000 CIA-RDP86-00513R000102830004-3"

"APPROVED FOR RELEASE: 06/06/2000 CIA-RDP86-00513R000102830004-3

BABIN, G.

New equipment in the meat industry. Mias. ind. SSSR no.2:59-61 '57.
(MLRA 10:5)

(Meat industry--Equipment and supplies)

APPROVED FOR RELEASE: 06/06/2000 CIA-RDP86-00513R000102830004-3"

"APPROVED FOR RELEASE: 06/06/2000 CIA-RDP86-00513R000102830004-3

BABIN, G., inzhener.

Technical innovations in the meat industry. Mias. ind. SSSR 28 no.3:61-62 '57. (MLRA 10:6)
(Meat industry--Equipment and supplies)

APPROVED FOR RELEASE: 06/06/2000 CIA-RDP86-00513R000102830004-3"

"APPROVED FOR RELEASE: 06/06/2000 CIA-RDP86-00513R000102830004-3

BABIN, G., kand.tekhn.nauk

What makes this pamphlet valuable ("Production of bacon" by D. Pavlov. Reviewed by G. Babin). Mias. ind. SSSR 32 no.3:59 '61. (MIRA 14:7)

(Bacon) (Pavlov, D.)

APPROVED FOR RELEASE: 06/06/2000 CIA-RDP86-00513R000102830004-3"

"APPROVED FOR RELEASE: 06/06/2000 CIA-RDP86-00513R000102830004-3

Bavik, G.V., kand. tekhn. nauk

[Special characteristics of the production of uncooked smoked sausage] Osobennosti proizvodstva syrokopchenny... kolbas. Moskva, T.entr. inst nauchno-tekhn. informatsii pishchevoi promyshl., 1963. 57 p. (MIRA 17:11)

APPROVED FOR RELEASE: 06/06/2000 CIA-RDP86-00513R000102830004-3"

"APPROVED FOR RELEASE: 06/06/2000 CIA-RDP86-00513R000102830004-3

BABIN, I.

We repaired a mobile electric power station. Muk.-elev.prom.21 no.8: 13 Jl [Ag] '55. (MLRA 8:12)

1. Russko-Turekskiy zagotovitel'nyy punkt Korovskoy oblasti
(Electric power plants)

APPROVED FOR RELEASE: 06/06/2000 CIA-RDP86-00513R000102830004-3"

"APPROVED FOR RELEASE: 06/06/2000 CIA-RDP86-00513R000102830004-3

SOV/84-58-7-7/46

AUTHOR: Babin, I.

TITLE: At the Brussels World Fair (Na vsemirnoy vystavke v Bryussele)

PERIODICAL: Grazhdanskaya aviatsiya, 1958, Nr 7, p 6 (USSR)

ABSTRACT: The article dwells on the unabated public interest in the Soviet pavilion at the World Fair, the main attractions being the models of the Earth satellites, and those of Soviet civil aircraft, as well as other similar exhibits. A fairly detailed description of the aircraft models is given in the text. A photograph shows the model of the Tu-114 for 170 passengers.

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ALEKSEYEV, B.D.; ALAVERDOV, A.I.; BABIN, I.D.; BIDNEV, A.I.; BUROVOY, I.A.; GUSOV, A.V.; IVANOV, V.I.; KAYDAK, A.M.; LEYZEROVICH, G.Ya.; KUPPUL', V.K.; SEREBRYANNIKOV, E.Ya.; SHTEYNGARDT, G.M.

Roasting zinc concentrate in a gas fired boiling fuel bed. Prom. energ. 13 no.8:19-20 Ag '58. (MIRA 11:10)
(Zinc--Metallurgy)

APPROVED FOR RELEASE: 06/06/2000 CIA-RDP86-00513R000102830004-3"

"APPROVED FOR RELEASE: 06/06/2000 CIA-RDP86-00513R000102830004-3

BABIN, I.

Cherished wish. Okhr. truda i sots. strakh. 6 no.12:24 D '63. (MIRA 17:2)

1. Tekhnicheskiy inspektor Karagandinskogo promyshlennogo oblastnogo soveta professional'nykh soyuzov.

APPROVED FOR RELEASE: 06/06/2000 CIA-RDP86-00513R000102830004-3"

"APPROVED FOR RELEASE: 06/06/2000 CIA-RDP86-00513R000102830004-3

DRABKIN, A.Ye.; RABIN, I.N.; GOLUBINSKAYA, M.A.

