"APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001654010013-0

L 18240-65

ACCESSION NR: AP5000670

4

tion with an EFP-1 attachment. The results have shown that the luminescence and absorption lines can be grouped into several equidistant series, the distance between lines in each series being approximately equal to the energy of the longitudinal vibration of the optical branch of the ZnTe lattice (approx. 0.026 eV). Mirror symmetry of the luminescence and of the absorption about the phononless line was observed for two electron-vibrational series. An investigation of the ratio of the integral intensities in the equidistant series of luminescence lines has shown that this ratio agrees with that derived theoretically by Pekar (UFN v. 50, 197, 1953) and M. A. Krivoglaz (Opt. i spektr. v. 1, 54, 1956). "In conclusion the authors thank B. P. Zakharchenya and L. M. Kanskaya for photographing the ZnTe absorption spectra in a magnetic field, and also Ye. D. Trifonov and K. K. Rebane for discussion of some problems involved in this work." Orig. art. has: 3 figures and 1 formula.

Card 2/3

APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001654010013-0"

"APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001654010013-0

L 18240-65
ACCESSION NR: AP5000670

ASSOCIATION: Fiziko-tekhnicheskiy institut im. A. F. Ioffe AN SSSR Leningrad (Physicotechnical Institute AN SSSR)

SUBMITTED: 28Apr64

ENCL: 00

SUB CODE: OP, SS

NR REF SOV: 009

OTHER: 005

Card 3/3

APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001654010013-0"

"APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001654010013-0

L 24763-65 EWT(1)/EWT(m)/T/EWP(t)/EEC(b)-2/EWP(b) IJP(c) JD

ACCESSION NR: AP5003456 S/0181/65/007/001/0291/0293

AUTHORS: Gross, Ye. F.; Suslina, L. G.; Mokerov, V. G.

TITLE: Narrow-line luminescence of hexagonal ZnS crystals

SOURCE: Fizika tverdogo tela, v. 7, no. 1, 1965, 291-293

TOPIC TAGS: zinc sulfide, luminescence, luminescence spectrum, single crystal, polycrystal, line spectrum

ABSTRACT: Continuing their investigations of absorption and luminescence of ZnS crystals (Opt. i spektr. v. 6, 115, 1959 and v. 8, 516, 1954; Izv. AN SSSR, ser. fiz. v. 25, 532, 1961), the authors undertook a more detailed study of the luminescence of ZnS and observed narrow-band luminescence on the edge of its main absorption. The experiments were made with polycrystals and single crystals of hexagonal modification, and the spectrum was recorded photographically. The results are shown in Fig. 1 of the enclosure and demon-

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"APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001654010013-0

L 24763-65

ACCESSION NR: AP5003456

strate that hexagonal single crystals and polycrystals of ZnS have entirely different emission spectra. The narrow-line component of the polycrystal spectrum consists of equidistant lines (width 360 ± ± 10 cm^{-1}) and disappears when the temperature is raised from 4.2 to 77K. It is attributed to the radiation of bound excitons and their interaction with the lattice phonons. The edge luminescence has a more complicated structure. The properties of the lines are tabulated. The single-crystal spectrum consists of a large number of luminescence lines (width 5 Å), spaced approximately (170 ± 5) cm^{-1} apart, and is attributed to the electronic transition in the impurity center interacting with the lattice vibration. The reason for the difference between the single-crystal and polycrystal spectra lies to the different content of imperfections in crystals obtained under different growth conditions. Orig. art. has: 1 figure and 1 table.

ASSOCIATION: Fiziko-tekhnicheskiy institut im. A. F. Ioffe AN SSSR

Card 1/4

APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001654010013-0"

"APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001654010013-0

L 24763-65

ACCESSION NR: AP5003456

(Physicotechnical Institute AN SSSR)

SUBMITTED: 31Jul64 ENCL: 01 SUB CODE: OP, SS

NR REF SOV: 006 OTHER: 000

Card 3/4

APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001654010013-0"

"APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001654010013-0

L 24763-65
ACCESSION NR: AP5003456

ENCLOSURE: 01

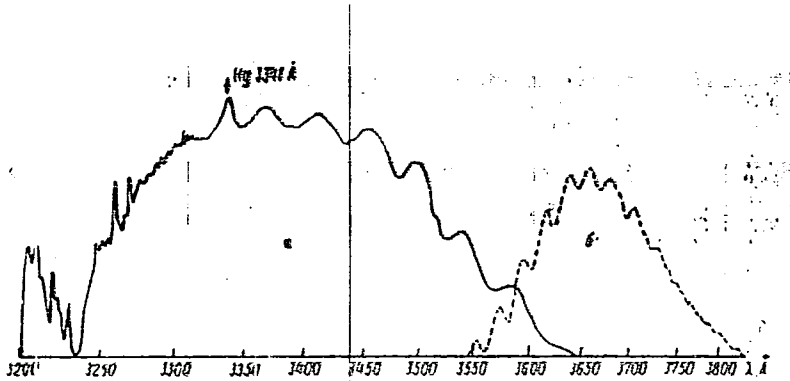

Fig. 1. Microphotograms of the emission spectra of ZnS at T = 4.2K.
a - Polycrystals, b - single crystals.

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"APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001654010013-0

L 4874-66 EWT(1)/EWT(m)/ETC/EWG(m)/EWP(t)/EWP(b) IJP(c) RDW/JD

ACCESSION NR: AP5019843 UR/0181/65/007/008/2327/2329 56

AUTHORS: Kaplyanskiy, A. A.; Suslina, L. G. 44,55 44,55 21,44,55 47 B

TITLE: Deformation splitting of the fundamental exciton line in the reflection spectrum of ZnTe

SOURCE: Fizika tverdogo tela, v. 7, no. 8, 1965, 2327-2329

TOPIC TAGS: zinc, telluride, 27 conduction band, valence band, exciton, line splitting, crystal deformation

ABSTRACT: In order to explain the properties of the lower conduction band and the upper valence band of ZnTe, between which an exciton state is produced, the authors investigated the influence exerted by directional deformation of the crystal on the 5236 Å (2.3675 ev) line. To this end, the splitting of this narrow exciton line was measured in single crystals of ZnTe, subject to elastic uniaxial compression along the <100>, <111>, and <110> axes at 77K. The procedure used was that described by D. G. Thomas (J. Appl. Phys. 32, 2298, 1961).

Card 1/3

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"APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001654010013-0

L 4874-66

ACCESSION NR: AP5019843

The reflection spectra were photographed in polarized light using a spectrograph (ISP-51) and a camera (UF-84). The 5236 Å line was found to experience a reversible doublet splitting upon deformation, with polarized doublets, observed in all three directions. The centers of gravity of the doublets were shifted towards the short wave side, but the long-wave side remained in the same position as in the unstressed crystal. The magnitude of the splitting could not be determined precisely because the reflection in the region of strong exciton absorption is determined in practice by the surface properties, so that the line splitting was very sensitive to inhomogeneities in the stress distribution on the surface. It is deduced from the data that the doublet splitting of the line is due to splitting of the valence band, and that the individual components of the doublet correspond to excitons connected with the unsplit Γ_7 band and with one of the two valence subbands produced when the Γ_8 band is split by the deformation. The deformation potentials of the Γ_8 band are found to be 2.67 and 3.97 eV, and the difference in the displaced centers

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"APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001654010013-0

L 4874-66
ACCESSION NR: AP5019843

9

of gravity of the valence and conduction bands is found to be 8.7 ev. The results confirm the degenerate nature of the Γ_8 band. [The authors thank Ye. F. Gross for interest in the work and G. L. Bir for a discussion.] Orig. art. has: 1 figure

ASSOCIATION: Fiziko-tekhnicheskiy institut im. A. F. Ioffe AN SSSR, Leningrad (Physicotechnical Institute, AN SSSR)

SUBMITTED: 15Feb65 ENCL: 00 SUB CODE: SS, OP

NR REF SOV: 005 OTHER: 007

Card 3/3

APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001654010013-0"

"APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001654010013-0

L 25475-66 EWT(m)/T/EWP(t) IJP(c) JD

ACC NR: AP6009677 SOURCE CODE: UR/0181/66/008/003/0872/0876

44
B

AUTHOR: Gross, Ye. F.; Suslina, L. G.

