PISARKEV, I.V.

We are improving production. Gidroliz. i lesokhim. prom. 10 no.8:24-25 '57. (MIRA 10:12)

1. Tikhvinskiy lesokhimicheskiy zavod.
(Wood-using industries)

PISAREV, I. Ye.

"The Place and Role of Statistics in the Uniform System of National Economic Accounting in the U.S.S.R."

paper submitted at 1st International Conference of Input-Output Techniques, Geneva, [illegible]

PISAREV, I.Yu.

Study of labor productivity and real wages. Vop.truda no.1: 90-101 '58. (MIRA 12:9)
(Labor productivity) (Wages)

MASLOV, P.P.; PISAREV, I.Yu., professor, redaktor; KREYNIN, G.S.; MOSKVI-cheva, N.I., tekhnicheskiy redaktor

[Critical analysis of bourgeois statistical publications] Kriticheskii analiz burzhuaznykh statisticheskikh publikatsii. Moskva, Izd-vo Akademii nauk SSSR, 1955. 477 p. (MLRA 9:1)
(Statistics)

PISAREV, Innokentiy Il'yevich

[Some problems in the statistical study of labor and production] Nekotorye voprosy statisticheskogo izucheniia truda i proizvodstva. Moskva, Nauchno-issl. in-t truda i zarabotnoi platy, 1961. 42 p. (MIRA 16:4)
(Labor productivity--Statistics)
(Productivity accounting)

PISAREV, I. Yu.

33094

Statisticheskaya Podgotovka Inzhenernykh Kadrov. Vestnik Vyssh. Shkoly, 1949, No 9, s. 48-51

SO: Letopis' Zhurnal'nykh Statey, Vol. 45, Moskva, 1949.

PISAREV, I.Yu., professor.

At the Third Annual Assembly of the Statistical Society of Yugoslavia.
Vest.AN SSSR 26 no.6:107-110 Je '56. (MLRA 9:9)
(Zagreb, Yugoslavia--Statistics--Congresses)

DOBRICH, Adal'bert [Dobrić, Adalbert]; ALIKHODZHICH, Asim [translator]; PISAREV, I.Yu., prof., red.; KABACHNIK, Ya.I., red.; LATYSHEV, A.I., red.; VINOGRADOVA, V.A., tekhn.red.