Composition of shale gas. Trudy VNIIPS no.6:107-119 '58. (MIRA 11:8)

(Gas--Analysis)

APPROVED FOR RELEASE: 06/06/2000 CIA-RDP86-00513R000102830004-3"

"APPROVED FOR RELEASE: 06/06/2000 CIA-RDP86-00513R000102830004-3

BABIN, I.N.; DRABKIN, A.Ye.; TROITSKAYA, M.N.

Effectiveness of odorization of fuel gases with shale gasolines produced by the thermal processing of oil shales and brown coals. Trudy VNIIPS no.7:294-301 '59. (MIRA 12:9)
(Gas, Natural) (Oil shales) (Gasoline)

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"APPROVED FOR RELEASE: 06/06/2000 CIA-RDP86-00513R000102830004-3

GRIGOR'YEV, Z.E.; BABIN, I.N.; DRABKIN, A.Ye.

Investigating the toxicity of light fractions of natural lignite gasoline (the Shchekino plant) used for the ordorization of fuel gases. Trudy VNIIT no.8:97-105 '59. (MIRA 13:4)

(Gasoline--Toxicology)

APPROVED FOR RELEASE: 06/06/2000 CIA-RDP86-00513R000102830004-3"

"APPROVED FOR RELEASE: 06/06/2000 CIA-RDP86-00513R000102830004-3

BABIN, I.N.

Physicochemical properties of the odorant produced from the Shchekino natural gasoline. Trudy VNIIT no.9:157-166 '60.
(MIRA 13:11)

(Gas, Natural) (Odorous substances)

APPROVED FOR RELEASE: 06/06/2000 CIA-RDP86-00513R000102830004-3"

"APPROVED FOR RELEASE: 06/06/2000 CIA-RDP86-00513R000102830004-3

DRABKIN, A.Ye.; BABIN, I.N.

Casing-head gasoline content of oil-shale gas. Trudy VNIIT no.10: 96-100 '61. (MIRA 15:3)

(Oil shales)(Gas,Natural)

APPROVED FOR RELEASE: 06/06/2000 CIA-RDP86-00513R000102830004-3"

"APPROVED FOR RELEASE: 06/06/2000 CIA-RDP86-00513R000102830004-3

BABIN, I.N.

Methods for controlling the extent of odorization of fuel gases. Trudy VNIIT no.10:136-147 '61. (MIRA 15:3)
(Gas as fuel)

APPROVED FOR RELEASE: 06/06/2000 CIA-RDP86-00513R000102830004-3"

"APPROVED FOR RELEASE: 06/06/2000 CIA-RDP86-00513R000102830004-3

RABIN, I.N.; DRABKIN, A.Ye.

Instrument for testing the scent intensity of odorized gases. Gaz.prom. 6 no.4:30-31 '61. (MIRA 14:3)
(Gases) (Odorous substances)

APPROVED FOR RELEASE: 06/06/2000 CIA-RDP86-00513R000102830004-3"

"APPROVED FOR RELEASE: 06/06/2000 CIA-RDP86-00513R000102830004-3

BABIN, I. N.; BARSHCHEVSKIY, M. M.; BEZMOZGIN, E. S.; PETROV, V. N.

Converting natural and mixed gas for special heating installations. Trudy VNIIT no. 11:245-253 '62. (MIRA 17:5)

APPROVED FOR RELEASE: 06/06/2000 CIA-RDP86-00513R000102830004-3"

"APPROVED FOR RELEASE: 06/06/2000 CIA-RDP86-00513R000102830004-3

BABIN, I.N.; TROITSKAYA, M.N.; Prinimala uchastiye ABRAMOVA, T.K., inzh.

Gas odorization in the gas-supply system of Leningrad. Trudy VNIIT no.12:168-173 '63. (MIRA 18:11)

1. Tekhnicheskiy otdel Leningradskogo upravleniya magistral'nykh gazoprovodov (for Abramova).

APPROVED FOR RELEASE: 06/06/2000 CIA-RDP86-00513R000102830004-3"

"APPROVED FOR RELEASE: 06/06/2000 CIA-RDP86-00513R000102830004-3

BABIN, L.V., kand. tekhn. nauk

Evaluating the gap in engine bearings by the vibration spectrum. Izv. vys. ucheb. zav.; mashinostr. no.7: 72-79 '65. (MIRA 18:12)

1. Submitted April 27, 1963.

APPROVED FOR RELEASE: 06/06/2000 CIA-RDP86-00513R000102830004-3"

"APPROVED FOR RELEASE: 06/06/2000 CIA-RDP86-00513R000102830004-3

BABIN, M.; SHERMAN, Ya.