ORG: Physicotechnical Institute im. A. F. Ioffe AN SSSR, Leningrad (Fiziko-tekhnicheskiy institut AN SSSR)

TITLE: Emission spectrum of donor-acceptor pairs in zinc sulfide crystals

SOURCE: Fizika tverdogo tela, v. 8, no. 3, 1966, 872-876 18

TOPIC TAGS: zinc sulfide, emission spectrum, luminescence, semiconductor impurity

ABSTRACT: This is a continuation of earlier work by the authors (FTT v. 7, 291, 1965) dealing with edge luminescence of polycrystalline ZnS. In the present investigation the authors studied the edge luminescence of hexagonal ZnS crystals in the 3300--3600 Å range. The spectra were investigated by means of a quartz spectrograph (ISP-28) with linear dispersion of 21 Å/mm in the 3400 Å region, using a photographic technique. The edge luminescence was excited with mercury lamps used in conjunction with a filter ($NiSO_4$ in solution). The temperature dependence of the edge radiation in the 4.2--77K interval was investigated together with the afterglow spectrum of the edge luminescence at 4.2K and the dependence of the type of the edge-radiation spectrum on the intensity of the exciting light. The results have also shown that long-wave excitation of the edge luminescence of ZnS (wavelength 4350 Å) has a low probability and its effect is equivalent to the reduction of the intensity of the exciting light. It is concluded that the edge luminescence of ZnS exhibits

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L 25475-66

ACC NR: AP6009677

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the same behavior as that in GaP, observed by the authors earlier (DAN SSSR v. 152, 1335, 1963). Just as in the case of GaP, the edge luminescence can be described by the model proposed by F. E. Williams (J. Phys. Chem. Sol. v. 12, 265, 1960), wherein the edge radiation in the crystals is due to donor-acceptor pairs produced by intrinsic lattice defects. Orig. art. has: 3 figures.

SUB CODE: 20/ SUBM DATE: 05Aug65/ ORIG REF: 008/ OTH REF: 012

Card 2/2

APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001654010013-0"

"APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001654010013-0

SUSLINA, M. G.

22752 Suslina, M. G. K Trudnostyam Dizherentsialbnoy Diagnostikipsikhozov Pri Otravlenii Promyshlennymi Yadami Sbornik Nauch Trudov Bashkir. Med. In-Ta Im. 15-Letiya Vlksm, T. IX, 1949, C. 14-18

SO: Letopis', No. 30, 1949

APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001654010013-0"

"APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001654010013-0

SUSLINA, M. V.

SUSLINA, M. V.: "Reactive changes in the lymphatic nodes of an animal during the migration of ascarid larvae." Min Agriculture USSR. All-Union Inst of Helminthology imeni Acadmeician K. I. Skryabin (VIGIS). Moscow, 1956. (Dissertation for the Degree of Candidate in Biological Science.)

Knizhnaya Letopis'
No 32, 1956. Moscow.

APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001654010013-0"

"APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001654010013-0

SUSLINA, N.G. (Khar'kov, ul. Oktyabr'skoy revolyutsii, d. 37/39, kv. 2.)

Spontaneous necrosis of the tongue [with summary in English]
Vop. onk., 2 no.6:750-751 '56 (MLRA 10:4)

1. Iz khirurgicheskogo otdeleniya (zav.-dots. B.V. Milonov) Ukrainskogo rentgeno-radiologicheskogo i onkologicheskogo instituta (dir.-dots. Ye.A. Bazlov)
(TONGUE--CANCER)

APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001654010013-0"

"APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001654010013-0

IL'YEVICH, A.I.; (Khar'kov, Faninskiy per., d. 3, kv. 38); SUSLINA, N.G. (ul. Oktyabr'skoy Revolyutsii, d. 37/39, kv. 2)

Radiophosphorus P-32, therapy of precancerous diseases of the skin. Vop. onk. 5 no.1:90-94 '59. (MIRA 12:3)

1. Iz Khar'kovskogo instituta meditsinskoy radiologii (dir.- dots. Ye. A. Bazlov)

(SKIN NEOPLASMS, ther.
precancer, radiophosphorus ther. (Rus))
(PHOSPHORUS, radioactive,
ther. of skin precancer (Rus))

APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001654010013-0"

"APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001654010013-0

SUSLINA, N.G.

Combined therapy of thyroid gland cancer. Med. rad. 9 no.1:36-41 Ja '64. (MIRA 17:9)

1. Otdeleniye vnutrennikh i sistemnykh zabolevaniy (zav. Lantodub, Yu.Ye.) Khar'kovskogo instituta meditsinskoy radiologii.

APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001654010013-0"

"APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001654010013-0

RAPOPORT, B. I.; LEKHTSIYER, L. I.; SUSLINA, N. S.

X-Rays - Therapeutic use

X-ray therapy of glassodynia. Stomatologiia No. 3, 1952.

Monthly List of Russian Accessions, Library of Congress, December 1952. Unclassified.

APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001654010013-0"

"APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001654010013-0

SUSLINA, O.I.; SHIRYAYEVA, Yu.D.

Joining the warm interfacing, the lining, and the garment. Shvein.prom. no.3:12-15 My-Je '59. (MIRA 12:9)

1. Laboratoriya tekhnologii i organizatsii proizvodstva TSentral'nogo nauchno-issledovatel'skogo instituta shveynoy promyshlennosti. (Tailoring)

APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001654010013-0"

"APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001654010013-0

SUSLINA, O.I.; LECHITSKAYA, R.I. (Moskva)

New methods of manufacturing men's shirts. Shvein. prom. no. 6:10-13 N-D '60. (MIRA 14:1)

(Shirts, Men's)

APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001654010013-0"

"APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001654010013-0

KOKURIN, A.D.; ROZENTAL, D.A.; SUSLINA, V.P.; TISHINA, N.[illegible].

Investigating the interaction of carbon dioxide with fuel carbon under dynamic conditions. Trudy LTI no.59:107-112 '61. (MIRA 17:9)

APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001654010013-0"

"APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001654010013-0

SUSLINA, Z.; POZHARINSKAYA, Ye., tekhnolog

Semiprepared fish products for Smolensk restaurants. Obshchestv. pit. no. 1:26 Ja '61. (MIRA 14:1)

1. Zamestitel' direktora tresta stolovykh Smolenska (for Suslina).
2. Trest stolovykh Smolenska (for Pozharinskaya).
(Smolensk--Restaurants, lunchrooms, etc.)
(Fish as food)

APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001654010013-0"

"APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001654010013-0

SUSLJA, B.

"The test set-I-199-A I, the equipment for testing motor generators and hand generators."

p. 685 (Vojno-Tehnicki Glasnik) Vol. 5, no. 9, Sept. 1957
Belgrade, Yugoslavia

SO: Monthly Index of East European Accessions (EEAI) LC. Vol. 7, no. 4, April 1958

APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001654010013-0"

"APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001654010013-0

SUSLONOV, S. A.

USSR/Electronic - Curcuits FD-2447

Card 1/1 Pub 90-9/11

Author : Suslonov, S. A.

Title : Transient characteristics of corrective brigade network

Periodical : Radiotekhnika, 10, 73-75, Apr 55

Abstract : Analysis of transient characteristics of bridge circuit, used as a corrective four-terminal network to improve the performance of amplifier, is presented in this article. Formulas are given for calculating the transient characteristics of an eight-element bridge circuit connected to a matched load. The transient characteristics of an amplifier, both before applying a corrective network to it and after, are compared, and the improvement of the resulting characteristics are pointed out. Two USSR references. Diagram.

Institution: --

Submitted : January 3, 1954

APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001654010013-0"

"APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001654010013-0

SOV/112-57-9-19588

Translation from: Referativnyy zhurnal, Elektrotekhnika, 1957, Nr 9, p 236 (USSR)

AUTHOR: Suslonov, S. A.

TITLE: Transition Characteristics of Some Correcting Fourpoles (Perekhodnyye kharakteristiki nekotorykh korrektiruyushchikh chetyrekhpolyusnikov)

PERIODICAL: Tr. Ryazansk. in-ta, 1956, Vol 1, pp 85-96

ABSTRACT: The article investigates transition characteristics of an 8-element bridge network used for correcting TV amplifiers. This type of correction permits improving considerably the basic data of transition characteristics, decreasing the value of blips and, to a certain degree, decreasing the transient time. A method is suggested of calculating the correction on the basis of the transition characteristics, instead of using frequency-phase characteristics, because the latter method results in cumbersome calculations and does not permit analyzing the influence of correction on the shape of the transition characteristic of an amplifier. The 8-element bridge circuit is analyzed under the conditions of a matched load; load resistance is selected low enough so that the influence of stray capacities connected in parallel can be neglected.

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"APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001654010013-0

SUSLONOV, S.

Journey into television; principles of producing television images. Radio no.5:23-28 My '60. (MIRA 13:12)

(Television)

APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001654010013-0"

"APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001654010013-0

BUTROV, M.V.; VOLGOV, V.A.; SUSLONOV, S.A.