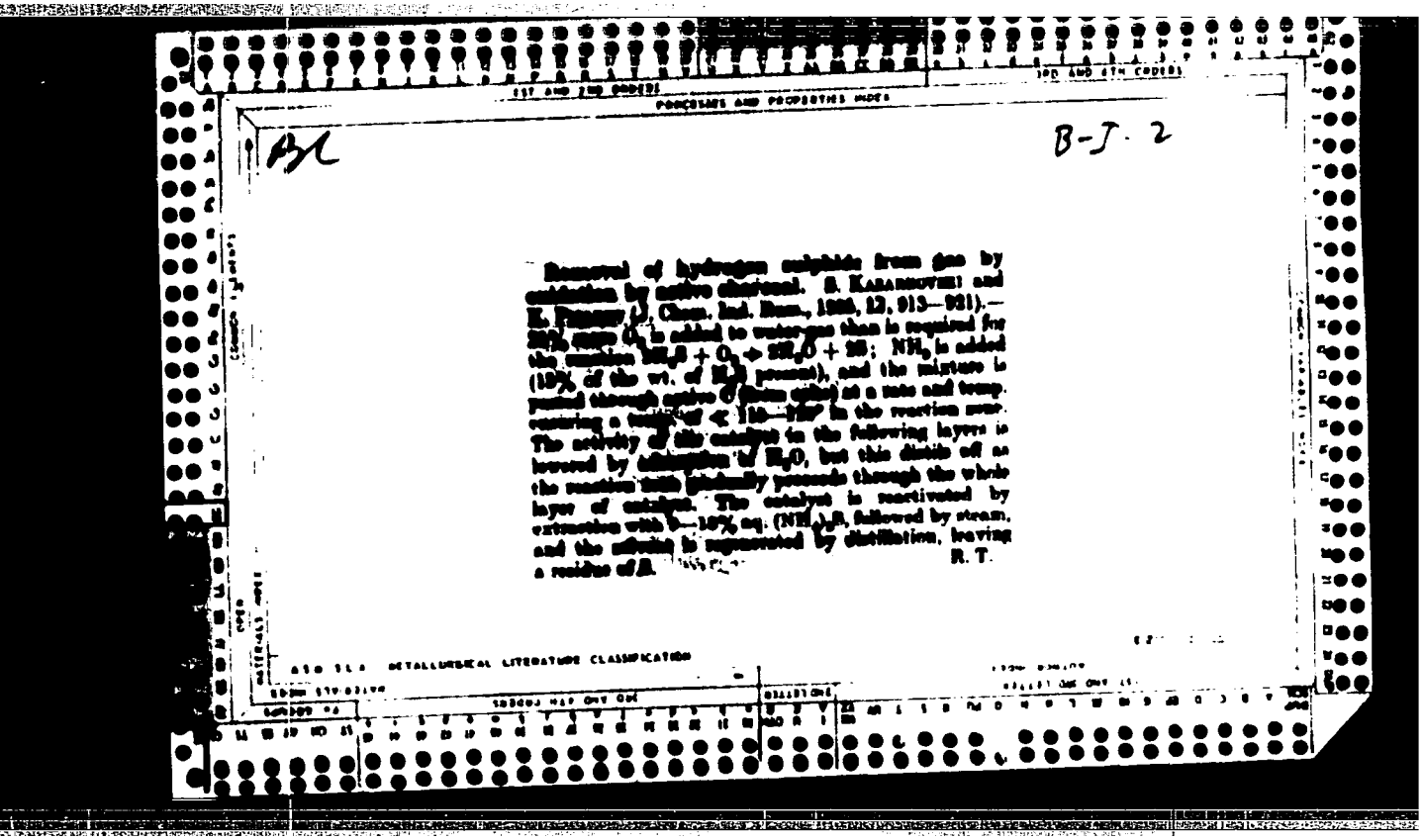
[Industrial statistics] Promyshlennaia statistika. Pod red. I.IU.Pisareva. Moskva, Gos.stat.izd-vo, 1959. 291 p. (MIRA 13:3)

(Industrial statistics)

PISAREV, I.Yu., prof., red.; ASTAKHOV, V., red.; ULANOVA, L., tekhn.red.

[Methodological problems in the study of living standards of working people] Metodologicheskie voprosy izucheniia urovnia zhizni trudiashchikhsia. Pod red. I.IU.Pisareva. Moskva, Izd-vo sotsial'no-ekon.lit-ry, 1959. 257 p. (MIRA 13:1)

1. Moscow. Nauchno-issledovatel'skiy institut truda.
(Cost and standard of living--Statistics)



B-J. 2

Removal of hydrogen sulphide from gas by oxidation by active charcoal. S. KARAMOVSKI and K. [illegible], J. Chem. Ind. Russ., 1938, 12, 913—921).—20% excess O_2 is added to watergas than is required for the reaction $2H_2S + O_2 \rightarrow 2H_2O + 2S$; NH_3 is added (10% of the vol. of H_2S present), and the mixture is passed through active C (from cellulose) at a rate and temp. ensuring a temp. of < 110—120° in the reaction zone. The activity of the catalyst in the following layers is lowered by adsorption of H_2O, but this distils off as the reaction with gradually proceeds through the whole layer of catalyst. The catalyst is reactivated by extraction with 5—10% aq. $(NH_4)_2S$, followed by steam, and the sulphur is regenerated by distillation, leaving a residue of S. R. T.