Metal scrap in excess of the plan. Prom.koop. 14 no.3:30 Mr '60. (MIRA 13:7)

1. Predsedatel' pravleniya arteli "Avtoguzhtransport," Saratov (for Babin). 2. Sekretar' partorganizatsii arteli "Avtoguzhtransport," Saratov (for Sherman).
(Scrap metal industry)

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"APPROVED FOR RELEASE: 06/06/2000 CIA-RDP86-00513R000102830004-3

F BABIN, N

5641. GAS INDUSTRY IN THE SOVIET UNION. Babin, N. (Gas Times, 8 Sept. 1945, 44, 166-7). The Soviet Union holds a leading place in natural gas resources and reservoirs have been found in the Pechora River Vasin. The steppes of the Volga and the Urals, the northern Caucasus, the Saratov region and other districts. Many large industrial centres derive their fuel entirely or partially from natural gas. During the war geological surveying has been intensified and new wells were discovered around Saratov. A pipe line is being laid from there to Moscow. (497 miles) when that city will receive nearly 500 million cubic metres of gas annually replacing over 400,000 tons of fuel oil or 3,150,000 cubic metres of wood. Two gas pockets in the Dashava and Opara villages can supply the western Ukraine and Kiev for many years. Synthetic fuel is also being produced on a large scale.

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"APPROVED FOR RELEASE: 06/06/2000 CIA-RDP86-00513R000102830004-3

BABIN, N.

27692. Plody vdokhnovennogo truda. [I-Ya Pol'sk. prom. vystavka v moskve] Ogonek, 1949, No. 36, s. 14.

SO: Knizhnaya Letopis, Vol. 1, 1955

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"APPROVED FOR RELEASE: 06/06/2000 CIA-RDP86-00513R000102830004-3

BABIN, N.M. (Ufa)

Device for cutting pipes and removing edges. Stroi. truboprov. 9 no.4:33 Ap '64. (MIRA 17:9)

1. Glavnyy tekhnolog trosta Neftoprovodmontazh.

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"APPROVED FOR RELEASE: 06/06/2000 CIA-RDP86-00513R000102830004-3

BABIN, N.M.

Electric contact welding in the construction of water lines in the Virgin Territory. Stroi. truboprov. no.9:16-17 S '64. (MIRA 17:10)

1. Trest Neftoprovodmontazh, Ufa.

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"APPROVED FOR RELEASE: 06/06/2000 CIA-RDP86-00513R000102830004-3

L 05767-67 EWT(1)/EWT(m)/EWP(t)/ETI IJP(c) JD/JG/GG

ACC NR: AR6031868 SOURCE CODE: UR/0058/66/000/006/D085/D085

AUTHOR: Ivakhnenko, P. S.; Babin, P. A.

TITLE: Problem of formation and stability of induced centers in a phosphor of NaCl—Ag

SOURCE: Ref. zh. Fizika, Abs. 6D692

REF SOURCE: Tr. Nauchn. ob"yedin. fiz.-matem. fak. ped. in-tov Dal'n. Vost., v. 4, 1964, 41-56

TOPIC TAGS: phosphor, sodium chloride, silver, crystal absorption, thermal stability, absorption band, luminescence

ABSTRACT: The authors investigated the spectral changes in the activated and excited absorptions of NaCl:Ag crystals (concentration of Ag is 0.04 and 1 mol % in the melt) as a function of the x-radiation time and the effects of optical (luminescence in F- and B-bands) and thermal factors (heating of the sample within the 75—300C range). The following conclusions are drawn. The B (275 m$\mu$) and C (305 m$\mu$) bands have an electron nature. The increase in the growth rate of the number of C-centers during the x-radiation with the concentration growth of the

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L 05767-67

ACC NR: AR6031868

activator indicates that the C-centers are dependent on the ion pair of Ag. The thermal and optical stabilities of induced absorption bands depend on the concentration of the activator, whereupon with the growth of concentration, the stability increases in C- and D-centers and decreases in B-centers. The x-rays exert luminescence stimulation on the B-band. V. Kosikhin. [Translation of abstract]

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Card 2/2 egh

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"APPROVED FOR RELEASE: 06/06/2000 CIA-RDP86-00513R000102830004-3

STOLYAROV, A.D.; BABIN, N.M.