Problem concerning the training of radio engineers. Izv. vys. ucheb. zav.; radiotekh. 4 no.4:503-504 Jl-Ag '61. (MIRA 14:11)

1. Ryazanskiy radiotekhnicheskiy institut.
(Radio)

APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001654010013-0"

"APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001654010013-0

SUSLOPAROV, G. D., TSEKHANSKIY, M. I., SHISHKIN, N. I., and KHUDOYAROV, K. V.

"Use of Ca^{45}."

report presented at The Use of Radioactive Isotopes in Analytical Chemistry, Conference in Moscow, 2-4 Dec 1957
Vestnik Ak Nauk SSSR, 1958, No. 2, (author Rodin, S. S.)

APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001654010013-0"

"APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001654010013-0

Susloparov, G. D.

131-2-7/10

AUTHORS: Tsekhanskiy, M. I., Khusnoyarov, K. B., Susloparov, G. D.

TITLE: The Determination of the Role of Refractory Materials in the Occlusion of Rimmed Steel by Non-Metallic Inclusions (Opredeleniye roli ogneuporov v zagryaznenii kipyashchey stali nemetallicheskimi vklyucheniyami).

PERIODICAL: Ogneupory, 1958, Nr 2, pp. 82-87 (USSR)

ABSTRACT: In this investigation participated I. A. Ol'khovskiy and M. I. Diyesperova: Rimmed steel was cast, using pan- and siphon tiles containing the radioactive calcium isotope Ca^{45}. The refractory products were produced from the basic and semi-acid clay from the source of Nizhne-Uvel'sk and Chasov-Yarskiy. The experimental smeltings were conducted according to the usual regulations of the plant and cast into ingot moulds by means of the siphon method, the weight of the blocks amounting to 500-520 kg. Experimental samples were taken of the metal and of the slag from the pan as well as from the surface of the rimmed steel in the ingot moulds. These samples were investigated chemically and their radioactivity was measured. The content of refractory material in the slag crust, taken from the surface of the rimmed steel in the ingot

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moulds is given in table 1, as well as the radioactivity of the slag samples from the casting pan. It can be seen from the data in table 1, that the content of refractory material, which may be interpreted as a result of the destruction of the pan casing and of the mortar, does not exceed from 2 to 3 %. Table 1 contains data on the dependence of the degree of destruction of the pan stones on the content of MnO in the slag. Table 2 gives the influence of the siphon stones on the contamination of the steel, the siphon stones originating from the clay of the source Chasov-Yarskiy, as well as from Nizhne-Uvel'sk. At the investigation of the entire siphon system the content of refractory material in the slag amounted to from 18'3 to 21'6 %. Additionally, it may be seen from table 2, that the clays from both sources show no essential differences. In tables 2, 3, 4 and 5 the contamination of the blocks by refractory materials is given and subsequently described in detail. All products from the experimental metal were scrutinized closely and examined. The output od defective products caused by the utilization of refractory materials

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"APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001654010013-0

The Determination of the Role of Refractory Materials in the Occlusion of Rimmed Steel by Non-Metallic Inclusions 131-2-7/10

is given in table 3, on which occasion it appeared, that the output of defective products due to refractory material from the source of Nizhne-Uvel'sk is almost half the amount of that of the source of Chasov ' Yarskiy (table 4). There are 6 figures, 4 tables, and 4 of which are Slavic.

ASSOCIATION: Institute of Ferrous Metals, Ural (Ural'skiy institut chernykh metallov).

AVAILABLE: Library of Congress

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"APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001654010013-0

05731

Methods of Local Electronographic Analysis of Micro- SOV/32-25-10-20/63
particles in Metal Alloys

Individual graphite spherulites in highly resistant magnesium cast iron were investigated by means of quartz replicas. The microphotographs and the electronogram of an individual graphite spherulite (Fig 2, a,b,c) confirm the polycrystalline structure of the graphite spherulite. Investigations of the phase along the grain boundary of thermally treated stainless steels showed (Table, Fig 3) that the particles separated on the grain boundaries are chromium carbide ($Cr_{23}C_6$) while the coarser nonmetallic inclusions deposited in the form of little strokes along the grain boundary represent alumina particles (α-Al_2O_3). There are 3 figures, 1 table, and 3 references, 2 of which are Soviet.

ASSOCIATION: Ural'skiy nauchno-issledovatel'skiy institut chernykh metallov (Ural Scientific Research Institute of Ferrous Metals)

Card 2/2

APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001654010013-0"

"APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001654010013-0

66736

~~10(3)~~ 18.9100

SOV/20-129-2-22/66

AUTHORS: Levitin, V. V., Susloparov, G. D.

TITLE: Electron Microscope and Electron Diffraction Pattern Studies of Carbide Particles in Stainless Austenite Steel

PERIODICAL: Doklady Akademii nauk SSSR, 1959, Vol 129, Nr 2, pp 318-320 (USSR)

ABSTRACT: The present paper deals with the distribution of carbide particles in steel and their crystal structure. The steel used for the investigation contained 0.09 % C; 17.7 % Cr, 10.9 % Ni, 1.2 % Mn, 0.2 % Si, 0.022 % P, 0.014 % S. These samples were quenched in water from 1050° and tempered at 600; 650; 700 and 750° for two hours. The specimens were blanched with a solution of bromine in methanol with only the metallic base having been dissolved. In this treatment the carbides rose above the surface of the ground section and maintained the position they occupied already in the steel. The collodion prints with the "captured" particles were examined in an electron microscope for stereophotographs. Carbide particles at the grain boundaries and a relief of the blanched surface were investigated. The character of the carbide precipitates is almost unchanged along the entire boundary between

Card 1/3

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"APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001654010013-0

18.7510

25927

S/126/61/012/001/019/020
E111/E435

AUTHORS: Mikhalev, M.S. and Susloparov, G.D.

TITLE: Dispersion hardening of ferrite in low-carbon steel with an addition of vanadium

PERIODICAL: Fizika metallov i metallovedeniye, 1961, Vol.12, No.1, pp.149-151

TEXT: M.S.Mikhalev and M.I.Gol'dshteyn (Ref.1: Stal', 1958, No.10) have shown that vanadium strengthens steel much more than carbon-free iron. With low-carbon steel an almost direct proportionality between increase in microhardness of ferrite and vanadium content of the steel has been observed. Experiments on a steel (0.20% C, 0.16%V) in which ferrite microhardness was measured after isothermal decomposition of austenite and holding at the same temperature showed that a process typical of dispersion hardening occurs in ferrite. Electron-microscopic investigation of normalized (1050°C) and normalized and additionally tempered (650°C, 1 and 4 hours) specimens suggested that formation of particles at block boundaries occurs. Electron diffraction showed these particles to be vanadium carbide. Their location at boundaries makes them plate-like with a chain-like arrangement.

Card 1/2

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Dispersion hardening of ferrite ... 25927 S/126/61/012/001/019/020 E111/E435

The great strengthening of steel on adding vanadium can be explained by the fact that the separate particles and the boundary carbide barrier with its stress fields hinder movement of dislocations; additional energy, i.e. increased external load, is needed to overcome this hindrance. The large difference between the strengthening capability of vanadium in carbon-free alloys and low-carbon steels is due to the fact that in the former, strengthening through additions of vanadium occurs through formation of a solid solution of vanadium in alpha-iron, while in the latter it is due to submicroscopic formations of vanadium carbide in the ferrite. There are 2 figures, 1 table and 5 references: 3 Soviet and 2 non-Soviet. The reference to an English language publication reads as follows: Gensamer M. Trans. ASM, 1946, 36,30.

ASSOCIATION: Ural'skiy nauchno-issledovatel'skiy institut chernykh metallov (Ural Scientific Research Institute of Ferrous Metals)

SUBMITTED: December 22, 1960

Card 2/2

APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001654010013-0"

"APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001654010013-0

18.1150 26555 S/126/61/012/002/004/019
E073/E335

AUTHORS: Gol'dshteyn, M.I., Guterman, S.G. and Susloparov, G.D.