PROCESSES AND PROPERTIES INDEX

ca

10

Production of acetic anhydride from acetylene. S. N. K[illegible]ornovskii and K. E. Fearev. Org. Chem. Ind. (U. S. S. R.) 1, 198-202(1936).—Results of lab. expts. and a scheme for com. production of Ac_2O by intermediate condensation of C_2H_2 and AcOH with HgO as catalyst to ethylidene diacetate are based on Ger. pats. 271,381 and 655,083. Chas. Blanc

ASM-SLA METALLURGICAL LITERATURE CLASSIFICATION

VOL'FKOVICH, S.I., STROGIN, G.M., REMEN, P.Ye., PISAREV, K.Ye.; SHISHKINA, A.I.

Methods for the producting of zinc phosphide and its use in the control of murine rodents. [Trudy] NIUIF no.167:5-31 '60. (MIRA 13:8)

(Zinc phosphide)
(Rodent baits and repellents)

MAIORSKIY, Yakov Yudovich; ROVINSKIY, Efraim Vol'fovich; MAYZEL', Yu.M., dotsent, kand.tekhn.nauk, retsenzent; PISAREV, M.S., inzh.-polkovnik zapasa, red.; MYASNIKOVA, T.F., tekhn.red.

[Theory of airplane engines] Teoriia aviatsionnykh dvigatelei. Moskva, Voen.izd-vo M-va obor.SSSR. Part 1. [Fundamentals of thermodynamics and gas dynamics] Osnovy termodinamiki i gazovoi dinamiki. 1960. 210 p. (MIRA 13:7)
(Thermodynamics) (Fluid dynamics)

VOSTRIKOV, S.I.; ZUYEV, L.N.; KUZNETSOV, V.I.; MAKHNUTIN, M.A.; NESPELA, A.N.; PELISHENKO, V.A.; TOKMAKOV, A.K.; FILIN, A.M.; MAYZEL', Yu.M., kand.tekhn.nauk, retsenzent; KOTLYAR, I.V., kand.tekhn.nauk, red.; PISAREV, M.S., insh.-polkovnik zapasa, red.; MYASNIKOVA, T.F., tekhn.red.

[Theory of airplane engines] Teoriia aviatsionnykh dvigatelei. Pod red. I.V.Kotliara. Moskva, Voen.izd-vo M-va obor.SSSR. Pt.2. [Theory of jet engines] Teoriia reaktivnykh dvigatelei. 1960. 281 p. (MIRA 13:7)
(Airplanes--Jet propulsion)

VERNITSA, Ye., doktor biolog. nauk; KUPERMAN, F., doktor biolog. nauk; PISAREV, V., doktor sel'skokhoz. nauk

Outstanding works of a Soviet scientist. Nauka i pered. op. v sel'khoz 9 no.10:77-79 O '59 (MIRA 13:3)
(Lysenko, Trofim Denisovich, 1898-)

PISAREVA, L.V., dotsent

Education and health. Zdorov'e 5 no.12:4-6 D '59. (MIRA 13:4)
(CHILDREN--CARE AND HYGIENE)
(EDUCATIONAL PSYCHOLOGY)

S/141/60/003/02/001/025
E032/E314

AUTHOR: Pisareva, V.V.

TITLE: On the Polarization of the Non-thermal Radio Emission of the Galaxy and the Crab Nebula

PERIODICAL: Izvestiya vysshikh uchebnykh zavedeniy, Radiofizika, 1960, Vol 3, Nr 2, pp 165 - 179 (USSR)

ABSTRACT: The emission of relativistic electrons in the magnetic field of the ionized clouds of the interstellar gas gives rise to radio emission which is strongly polarized. The orientation of the plane of polarization as observed on the Earth surface depends on the direction of the magnetic field in each of the clouds. Since in general the magnetic fields in the clouds have a random distribution, the degree of polarization of radiation coming from a large number of clouds will not be large. A calculation of the expected degree of polarization of the cosmic radio emission has been given by Getmantsev and Razin (Ref 3). However, in their calculation of depolarization the averaging process which they employed did not take into account the distribution of the magnetic field and the electron gas density along the line of sight. In the present paper it is