Improve the equipment of field laboratories. Stroi. truboprov. 10 no.8:38-39 Ag '65. (MIRA 18:11)

1. Trest Nefteprovodmontazh, Ufa.

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"APPROVED FOR RELEASE: 06/06/2000 CIA-RDP86-00513R000102830004-3

BABIN, Nikolay Semenovich; DMITRIYEVA, L.A., red.; KUZNETSOVA, G.I., tekhn.red.

[Rainbow over the Yangtze] Raduga nad IAntszy; ocherki o Kitae. Moskva, Izd-vo "Sovetskaia Rossiia," 1959. 107 p. (MIRA 12:7)

(China--Description and travel)

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"APPROVED FOR RELEASE: 06/06/2000 CIA-RDP86-00513R000102830004-3

NADIROV, N.K., kand.khim.nauk; BABIN, P.A.; IVAKHNENKO, P.S.

Spectrophotometric analysis of soybean oil clarified with Far East clays of the Pionersk deposit. Masl.-zhir.prom. 29 no.7:16-18 Jl '63. (MIRA 16:9)

1. Khabarovskiy pedagogicheskiy institut.
(Soviet Far-East—Clay) (Soybean oil—Analysis)

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"APPROVED FOR RELEASE: 06/06/2000 CIA-RDP86-00513R000102830004-3

ACCESSION NR: AP4041844 S/0139/64/000/003/0017/0022

AUTHORS: Babin, P. A.; Ivakhnenko, P. S.

TITLE: Some features of additional absorption bands in NaCl crystals

SOURCE: IVUZ. Fizika, no. 3, 1964, 17-22

TOPIC TAGS: sodium chloride, color center, absorption band, x ray coloring, line broadening

ABSTRACT: In order to obtain additional data on the properties of color centers, the authors made a simultaneous investigation of the formation and optical decay of electron and hole absorption bands, observed at room temperature in natural NaCl crystals and in crystals grown from a melt. The experiments were made with crystal plates 1 mm thick, excited by cobalt x-radiation (50 kV, 12 mA). The influence of the radiation dose and of the hardness of the radi-



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ACCESSION NR: AP4041844

ation, as well as of the F and M light, on the spectrum of the additional absorption was investigated. The behavior of each of the three bands of this spectrum (hole band V, electron bands F and M) as a function of the duration of exposure to x-rays was investigated. An increase in the x-ray dose caused the maximum of the V band to shift towards shorter wavelengths in both types of crystals. The position of the maximum of the F band and its half-width varied with increasing x-ray exposure time. The width increased by approximately 0.04 eV and the maximum shifted by approximately 1--2 millimicrons towards the shorter wavelengths. The variation in the x-ray tube voltage displayed no change in the positions of the maxima and the half-widths. Tests of the behavior of the spectrum of the additional absorption under the influence of F and M light (separated by means of a spectrophotometer) were also made and curves plotted for the optical decay of F and M centers. The tests have shown that the M centers are more stable in natural crystals than in artificial ones. The tests have also confirmed that the decay of F center is



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a complex process consisting of two stages, the transformation of the F centers into other electron centers and repeated localization of the electrons. "We are grateful to Professor Doctor of Physico-mathematical Sciences I. A. Parfianovich and Candidate of Physico-mathematical Sciences Ye. I. Shuraleva for suggesting the topic and for guidance of the work." Orig. art. has: 5 figures.

ASSOCIATION: Khabarovskiy pedinstitut (Khabarovsk Pedagogical Institute)

SUBMITTED: 26Nov62 ENCL: 02

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

3/5

Card

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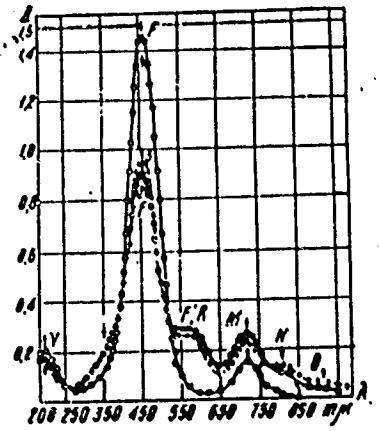
"APPROVED FOR RELEASE: 06/06/2000 CIA-RDP86-00513R000102830004-3

ACCESSION NR: AP4041844

ENCLOSURE: 01




Additional-absorption spectra of natural NaCl crystal: 1 - immediately after x-ray exposure, 2 - after illumination in F-band, 3 - after subsequent illumination of the crystal with M light.