TITLE: Electron-microscopic and Electron-diffraction Studies of Vanadium Steel Tempered at High Temperatures

PERIODICAL: Fizika metallov i metallovedeniye, 1961, Vol. 12, No. 2, pp. 193 - 196

TEXT: High disperse rejections of vanadium carbide were detected by X-ray-structural and electron-diffraction methods in steels with vanadium contents of 0.7% or higher which were quenched and high-temperature tempered. The authors have shown in earlier work that introduction into carbon steel of vanadium, even to the extent of hundredths of percent, will bring about after quenching and high-temperature tempering an appreciable increase in the strength properties. It was thereby assumed that this phenomenon was due to the rejection of finely disperse vanadium carbides. The work described here was aimed at determining directly the highly-disperse vanadium-carbide particles after quenching and

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Electron-microscopic and S/126/61/012/002/004/019
E073/E335

high-temperature tempering, i.e. to prove by a direct method the possibility of dispersion-hardening as a result of small vanadium additions. Steels of a single heat were used (C 0.37%, Si 0.23%, Mn 0.92%, P 0.032% and S 0.043%) without vanadium and with vanadium contents of 0.09, 0.25, 1.7 and 2.46%. The specimens were quenched from various temperatures and tempered at 600 and 650 °C for 4 hours. Table 1 shows the applied tempering temperature for steels with the various vanadium contents. Specimens without vanadium and with 2.46% V were used for comparison since, after the applied heat-treatment, the carbon was primarily in the form of cementite in the first case and in the form of vanadium carbide in the second case. In vanadium-free specimens tempered at 650 °C large rejections of cementite of granular shape were detected. Fine rejections of carbide particles were detected in the specimens containing 0.09% V, in addition to cementite. The quantity of disperse carbide particles increased with increasing vanadium content and they covered almost entirely the surface

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26555

Electron-microscopic and S/126/61/012/002/004/019
E073/E335

explained by their preferential separation along the boundaries of blocks. This assumption is confirmed by the fact that the dimensions of the section of the metal bounded by vanadium carbides is of the order of 10^{-5} - 10^{-6} cm, corresponding to the size of the blocks. the formation of coarse carbides along the boundaries of the original austenite grains can also be explained by the accelerated movement of the atoms to the growing carbide. Detection of vanadium carbide in steel with a low V content (0.09%) is a direct proof that an increase in the strength due to small V additions is caused by the rejection of highly-dispersed vanadium-carbide particles.
There are 4 figures, 2 tables and 6 references: 2 Soviet and 4 non-Soviet. The two English-language references quoted are: Ref. 2 - E. Smith, I. Natting - Iron and Steel, 1958, 31, No. 6, 226; Ref. 3 - A. Seal, R. Honeycomb - Iron and Steel, 1958, 31, No. 6, 256.

Card 4/5

APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001654010013-0"

"APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001654010013-0

GOL'DSHTEYN, M.I.; PANFILOVA, L.M.; SUSLOPAROV, G.D.

Investigating the nature of the carbide phase during the quenching of manganese-vanadium and chromium-vanadium structural steels. Fiz. met. i metalloved. 19 no.6:870-875 Je '65. (MIRA 18:7)

1. Ural'skiy nauchno-issledovatel'skiy institut chernykh metallov.

APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001654010013-0"

"APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001654010013-0

L 29226-66 EWT(m)/T/EWP(t)/ETI IJP(c) JD

ACC NR: AP6019366 SOURCE CODE: UR/0126/66/021/002/0291/0293

AUTHOR: Syreyshchikova, V. I.; Susloparov, G. D.

ORG: Ural NIICHERMET (Ural'skiy NIICHERMET)

49
48
B

TITLE: Investigation of carbide transformations during the tempering of steels 12Kh1MF and 15Kh1M1F

SOURCE: Fizika metallov i metallovedeniye, v. 21, no. 2, 1966, 291-293

TOPIC TAGS: tempering, steel, carbide, electron diffraction, electron microscopy, metal chemical analysis, metal etching, chromium carbide, vanadium compound, molybdenum, toughness, brittleness/12Kh1MF steel, 15Kh1M1F steel

ABSTRACT: The electron microscopic and electron diffraction study of the structure, form, and position of carbide phase particles, precipitated during the annealing of normalized steels 12Kh1MF and 15Kh1M1F is presented. The steels had the following chemical composition (wt %):

	C	Mn	Si	S	P	Cr	Mo	V
12Kh1MF	0.14	0.54	0.26	0.022	0.016	1.15	0.26	0.20
15Kh1M1F	0.14	0.46	0.29	0.018	0.023	1.34	0.94	0.20

The specimens were normalized from 980°C (steel 12Kh1MF) and 1030°C (steel 15Kh1M1F). The tempering temperature was varied in the 450-780°C range; annealing time was 3 hours.

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"APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001654010013-0

L 29226-66

ACC NR: AP6019366

The specimens were etched in a 4% solution of picric acid and carbon replicas were used in which particles of the investigated phase were held.

After tempering at 450° large particles of cementite are preserved in the steels. During electron microscope examination of the background of large cementite plates one can see fine, columnar precipitates which are particles of hexagonal chromium carbide, Cr_7C_3 (a = 13.98 A; c = 4.53 A). These precipitates are most clearly visible after tempering at 500°.

At the 450° tempering temperature, individual precipitates of cubic vanadium carbide, VC, appear in steel 15Kh1M1F. After tempering at 500° the particles of Cr_7C_3 in this steel are semitransparent and offer an excellent diffraction pattern.

Massive, electronically opague, particles of chromium carbides are observable in the structure of steel 12Kh1MF tempered at the same temperature. Finely dispersed vanadium carbides are present here in larger numbers than in steel 15Kh1M1F. This fact is evidently associated with the lower content of molybdenum in steel 12Kh1MF which results in an acceleration of carbide formation since it is known that molybdenum complicates diffusion processes in ferrite.

After tempering at 600°, Cr_7C_3 in both steels forms almost continuous tough partitions at the sites of the previous cementite precipitates. The amount of vanadium carbide in steel 12Kh1MF continues to remain substantially higher than in steel 15Kh1M1F. Further increase in tempering temperature results in coalescence of the chromium and vanadium carbides, especially noticeable in steel 12Kh1MF.

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ACC NR: AP6019366

The results obtained make it possible to explain the observed lowering of toughness of normalized steels 12KhiMF and 15KhiMiF after tempering in the 450-650° range.

Lowering of toughness of the steels is associated with the precipitation of columnar chromium carbides on the cementite plates. The formation of continuous stringers of chromium carbides and the intensive separation of vanadium carbides at 500-650° cause even greater brittleness of the steel. The coalescence processes of chromium and vanacium carbides, occurring at higher tempering temperatures, result in increased toughness of the steels investigated. Orig. art. has: 3 figures. [JPRS]

SUB CODE: 11, 13, 20 / SUBM DATE: 10May65 / ORIG REF: 004 / OTH REF: 003

Card 3/3

APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001654010013-0"

"APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001654010013-0

ACC NR: AP7000659 (A) SOURCE CODE: UR/0126/66/022/005/0766/0771

AUTHORS: Panfilova, L. M.; Gol'dshteyn, M. I.; Susloparov, G. D.; Chirkova, S. N.

ORG: Ural NII of Ferrous Metals (Ural'skiy NII chernykh metallov)

TITLE: Investigation of processes of dispersion hardening of steel caused by precipitation of nitride phases

SOURCE: Fizika metallov i metallovedeniye, v. 22, no. 5, 1966, 766-771

TOPIC TAGS: alloy steel, nitrogen, vanadium, chromium, aluminum / 30Kh2 steel, 30Kh2A steel, 30Kh2AF steel, 30Kh2AYu steel, 30Kh2AYuF steel

ABSTRACT: A study of the nitride phases precipitated during quenching of steel 30Kh2 containing additions of nitrogen, vanadium, and aluminum was carried out. The study supplements the results of L. M. Panfilova and M. I. Gol'dshteyn (Sb. Problemy vanadiya v chernoy metallurgii, Trudy UralNIIChM, Sverdlovsk, 1966, str. 231). The specimens were prepared in an induction furnace of 100-kg capacity. The chemical analysis of the specimens was carried out after the method of N. M. Popova and A. F. Platonova (Zavodskaya laboratoriya, 1953, No. 7, 28). The results are presented in graphs and tables (see Fig. 1). The strength limit of the specimens as a function of the quenching temperature was determined, and the results are tabulated. Photographs of the microstructure of specimens are presented. It was found that additions of vanadium and aluminum to steel 30Kh2 alloyed with nitrogen increase the strength

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ACC NR: AP7000659

limit of the steel by 28%. It is concluded that the presence of vanadium and aluminum causes a finely dispersed precipitate of vanadium nitride in the steel. Orig. art. has: 2 tables and 3 graphs.

SUB CODE: 11/ SUBM DATE: 26Mar66/ ORIG REF: 003/ OTH REF: 001

Card 3/3

APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001654010013-0"

"APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001654010013-0

SUSLOPAROV, G.K.