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S/141/60/003/02/001/025
E032/E314

On the Polarization of the Non-thermal Radio Emission of the Galaxy and the Crab Nebula

assumed that the density of the electron gas in interstellar space, the emitting power and the orientation of the magnetic field in the clouds, are all random. The calculation takes into account depolarizing effects between the emitting clouds and the point of observation. In the case of an isotropic model of the emitting clouds and the clouds giving rise to depolarization the degree of polarization turns out to be too small as compared with experimental values by Razin (Ref 7) and Thomson (Ref 8). The nonuniformities in the electron gas and the magnetic field near the plane of the galaxy should be drawn out along the galactic parallels if one is to achieve agreement with experiment. The influence of the Faraday effect on the polarization of the radiation from the Crab nebula is also considered and possible values of the parameters describing the medium of the nebula which are not in conflict with experiments are estimated. Acknowledgments to Ginzburg, Getmantsev and Razin. There are 1 table and 13 references, 7 of which are Soviet, 5 English, 1 Dutch.

ASSOCIATION: Nauchno-issledovatel'skiy radiofizicheskiy institut pri Gor'kovskom universitete (Scientific-research Radiophysics Institute of Gor'kiy University)

Card 2/2

SUBMITTED: September 2, 1959

VC

STRONGIN, G.M.; PISAREV, K.Ye.; ABREIMOV, P.G.; GRISHIN, N.T.; SHISHKINA, A.I.

Zinc phosphide. Patent U.S.S.R. 78, 450, Dec. 31, 1949.
(CA 47 no.20:10816 '53)

SOV

Translation from: Referativnyy zhurnal Metallurgiya 1959 No [illegible] USSR

AUTHORS: Yurvev V S Pisarev I Ya

TITLE: An Automatic Arc welding Unit for Welding of Flanges E [illegible] s varochnyy avtomat dlya privarki flantsev)

PERIODICAL: Byul tekhn ekon informm Sovnarkhoz Rostovsk ekon adm [illegible] a 1958 Nr 4 pp 25 26

ABSTRACT: Developed by the design department of the Taganrog Krasnyy Kotelshchik (Red Boilermaker) plant the automatic welding machine described is designed for welding of flanges to various cylindrical articles The operating characteristics of the unit are as follows Maximum diameter 1600 mm; minimum diameter 700 mm; thickness of wall 10 30 mm, maximum length 1000 mm, speed of welding m hr The welding head is identical to that employed on the TI automatic welding machine equipped with a traversing mechanism The speed of welding can be controlled continuously the face plate may be rotated through an angle of 90° The electric current is supplied to the welding head through a cable from a transformer of the STD 1000 type Annular surfacing of flat areas may be performed with this welding unit N K

Card 1 1

PISAREV, M., vospitatel'.

On the road to zastery. Nauka i pered. op v sel'khoz 9 no.5:63-65 My '59. (MIRA 12:8)
(Agriculture--Study and teaching)

PISAREV, M.N., kand.tekhn.nauk, dotsent

Classification of mechanisms without common connectors for all links. Trudy GPI 15 no.1:28-31 '61 [i.e. '59]. (MIRA 15:11)
(Machinery, Kinematics of)

124-1957-2-1525

Translation from Referativnyy zhurnal Mekhanika 1957 Nr 2 p 12 (USSR

AUTHOR Pisarev M N

TITLE On the Structure of Mechanisms of Different Types (K voprosu o stroitel'stve mekhanizmov razlichnykh semevstv)

PERIODICAL Sb statey Vses zaoch politekhn in-ta 1956 Nr 14 pp

ABSTRACT [illegible] number of links of [illegible] varieties is pursued in this paper according to the [illegible] tion of I I Artobolevskiy The method of investigation developed by the Author for the study of mechanisms varies only insignificantly from the method used earlier by I I Artobolevskiy

V A Zinov'yev

Card 1/1

PISAREV, N. N.