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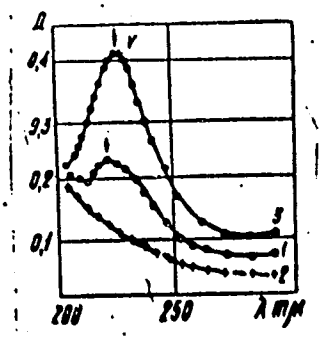
"APPROVED FOR RELEASE: 06/06/2000 CIA-RDP86-00513R000102830004-3

ACCESSION NR: AP4041844

ENCLOSURE: 02




Additional-absorption spectra of artificial crystal in ultraviolet light: 1 - immediately after x-ray exposure of un-annealed crystal, 2 - after subsequent discoloration in F band, 3 - after e-ray exposure of annealed crystal

5/5

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"APPROVED FOR RELEASE: 06/06/2000 CIA-RDP86-00513R000102830004-3

ACC NR: AR6025774 SOURCE CODE: UR/0058/66/000/004/D064/D065

AUTHOR: Babin, P. A.; Ivakhnenko, P. S.

TITLE: Investigation of the formation and stability of electron and hole color centers in single crystals of NaCl

SOURCE: Ref. zh. Fizika, Abs. 4D497

REF SOURCE: Tr. Nauch. ob"yedin. fiz.-matem. fak. ped. in-tov Dal'n. Vost., v. 4, 1964, 25-40

TOPIC TAGS: sodium chloride, color center, excitation spectrum, absorption spectrum, x ray irradiation, annealing, optic density

ABSTRACT: A study was made of the excited absorption spectrum of single crystals of NaCl as a function of the x-ray exposure time, the action of additional illumination in the F and M bands on the color centers, the action of annealing at 350 and 475C on the rate of coloring in the F, M, and V bands, and also the dependence of the relative optical density at the maxima of the F, M, F', and V bands on the time of irradiation with F-light. The complicated character of the F band is confirmed. It is shown that the process of optical decay of F centers proceeds in two stages. The V band consists of $V_2$ and $V_3$ bands. The band of excited absorption with maximum near 375 nm has na electronic nature. It is proposed that in synthetic crystals the absorption band with maximum near 200 nm, the long-wave fall-off of which is superimposed on the V-band, is a $V_5$ band. The growth curves of the optical density of the

Card 1/2

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ACC NR: AR6025774

color centers for natural crystals lie higher than those for synthetic crystals, this being apparently due to the larger concentration of vacancies in them during the initial instant. V. Kosikhin. [Translation of abstract]

SUB CODE: 20

Card 2/2 pb

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"APPROVED FOR RELEASE: 06/06/2000 CIA-RDP86-00513R000102830004-3

L 47332-66 EWT(1)/EWT(m)/EWP(t)/ETI IJP(c) JD

ACC NR: AR6025776 SOURCE CODE: UR/0058/66/000/004/D094/D094

62
B

AUTHOR: Babin, P. A.; Ivakhnenko, P. S.

TITLE: On the impurity absorption of the NaCl-Pb phosphor

SOURCE: Ref. zh. Fizika, Abs. 4D726

REF. SOURCE: Tr. Nauchn. Ob"yedin. fiz.-matem. fak. ped. in-tov Dal'n Vost., v. 4, 1964, 57-74

TOPIC TAGS: halide optic material, luminor, x ray irradiation, absorption band, impurity band, electron transition

ABSTRACT: The change in the absorption spectrum as a function of the x-ray exposure time, illumination in the F-band, and heating at temperatures 50 -- 450C with subsequent quenching, was investigated for NaCl-Pb phosphors kept in storage more than three years, with acceptor concentrations 0.04 and 0.2 mol.% in the melt. The 270 and 200 nm absorption bands changed little following exposure to x-rays and illumination in the F-band, and are apparently due to complexes which do not interact with electrons, holes, or vacancies, and possibly with the $PbCl_2$ phase. Comparison with the spectrum of KCl-Pb makes it possible to conclude that the 203.5 and 273 nm bands in NaCl-Pb correspond to an electronic transition in the Pb ion situated at a lattice point. V. Kosikhin. [Translation of abstract]

SUB CODE: 20

Card 1/1 pb

APPROVED FOR RELEASE: 06/06/2000 CIA-RDP86-00513R000102830004-3"