2878. RURAL ELECTRIFICATION IN U.S.S.R. Susloparov, G. K. (Elektrichestvo, Feb. 1948, (2), 3-6). Figures are given indicating the debelopment of rural electrification in the U.S.S.R., particularly during the first two years of the present five year plan. Emphasis is placed on the importance of the erection of small hydro-electric power stations and power stations operating on local fuel. Efficiency of production processes based on rural electrification is touched upon, together with problems confronting the industry, planning commissions and research organizations.

Z.R.A.

APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001654010013-0"

"APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001654010013-0

SUSLOPAROVA, F. A.

TRUYEVTSEVA, M.F.; SUSLOPAROVA, F.A., redaktor; SMIRNOVA, M.I., tekhnicheskiy redaktor

[School crews on collective farms in Stavropol Territory; collection of articles] Shkol'nye brigady v kolkhozakh Stavropol'skogo kraia. Moskva, Gos.uchebno-pedagog.izd-vo M-va prosv. RSFSR, 1957. 148 p. (Stavropol Territory--Agriculture) (MIRA 10:9)

APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001654010013-0"

"APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001654010013-0

TRUYEVTSEVA, M.F.; SUSLOPAROVA, F.A., red.; KREYS, I.R., tekhn.red.

[School farms for training and experimentation in Ryazan Province; collection of articles] Uchebno-opytnye khoziaistva shkol Riazanskoi oblasti; sbornik statei. Moskva, Gos.uchebno-pedagog.izd-vo M-va prosv.RSFSR, 1959. 269 p. (MIRA 13:2)
(Agriculture--Study and teaching)

APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001654010013-0"

"APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001654010013-0

SUSLOPAROVA, F.A.

TURBINA, Ye.I., uchitel'nitsa (g.Khimki, Moskovskoy oblasti)

Books about the best teachers of biology ("Rural teacher" by F.A. Susloparova; "The teacher enthusiast" by V.I. Petrova. Reviewed by E.I. Turbina). Biol. v shkole no.3:82-84 My-Je '60. (MIRA 13:7)
(Teachers) (Petrova, V.I.)

APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001654010013-0"

"APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001654010013-0

SUSLOV, A., kand.fiziko-matematnauk

In the field of vision of an astrogeologist. IUn.tekh. 7 no.1: 42-45 Ja '63. (MIRA 16:5)
(Mars (Planet)) (Planets--Observations)

APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001654010013-0"

"APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001654010013-0

SHILOV, P.M., professor, doktor tekhnicheskikh nauk; SUSLOV, A.A., redaktor.

[Mining machinery and its repair] Shakhtnye mashiny i ikh remont] Izd.2., perer.i dop. [Leningrad] Ugletekhizdat, 1953. 366 p. (MLRA 7:3)

(Mining machinery)

APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001654010013-0"

"APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001654010013-0

SUSLOV, A.A., kand.tekhn.nauk; FINKEL', A.I., gornyy inzh.

Investigating EBK-5 column-mounted electric drills. Ugol' Ukr. 3 no.4:26-27 Ap '59. (MIRA 12:7)
(Rock drills--Electric driving)

APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001654010013-0"

"APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001654010013-0

SUSLOV, A.; STEPANOVA, V.; SAMOGLYADOVA, A., tekhnolog; ARZHANOVA, Ye., master pyatnovyvodki

Time does not wait. Mast.prom. i khud.promys. 4 no.4:13 Ap '63. (MIRA 16:10)

1. Ivanovskaya fabrika khimicheskoy chistki i krasheniya odezhdy. 2. Direktor Ivanovskoy fabriki khimicheskoy chistki i krasheniya odezhdy (for Suslov). 3. Glavnyy inzh. Ivanovskoy fabriki khimicheskoy chistki i krasheniya odezhdy (for Stepanova).

APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001654010013-0"

"APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001654010013-0

L 29912-66 FSS-2/EWT(1)/FS(v)-3/FCC/EWA(d)/EWA(h) TT/GS/GW

ACCESSION NR: AT5023633 UR/0000/65/000/000/0514/0528

AUTHOR: Blokh, Ya. L.; Dorman, L. I.; Kurnosova, L. V.; Logachev, V. I.; Platonov, G. F.; Razorenkov, L. A.; Sinitsina, V. G.; Suslov, A. A.; Fradkin, M. I. 76 B+1

TITLE: Some results of the study of cosmic ray nucleons by the Elektron-2 satellite

SOURCE: Vsesoyuznaya konferentsiya po fizike kosmicheskogo prostranstva. Moscow, 1965. Issledovaniya kosmicheskogo prostranstva (Space research); trudy konferentsii. Moscow, Izd-vo Nauka, 1965, 514-528

TOPIC TAGS: satellite, radiation, cosmic ray, cosmic radiation, nuclear particle, nucleon/Elektron 2 satellite

ABSTRACT: Included in the instrumentation of the Elektron-2 satellite (launched, Jan 1964; apogee, 68,000 km) was a combination of internal and external counters designed to register nuclear components of primary cosmic radiation. The design and calibration of this apparatus is described, and some results of partially-reduced data are discussed. One counter mounted on the external surface of the satellite was a combination of the Cerenkov and scintillation types which responded to nucleons in the atomic number range of $2 \geqslant Z \geqslant 30$. The internal counter was a Cerenkov

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ACCESSION NR: AT5023633

type, registering at the discrete levels of $Z \geq 2$, $Z \geq 5$, and $Z \geq 15$. All counters were shielded and were designed to register only particles with energies ≥ 600 Mev/nucl. Fig. 1 of the Enclosure gives the basic schematic of the external counter combination. The authors detail the method used to calibrate the photomultiplier outputs in terms of the Z-range of input excitation; for example, for the type FEU-35 external counter, the anode output characteristic corresponded to the range from $Z = 4$ to $Z = 21$, and the output of the 7th dynode, to the range $Z = 6$ to $Z = 28$. The calibration technique was to excite a SiC electroluminescent diode with a high-voltage, short-duration (4—30 nsec) thyratron pulse, providing the phototube with a light input similar to a counter input. Early results from these primary particle counters, obtained during the IQSY, have been a useful supplement to analogous satellite data from the 1959-1962 period, during which solar activity was undergoing the transition from maximum to minimum. Comparative results are seen in Fig. 2, which shows an almost twofold increase in nuclear particles recorded near the solar activity minimum. Table 1 compares data from one orbit of Elektron-2 to that of the 1959 and 1960 satellites and the 1962 Mars-1 probe. To date only data for the $Z \geq 15$ particles have been reduced enough for statistical analysis. A large increase in incidence of this size particle was noted during solar eruptions observed in the course of the Elektron-2 flight. Orig. art. has: 18 figures, 1 table, and 1 formula. [SH]

ASSOCIATION: none

Card 2/6

APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001654010013-0"

"APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001654010013-0

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ACCESSION NR: AT5023633

SUBMITTED: 02Sep65 ENCL: 03 SUB CODE: AA, NP

NO REF SOV: 003 OTHER: 000 ATD PRESS: 4109

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APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001654010013-0"

"APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001654010013-0

L 4089-66 EWT(1)/FCC/EWA(h) GW

ACCESSION NR: AP5026227 UR/0048/65/029/010/1853/1858

AUTHOR: Kurnosova, L.V.; Logachev, V.I.; Platonov, G.F.; Rasorenov, L.A.; Simakina, V.G.; Suslov, A.A.; Fradkin, M.I.