25647. PISAREV, N. N.
K voprosu o svyazi rezhdu strukturnoy formoy tverdichnogo tsementita i mekhanicheskimi svoystvami nyakotorykh stali. Trudy Gor'k. indstr. in-ta im. Zhdanova, T. VII, V. 1, 1946, s 82-86.

SO: Letopis' Zhurnal Statey, No. 30, Moscow, 1946

PISAREV, M. N.
25547

Kovoprosu O Svyazi Mezhdu Strukturnoy Formoy Tretichnogo Tsementita i Meklanicheskimi Svoystvami Myagkoy Stali. Trudy Gor'k. Industr. In-Ta. Im. Zhdanova, T. VIII VBP. 1, 1948, S. 83-86

SO: LETOPIS NO. 30, 1948

PISAREV, M.N., kand.tekhn.nauk

Number of links in mechanisms related to simple, closed kinematic chains. Trudy GPI 14 no.1:88-91 '58. (MIRA 13:2)
(Links and link motion)

1. PISAREVA, M. P.

2. USSR (600)

4. Afforestation

7. Practice in growing shelterbelts. Dost. sel'khoz. No. 1: 1952.

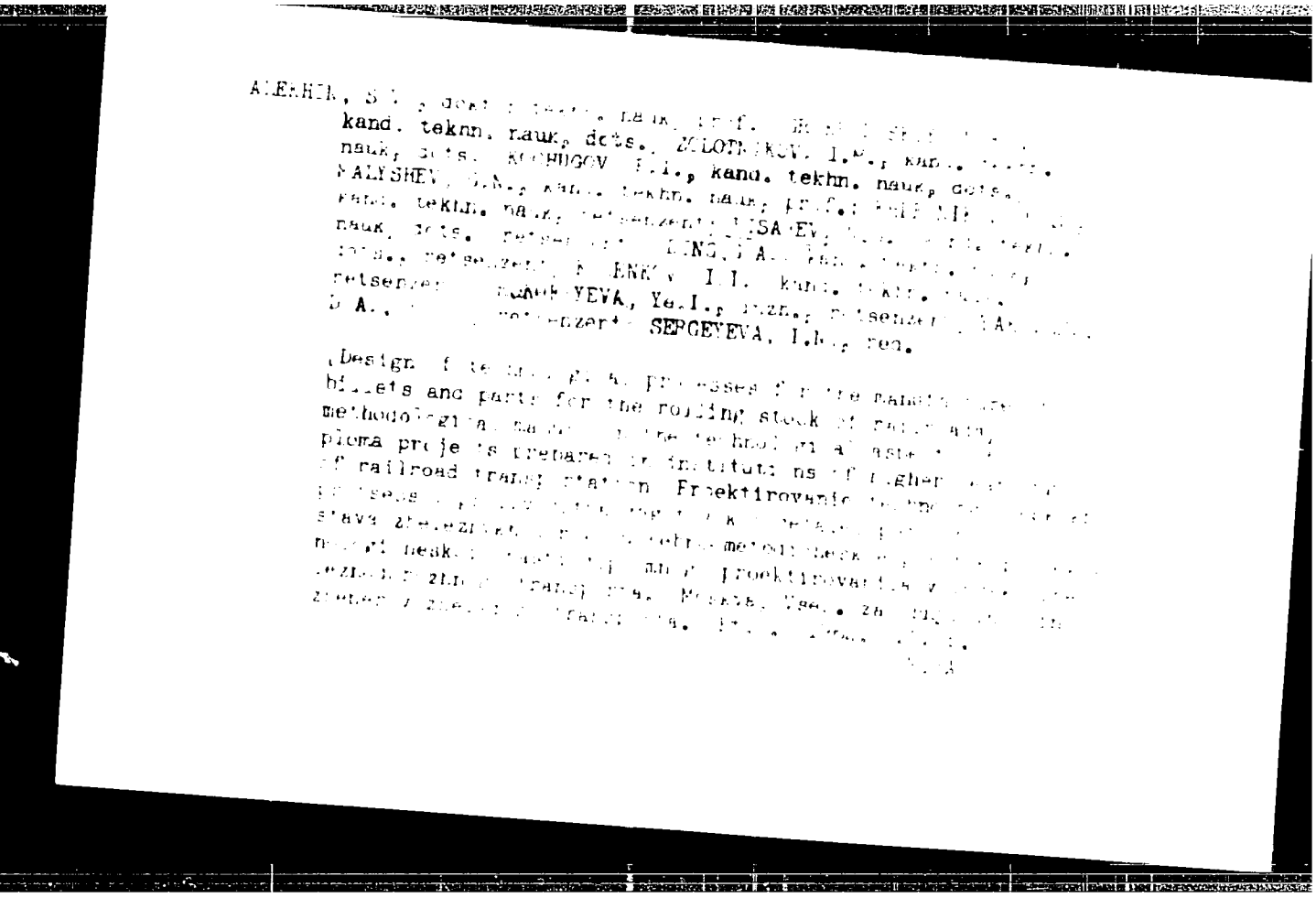
9. **Monthly List of Russian Accessions**, Library of Congress, January, 1953. Unclassified.