TITLE: Investigation of low-energy charged particles with the Cosmos 12, Cosmos 15, and Electron 2 satellites /Report, All-Union Conference on Cosmic Ray Physics held at Apatity 24-31 August 1964/

SOURCE: AN SSSR. Izvestiya. Seriya fizicheskaya, v. 29, no. 10, 1965, 1853-1858

TOPIC TAGS: primary cosmic ray, heavy particle, artificial earth satellite, Cerenkov counter, scintillation counter, solar activity

ABSTRACT: Equipment carried by Electron 2 to measure the nuclear component of cosmic rays during the International Year of the Quiet Sun is described briefly and a few preliminary results are reported. The equipment consisted of a Cerenkov counter mounted within the satellite behind 1.5 g/cm^2 of matter and a telescope composed of a Cerenkov counter and a scintillation counter, mounted outside the satellite behind 0.6 g/cm^2 of aluminum. All the counters could record cosmic ray particles with energies exceeding 600 Mev/nucleon. The external telescope recorded nu-

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ACCESSION NR: AP5026227

clei with charge numbers of 2 or greater, and the external Cerenkov counter, which was part of the telescope, also recorded very heavy nuclei with charge numbers near 30. Nuclei with charge numbers not less than 3, 5, or 15 were recorded in separate channels by the internal Cerenkov counter. The counters were tested and calibrated in the laboratory with the aid of cosmic ray particles; the associated photomultipliers were calibrated with flashes from a SiC diode. Preliminary results are compared with analogous data recorded with the Second Soviet Cosmic Rocket, the Third Soviet Satellite Vehicle, and the Mars 1. A strong negative correlation is indicated between solar activity and the intensity of the nuclear component of the cosmic radiation. The intensity of the nuclear component nearly doubled between the flights of the Second Cosmic Rocket in 1959 and the Electron 2 in 1964. It is anticipated that when the data recorded with the Electron 2 are processed they will provide information concerning the dependence of the nuclear component on solar activity. A number of solar flares occurred in February and March during the flight of the Electron 2. Analysis of the data recorded during these flares is awaited with great interest. Orig. art. has: 1 formula, 6 figures, and 1 table. [15]

ASSOCIATION: Laboratoriya kosmicheskikh luchey Fizicheskogo instituta im. P.N. Lebedeva Akademii nauk SSSR (Cosmic Ray Laboratory, Physics Institute, Academy of Sciences, SSSR)

Card 2/3

APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001654010013-0"

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ACCESSION NR: AP6016227

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SUBMITTED: 00 ENCL: 00 SUB CODE: NP,ES

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"APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001654010013-0

SUSLOV, A. D.

SUSLOV, A. D.: "Investigation of the operation of a rotary compressor." Min Higher Education USSR. Moscow Order of Lenin and Order of Labor Red Banner Higher Technical School imeni N. E. Bauman. Moscow, 1956.
(Dissertation for the Degree of Candidate in Technical Sciences).

SO: Knizhnaya Ietopis', No 23, 1956

APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001654010013-0"

"APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001654010013-0

SUSLOV, A.D., kand.tekhn.nauk

Delivery ratio of a rotary sliding-vane compressor. Izv.vys. ucheb.zav.; mashinostr. no.4:151-158 '59. (MIRA 13:4)
(Air compressors)

APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001654010013-0"

"APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001654010013-0

SUSLOV, A.D., kand.tekhn.nauk

Mechanical losses in rotary compressors without discharge rings. Khim. mash. no. 3:18-22 My-Je '60. (MIRA 14:5)
(Compressors)

APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001654010013-0"

"APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001654010013-0

SUSLOV, A.D., kand.tekhn.nauk

Determination of the temperature of a plate-type compressor rotor. Khim. mash. no. 1:24-26 Ja-F '61. (MIRA 14:1)
(Compressors)

APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001654010013-0"

"APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001654010013-0

GOLOVINTSOV, A.G., doktor tekhn.red. prof. [deceased]; RUMYANTSEV, V.A., dots.; ARDASHEV, V.I.; PESHTI, Yu.V.; PLASTININ, P.I.; SUSLOV, A.D.; FROLOV, Ye.S.; YAMINSKIY, V.V.; STRAKHOVICH, K.I., doktor tekhn.nauk, prof., retsenzent; PALEYEV, N.M., inzh., red.

[Rotary compressors] Rotatsionnye kompressory. [By] A.G. Golovintsov i dr. Moskva, Izd-vo "Mashinostroenie," 1964. 314 p. (MIRA 17:7)

1. Fakul'tet teplovykh i gidravlicheskikh mashin Moskovskogo vysshego tekhnicheskogo uchilishcha imeni N.Ye. Baumana (for all except Strakhovich, Paleyev).

APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001654010013-0"

"APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001654010013-0

SUSLOV, A.D., kand.tekhn.nauk, dotsent

Efficiency of a rotary plate compressor. Energomashinostroenie 11 no.10:42-44 O '65. (MIRA 18:11)

APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001654010013-0"

"APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001654010013-0

SUSLOV, A.F.

25095 SUSLOV, A.F. Agrotekhnika Lugovykh Trav Na Semena V Sb: Voprosy Kormodobyvaniya Vyp. 2. M., 1949. S. 130-139

SO: Letopis', No.33, 1949

APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001654010013-0"

"APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001654010013-0

SUSLOV, A.F.

25827. SUSLOV, A.F. Letniy posevmnogoletnikh zlakoughh trav svezheubrannymi semenami v svyazi s ikh posleuborochnym dozrevaniem. Sov. agronomiya, 1949, No 8, S. 84-91

SO: Letopis' Zhurnal'nykh Statey Vol. 34, Moskva 1949

APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001654010013-0"

"APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001654010013-0

Growing of meadow forage grasses for seed Moskva, Gos. izd-vo selkhoz litery, 1950. 225 p.

DA

APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001654010013-0"

"APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001654010013-0

BUSLOV, A. F.

Grasses

Effect of nitrogen on the yield of Gramineae seed, Korm. baza 3 No. 3, 1952.

9. MONTHLY LIST OF RUSSIAN ACCESSIONS, LIBRARY OF CONGRESS, July 1952, Uncl.

APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001654010013-0"

"APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001654010013-0

SHAIN, S. S., SUSLOV, A. F.

Grasses

Good book on sowing grass ("Raising the productivity of perennial grasses." Reviewed by S. S. Shain and A.F. Suslov.) Ed. P.S. Tufanov, Korm. baza 3 No. 7, 1952

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

APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001654010013-0"

"APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001654010013-0

SUSLOV, A.

Grasses

Summer and autumn sowing of grass for see. Kolkh, proiz., 12, no. 5, 1952

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

APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001654010013-0"

"APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001654010013-0

SUSLOV, A. F.

Meadow seed grasses; restorers of soil fertility. Dokl. Ak. sel'khoz 17, No. 2, 1952

MLRA, August 1952

APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001654010013-0"

"APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001654010013-0

SUSLOV, A. F.

"Scientific Bases of the Cultivation of Meadow Forrage Grasses for Seed." Dr Agr Sci, All-Union Sci Inst of Fodder, Moscow, 1953. (RZhBiol, No 2, Sep 54)

Survey of Scientific and Technical Dissertations Defended at USSR Higher Educational Institutions (10)

So: Sum. No. 481, 5 May 55

APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001654010013-0"

"APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001654010013-0

SUSLOV, A F

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SUSLOV, A F

Semenovodstvo lugovykh kormovykh trav (Seed growing of forage grasses) Moskva, Sel'khozgiz, 1955.
399 p. illus., diagrs., tables.
At head of title: Moscow. Vsesoyuznyy Nauchno-Issledovatel'skiy institut Kormov.

APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001654010013-0"

"APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001654010013-0

SUSLOV, A.F.

M-4

USSR / Cultivated Plants. Fodders.

Abs Jour: Ref Zhur-Biol., No 6, 1958, 25071

Author : Suslov, A.F.
Inst : The All-Union Inst. of Fodders
Title : The Effect of Superphosphate on the Germination of Meadow Grass Seeds

Orig Pub: Vestn. s.-kh. nauki, 1957, No 1, 129-131 (res.End., Fr.)

Abstract: Experiments of the All-Union Institute of Fodders studying the effect of short-term contact of granulated P_c with meadow grass seeds have shown that it exerts a powerfully negative effect on the germinating power and sprouting vigor of the seeds. In 72 hours after mixing the germination of the seeds of smooth brome was reduced by 5 times, of meadow fescue by 4 times, timothy by 2 times, bent

Card 1/2

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APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001654010013-0"

USSR / Cultivated Plants. Fodders.

M-4

Abs Jour: Ref Zhur-Biol., No 6, 1958, 25071

Abstract: grass by 8 times. The higher the moisture of the P_c, the faster and greater was the grass seed germination reduced. An analogical effect was shown by mixing the seeds with powdery P_c. In both cases the germination and sprouting force of pink clover seeds was not lowered, which may be explained by the presence in leguminous grass seeds of a layer of tightly compressed palisade cells which do not permit the acid of P_c to pass to the embryo. Storing grass seeds in an organic mineral mixture did not show any adverse effects. When seeds are sown with granulated P_c, it is suggested that dry compost or peat be added; without peat the granule and seed mixture should be made immediately before planting. -- M.A. Novoderzhkina

Card 2/2

"APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001654010013-0

SUSLOV, I.F., doktor sel'skokhozyaystvennykh nauk; KOCHETOVA, N.V., kand. sel'skokhozyaystvennykh nauk

Growth and development of white clover from seeds obtained from plants propagated by various methods. Agrobiologiia no. 3:76-82 My-Je '58. (MIRA 11:7)

1. Vsesoyuznyy nauchno-issledovatel'skiy institut kormov im. V. R. Vil'yamsa.

(White clover)

APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001654010013-0"

"APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001654010013-0

SUSLOV, A., doktor sel'skokhozyaystvennykh nauk

Effect of superphosphate on the germinability of meadow grass seeds. Nauka i perod. op v sel'khoz 9 no.5:49-50 My '59. (MIRA 12:8)

(Phosphates) (Grasses) (Germination)

APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001654010013-0"

"APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001654010013-0

SUSLOV, A.G.