ANDREYEV, L. L.; PISAREV, N. D., agronom po zashchite rasteniy

Protecting "strong" wheat against the shield bug Eurygaster integriceps; from the practices of the "Rossiya" Collective Farm. Zashch. rast. ot vred. i bol. 5 no.5:8-10 My '60. (MIRA 16:1)

1. Zaveduyushchiy Severo-Kavkazskim opornym punktom Vsesoyuznogo instituta zashchity rasteniy, Stavropol'skiy kray (for Andreyev). 2. Kolkhoz "Rossiya" Stavropol'skogo kraya (for Pisarev).

(Wheat—Diseases and pests)
(Eurygasters—Extermination)



ALEKHIN, S.V.; ABRAMCHENKO, I.V.; PISAREV, N.G.; SHABOBAYKO, T.N., red.

[Metal cutting, machine tools and cutting tools] Rezanie metallov, stanki i instrumenty; uchebnoe posobie. Leningrad, Leningr. in-t inzhenerov zhel-dor. tranporta, 1962. 128 p. (MIRA 16:4)
(Metal cutting) (Machine tools) (Metal-cutting tools)

L 26628-66 EWT(1)/T IJP(c) AT

ACC NR: AP6013918 SOURCE CODE: UR/0207/66/000/002/0021/0024

AUTHOR: Kunin, V. N. (Chelyabinsk); Pisarev, N. M. (Chelyabinsk)

66
B

ORG: none

TITLE: Electron conductivity of a thermoionized gas in an electric field

SOURCE: Zhurnal prikladnoy mekhaniki i tekhnicheskoy fiziki, no. 2, 1966, 21-24

TOPIC TAGS: plasma conductivity, ionized gas, free path, electron collision, electron flow, gas conduction, free electron

ABSTRACT: The authors study electron conductivity of a thermoionized gas in an electric field. The electron conductivity of the gas is calculated by using Drude's method and considering the drift of electrons in determining their travel time. The following are given: free electron concentration, the mean effective cross section of their collisions and their mean free path. It is assumed that these quantities have a spatially isotropic distribution in the gas and are independent of time. It is further assumed that the macroscopic parameters for the state of the gas are given. The conductivity problem reduces to finding the mean drift rate of the electrons. It is shown that kinematic relationships may be used for determining conductivity without knowing the distribution function. A model is set up in which a gas particle is surrounded by a sphere of given radius. Free electrons within this sphere drift under the effect of a field which is parallel to the axis and where the electrons are scat-

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L 26628-66

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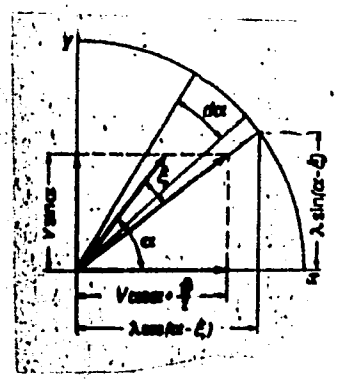
tered by a particle. After scattering, the electrons travel in the field along curved trajectories resulting in electron-ion and electron-molecule collisions. Since molecules and ions have large masses, their motion in a weak field does not depend on field intensity. Therefore the motion of electrons is limited only by the surface of the sphere. In the case of weak fields, it may be assumed that electron scattering intensity is nearly equal in all directions. An expression is given for calculating the electron drift rate within a given sphere. An improved classical formula for calculating conductivity is given. Orig. art. has: 1 figure, 12 formulas.



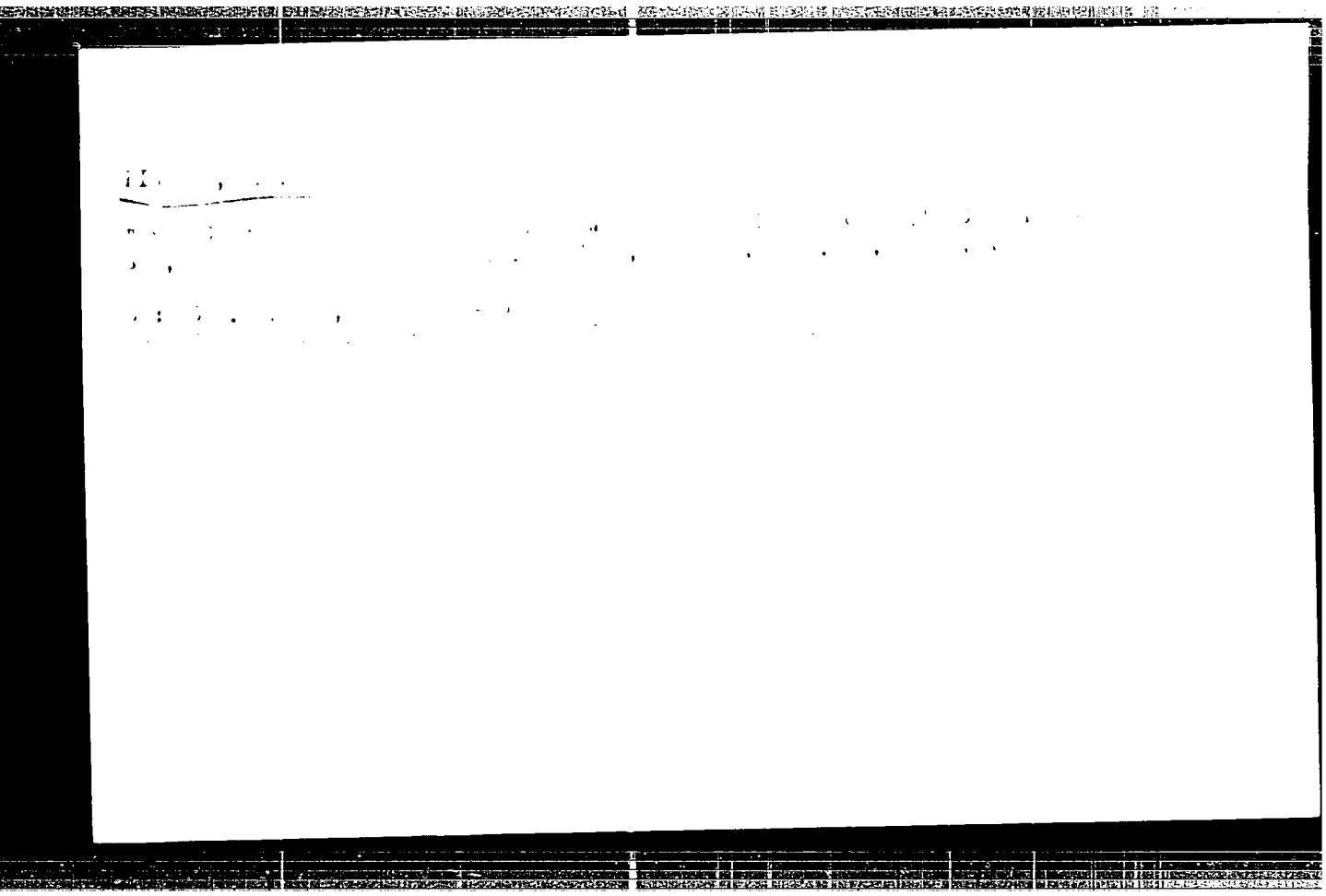
SUB CODE: 20/ SUBM DATE: 28Sep65/ ORIG REF: 003/ OTH REF: 001