Students' astronomical societies in St. Petersburg from 1902 to 1914.
Ist.-astron. issl. no.3:649-658 '57. (MIRA 11:3)
(Leningrad--Students' societies)

APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001654010013-0"

"APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001654010013-0

ACCESSION NR: AR[illegible] S/0299/64/000/017/A007/A007

SOURCE: Ref. zh. Biologiya. Svodnyy tom, Abs. 17A32

AUTHOR: Braynes, S. N.; Suslov, A. I.

TITLE: Information processes from a biocybernetic aspect

CITED SOURCE: Eksperim. khirurgiya i anesteziol., no. 2, 1964, 13-18

TOPIC TAGS: cybernetics, biological system, information recording, molecular recording technique

TRANSLATION: A possible elementary information process mechanism is hypothesized according to which information transmission in [illegible] systems is based [illegible] of macromolecular structures with an electromagnetic field. Elementary acts of informa- [illegible] are between specific molecular [illegible] of an electromagnetic field, and the molecules which [illegible] are excited in the same manner act as coupled oscillators; in such a system, excitation can be sustained for a sufficiently long period. The structure which

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"APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001654010013-0

L 24894-6

ACCESSION NR: AP[illegible]

interacts with the field can be considered as a grid whose elements also include the oscillators. Grids can overlap as long as different type oscillators are included in the same biological structures, that is, generators of different frequencies with separation of grids taking place according to the frequencies on which their basic elements operate. The grid, whose basic elements are the coupled oscillators, has the property of [illegible] as long as each oscillator belongs to a certain macromolecular structure which is repeated in all the cells. It is specifically indicated that signal transmission from the receptors [illegible] the nerve fiber [illegible]

[illegible] of the fiber molecular structures, as a result of which signal transmission of the electromagnetic field takes place in a negative absorption medium. The presence of a quantum amplifier in the mediums helps reduce infomation losses during its transmission, and the number of possible feedbacks, forming in the course of biological information processes because of linear and nonlinear interaction of electromagnetic field vibrations, can be significantly increased. The disadvantages of

Card 2/3

APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001654010013-0"

"APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001654010013-0

L 24891-65

ACCESSION NR: AR[illegible]

models based on relay principles are emphasized. It is stated that anesthesia can be regarded as a disturbance of certain information processes in the cell systems. Bibliography, 16 titles. V. Chtetsov

SUB CODE: LS, DP ENCL: 00

Card 3/3

APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001654010013-0"

"APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001654010013-0

SUSLOV, A. K.

Moon

New determination of the moonlight constant. Biul. Stal. astron. obser. No. 2, 1952.

Monthly List of Russian Accessions, Library of Congress, June 1953. Unclassified.

APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001654010013-0"

"APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001654010013-0

SYTINSKAYA, N.; SUSLOV, A.; SHPAGINA, T.; ORLOVA, N.S.; POLOZHENTSEV, D.D.

Preliminary results of observations of the total solar eclipse of February 25, 1952, carried out by the expedition of the Leningrad University. Astron. tsir. no.136:10-13 Mr '53. (MLRA 6:6)

1. Leningradskiy universitet. (Eclipses, Solar--1952)

APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001654010013-0"

"APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001654010013-0

SUSLOV, A.K.

Summary of results of integral visual photometry of the moon during eclipses. Astron.tsir. no.145:13-14 Ja '54. (MLRA 7:6)
(Photometry, Astronomical) (Eclipses, Lunar)

APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001654010013-0"

"APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001654010013-0

SUSLOV, A.K.

Possibility of life on Mars. Trudy Sekt. astrobot. AN Kazakh. SSR 3:272-273 '55. (MLRA 9:12)

(Mars (Planet)) (Botany)

APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001654010013-0"

"APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001654010013-0

SUSLOV, A.K.

KRISHTOFOVICH, A.N. [deceased]; L'VOV, V.Ye.; MARKOV, A.V., professor; KOHOLEV, A.V.; GOLOSHITSKIY, L.P.; OGORODNIKOV, K.F., professor; EYGENSON, M.S., professor; LOZIN-LOZINSKIY, L.K., professor; VOROB'YEV, A.G., professor; KOZLOVA, K.I.; KAZANNOV, B.A.; SUSLOV, A.K.; GEL'FREYKH, G.B.; VASIL'YEV, O.B.; LICHKOV, B.L., professor; SYROMYATNIKOV; KUTYREVA, A.P.; KATTERFEL'D, G.N.; SYTINSKAYA, N.N.; SHARONOV, V.V.; SUVOROV, N.I.; KUCHEROV, N.I.; TIKHOV, G.A.; GORSHKOV, P.M.

Addresses by A.N.Krishtofovich and others. Trudy Sekt.astrobot.AN Kazakh.SSR 4:68-157 '55. (MLRA 9:12)

(Mars (Planet))

APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001654010013-0"

"APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001654010013-0

SUSLOV, A. K.

KOZLOVA, Kh.I.; SUSLOV, A.K.; GLAGOLEVSKIY, Yu.V.

Red light photographic photometry of the partial lunar eclipse of May 24, 1956. Astron.tsirk. no.173:6-7 O '56. (MLRA 10:1)

1. Sektor astrobotaniki Akademii nauk KazSSR, Alma-Ata.
(Eclipses, Lunar--1956) (Photometry, Astronomical).

APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001654010013-0"

"APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001654010013-0

SUBJECT) M.E.

3(1) PHASE I BOOK EXPLOITATION SOV/1836

Akademiya nauk Kazakhskoy SSR. Sektor astrobotaniki

Trudy, t. 5 (Transactions of the Astrobotanical Sector, Kazakh SSR. Academy of Sciences, Vol 5) Alma-Ata, Izd-vo AN Kazakhskoy SSR, 1957. 1,100 copies printed.

Eds.: L.S. Rzhondkovskaya and D.M. Glazyrina; Tech. Ed.: Z.P. Korokina; Editorial Board: Sh.P. Darchiya, K.I. Kozlova (Secretary), N.I. Suvorov (Deputy Resp. Ed.), and G.A. Tikhov (Resp. Ed.).

PURPOSE: This book is intended for scientists engaged in the fields of astrobotany and astronomy.

COVERAGE: The book comprises 20 articles which deal primarily with spectrophotometry as a means for determining the absorption of light by plants. It also contains a short review of the foreign publications on astrobotany which, according to the publisher, has already grown into the more extensive domain of astrobiology. Photo and chart accompany each article. No personalities are mentioned. Bibliography follows each article.

Card 1/4

Transactions of the Astrobotanical Sector (Cont.) SOV/1836

Semenenko, A.D. The Dynamics of Spectral Brightness in Blanched Plants 187

Semenenko, A.D. The Spectral Reflective Property of Tomatoes Subjected to the Hydroponic Nutrition on the Leaf Extracts From Other Plants 199

~~Kuslov, A.N.~~ The Philosophical Foundation of the Problem of Life on Another Planet 207

Sokolova, V.S. The Spectral Method for Determining the Absorption of Light by a Live Leaf 212

Parshina, Z.S. Biogenetic Changeability of the Absorption Band of Chlorophyll in Higher Plants 221

Sedenko, V.P. Light Passage Through the Leaves and Flowers of Certain Plants Within the Range of 436 - 726 mμ 228

Sredinskiy, S.N. The Color of the Developing Vegetation and Its Significance 242

Foreign Reports on Astrobiology 246

AVAILABLE: Library of Congress

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APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001654010013-0"

"APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001654010013-0

SUSLOV, A.K.

Philosophical justification of life on other planets. Trudy Sekt. astrobot. AN Kazakh. SSR 5:207-211 '57. (MLRA 10:6)
(Life on other planets)

APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001654010013-0"

"APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001654010013-0

KOZLOVA, K.I.; SUSLOV, A.K.

Red light photographic photometry of the total lunar eclipse of May 13-14, 1957. Astron.tsir. no.184:12-14 S '57. (MIRA 11:4)

1. Sektor astrobotaniki AN KazSSR, Alma-Ata.
(Eclipses, Lunar--1957) (Photometry, Astronomical)

APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001654010013-0"

"APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001654010013-0

SOV/169-59-4-3835

Translation from: Referativnyy zhurnal, Geofizika, 1959, Nr 4, p 95 (USSR)

AUTHOR: Suslov, A.

TITLE: A Photographic Method for Determining the Coefficient of Transparency

PERIODICAL: Astron. tsirkulyar, 1957, June 20, Nr 185, pp 9 - 11

ABSTRACT: The article has not been abstracted.

Card 1/1

APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001654010013-0"

"APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001654010013-0

SUSLOV, A.K.

3 (1) PHASE I BOOK EXPLOITATION SOV/1881

Akademiya nauk Kazakhskoy SSSR. Sektor astrobotaniki.

Trudy, t. 6 (Transactions of the Astrobotanical Sector, Kazakh SSR. Academy of Sciences, Vol 6) Alma-Ata, Izd-vo AN Kazakhskoy SSR, 1958. 207 p. Errata slip inserted. 1,300 copies printed.

Eds.: L.N. Moskvicheva and T.I. Shevchuk; Tech. Ed.: P.F. Alferova; Editorial Board: G.A. Tikhov (Resp. Ed.), N.I. Suvorov (Deputy Resp. Ed.) and V.S. Sokolova (Secretary)

PURPOSE: This book is intended for scientists engaged in the fields of astrobotany and astronomy.

COVERAGE: The book summarizes the results gathered from observations of the planet Mars made during its most favorable opposition in [illegible] was obtained to prove the existence of vegetation [illegible] observations were carried out with the Bredikhin astro[illegible] telescope AZT-7 (the Maksutov type). Photographically a[illegible] they were made using light filters. The book contains [illegible] studies on the work Zhizn'vo Vselennoy by A.I. Oparin and V.[illegible] Fesenkov, in which the existence of any vegetable life had been denied. Each article is accompanied by references.

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Vladimirskiy, B.M., and K.A. Lyubarskiy. The Nature of the Surface of Mars 34

Suslov, A.K. Cosmogony and Astrobiology 39

Vladimirskiy, B.M., and K.A. Lyubarskiy. A Critical Review of the Hypothesis on the Existence of Vegetation on Mars 43

Stanko, S.A. The Effect of the Spectral Reflection of Mars Soil on the Spectral Reflection of Its Vegetation 55

Suslov, A.K. The Spectrum of the Oxygen Molecules 65

Suslov, A.K. Identification of the O_2H Spectrum by Yegorov and Subsequent Studies 77

Parshina, Z.S. Phylogenetic Properties of the Spectral Brightness of Plants in Reflected Rays 84

Stanko, S.A., V.P. Bedenko, and M.S. Nebogatikova. The Utilization of Radiant Energy by Plants in Relation to the Vertical Zonality 141

Semenenko, A.D. A Study of the Spectral Brightness of Vegetative Hybrids of the Solanaceae Family by the Method of Photographic Spectrophotometry 157

Card 3/4

APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001654010013-0"

"APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001654010013-0

SUSLOV, A.K.

Oxygen molecular spectra. Trudy Sekt.astrobot. AN Kazakh.SSR 6:65-76 '58. (MIRA 11:12)

(Spectrum, Molecular) (Oxygen)

APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001654010013-0"

"APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001654010013-0

SOV/35-59-10-8149

Translation from: Referativnyy zhurnal. Astronomiya i Geodeziya, 1959, Nr 10, p 74 (USSR)

AUTHOR: Suslov, A.K.

TITLE: The Identification of the O_2 Spectrum by N. Yegorov and the Subsequent Study of It

PERIODICAL: Tr. Sektora astrobotan. AS KazSSR, 1958, Vol 6, pp 77-83

ABSTRACT: This is a survey of studies on the identification of telluric bands. There is a description of experiments and observations carried out at various observatories with the aim of studying the air absorption spectrum in different conditions. The part played by the studies of Professor N. Yegorov of Petersburg University is explained, who back in the 80's of the 19th Century explained the bands of the solar spectrum A, B, and α as without a doubt belonging to the molecular oxygen of the terrestrial atmosphere. (Yegorov, N.C. r. Acad. sci., 1881, Vol 93, pp 385 - 387, 788 - 790; 1882, Vol 95, pp 447 - 449; 1883, Vol 97, pp 555 - 557; 1885, Vol 101, pp 1143 - 1145). The possible reasons for the variation of the amount of oxygen in

Card 1/2

APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001654010013-0"

"APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001654010013-0

SUSLOV, A.

New determination of the factor for transition from the intensity of O_2 telluric lines to the number of molecules. Astron. tsir. no.189: 10-13 F '58. (MIRA 11:8)

1. Sektor astrobotaniki, Alma-Ata.
(Spectrum, Solar) (Spectrum, Atomic)

APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001654010013-0"

"APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001654010013-0

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S/035/60/000/007/002/018
A001/A001

Preliminary Results of Observations of O_2 Telluric Lines

values of air masses at Alma-Ata, Ashkhabad, Vannovskiy and Temir-Tau. The amount of O_2 over Vannovskiy is less than that over Ashkhabad by 2.75%, and in Temir-Tau less than in Alma-Ata by 1%.

I.I. Lebedeva

Translator's note: This is the full translation of the original Russian abstract.

Card 2/2

APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001654010013-0"

"APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001654010013-0

SUSLOV, A. K.: Master Phys-Math Sci (diss) -- "Spectrophotometric investigations of atmospheric oxygen". Alma-Ata, 1959. 11 pp (Kazakh State U im S. M. Kirov), 200 copies (KL, No 13, 1959, 100)

APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001654010013-0"

"APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001654010013-0

8520 9

S/035/60/000/010/016/021
A001/A001

3,1540(1062, 1128, 1168)

Translation from: Referativnyy zhurnal, Astronomiya i Geodeziya, 1960, No. 10, p. 62, # 10189

AUTHOR: Suslov, A. K.

TITLE: The Effect of the Contour Central Part on Determining the Equivalent Width of O_2 Telluric Lines

PERIODICAL: Solnechnyye dannyye, 1959, No. 7, pp. 93-94

TEXT: This is a brief note on determination of equivalent width of O_2 telluric lines. Since the optical thickness in the center of a line is proportional to the molecule number, it can be assumed that an increase of equivalent width with an increase in the number of molecules, should take place at the expense of an increase of the central residual intensity. A proof of this assertion is presented. Absorption in the center of the line is directly proportional to equivalent width, but for the absorption in the line wings this relation is expressed considerably weaker. There are 7 references.

V. F. Ye.

Translator's note: This is the full translation of the original Russian abstract.

Card 1/1

APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001654010013-0"

"APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001654010013-0

SUSLOV, A.

Plotting the curve of growth according to the lines of A and B bands of the O_2 molecule. Astron.tsir. no.204:11-13 S '59. (MIRA 13:6)

1. Sektor astrobotaniki, Alma-Ata.
(Spectrum, Solar)

APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001654010013-0"

"APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001654010013-0

SUSLOV, A.K.

Mapping the Martian seas from negative obtained by G.A.Tikhov in 1909. Trudy Sekt. astrobot. AN Kazakh. SSR 8:104-116 '60. (MIRA 13:12)

(Mars (Planet))

APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001654010013-0"

"APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001654010013-0

SUSLOV, A.K.

C.Flammarion as the precursor of astrobioloty. Trudy Sekt. astrobot. AN Kazakh. SSR 8:250:257 '60. (MIRA 13:12)
(Flammarion, Camille, 1842-1925)
(Life on other planets)

APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001654010013-0"

"APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001654010013-0

87239

S/034/60/000/212/001/003
E032/E114

3.9000 (1041, 1109, 327)

AUTHOR: Suslov, A.K.

TITLE: On the Profile of the Telluric Line of O_2

PERIODICAL: Astronomicheskiy tsirkulyar, 1960, No.212, pp. 5-6

TEXT: The object of the investigation now reported was the telluric line of the A band with $\lambda = 7620.995$ Å. The spectrum was obtained on March 14, 1959 at AOKGU ($\varphi = 50^\circ 27' 11''.8$, $\lambda = 2^h 02^m 00^s.56$, H = 184 m) at $13^h 18^m.5$ Moscow time, with the aid of the diffraction spectrograph of the Solar Service. Second order dispersion was 1.225 Å/mm. It is assumed that the line was subject to broadening as a result of collisions. The profile of such an absorption line can, according to Aller (Ref.1), be described by the formula

$$i = 1 - \frac{(2\pi T_0)^{-2}}{(\nu - \nu_0)^2 + (2\pi T_0)^{-2}} \qquad (1)$$

where i is the residual intensity in units of the continuous spectrum intensity, ν_0 is the frequency at the centre of the line

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