Card 2/2

PISAREV, N.M.

Determining the length of time for changes in hydrogen concentration in parallelepiped and cylinder shaped ingots. Izv. vys. ucheb. zav.; chern. met. no. 11:45-49 '60. (MIRA 13:12)

1. Ural'skiy lesotekhnicheskiy institut.
(Steel ingots) (Steel--Hydrogen content)



LYKOSHIN, B.A.; PISAREV, N.V., red.

[Handbook on local defense against air attack] Posobie po mestnoi PVO. 2. izd. Moskva, Vodtransizdat, 1954. 141 p. (MIRA 16:7)

(Air defenses)

SOV/129-59-4-4/17

AUTHORS: Lyulicheva N.N. (Candidate of Technical Sciences) and Pisareva N.V. (Engineer)

TITLE: Influence of Rolling at Low Temperatures on the Mechanical Properties of Austenitic Steels (Vliyaniye prokatki pri nizkikh temperaturakh na mekhanicheskiye svoystva austenitnykh staley)

PERIODICAL: Metallovedeniye i Termicheskaya Obrabotka Metallov, 1959, Nr 4, pp 19 - 22 + 1 plate (USSR)

ABSTRACT: Stainless austenitic 18-8 steels are being used at room temperature and at elevated temperatures, as well as temperatures down to -196°C, for instance in cooling equipment for manufacturing liquid gases. The purpose of the work described in this paper was to investigate the influence of the reduction on the mechanical properties of austenitic steels. The deformation as well as the testing of the mechanical properties was effected at temperatures +100°, +20° and -183°C. The specimens consisted of 1.2 mm thick sheets of the steels 1Kh18N9T and 1Kh18N9. The blanks were first quenched from 1050°C in water and following that they were rolled at -183°, +20° and +100°C with reductions of 15 - 60%. The results of tensile tests at +20° and -183°C are

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Influence of Rolling at Low Temperatures on the Mechanical Properties of Austenitic Steels

graphed in Fig 1 for the steel 1Kh18N9T, and in Fig 2 the influence is graphed of the reduction at 20°C on the ductility for specimens tested at -183° and +100°C respectively. The authors arrive at the following conclusions: 1) Rolling in the cold state of austenitic steels for the purpose of improving the strength is more effective if it is carried out at sub-zero temperatures; in that case the strength characteristics will be 20 - 30% higher and the ductility will be the same, as in the case of ordinary rolling. 2) At low temperatures austenitic steels have good plastic properties (δ and Ψ_p), irrespective of the degree of preliminary work hardening, at above freezing-point temperatures. 3) For work hardening of austenitic steel components operating at below freezing-point temperatures it is advisable to cold-work them at above freezing-point temperatures; such cold-working will bring about only an insignificant reduction in the plastic properties of the material at

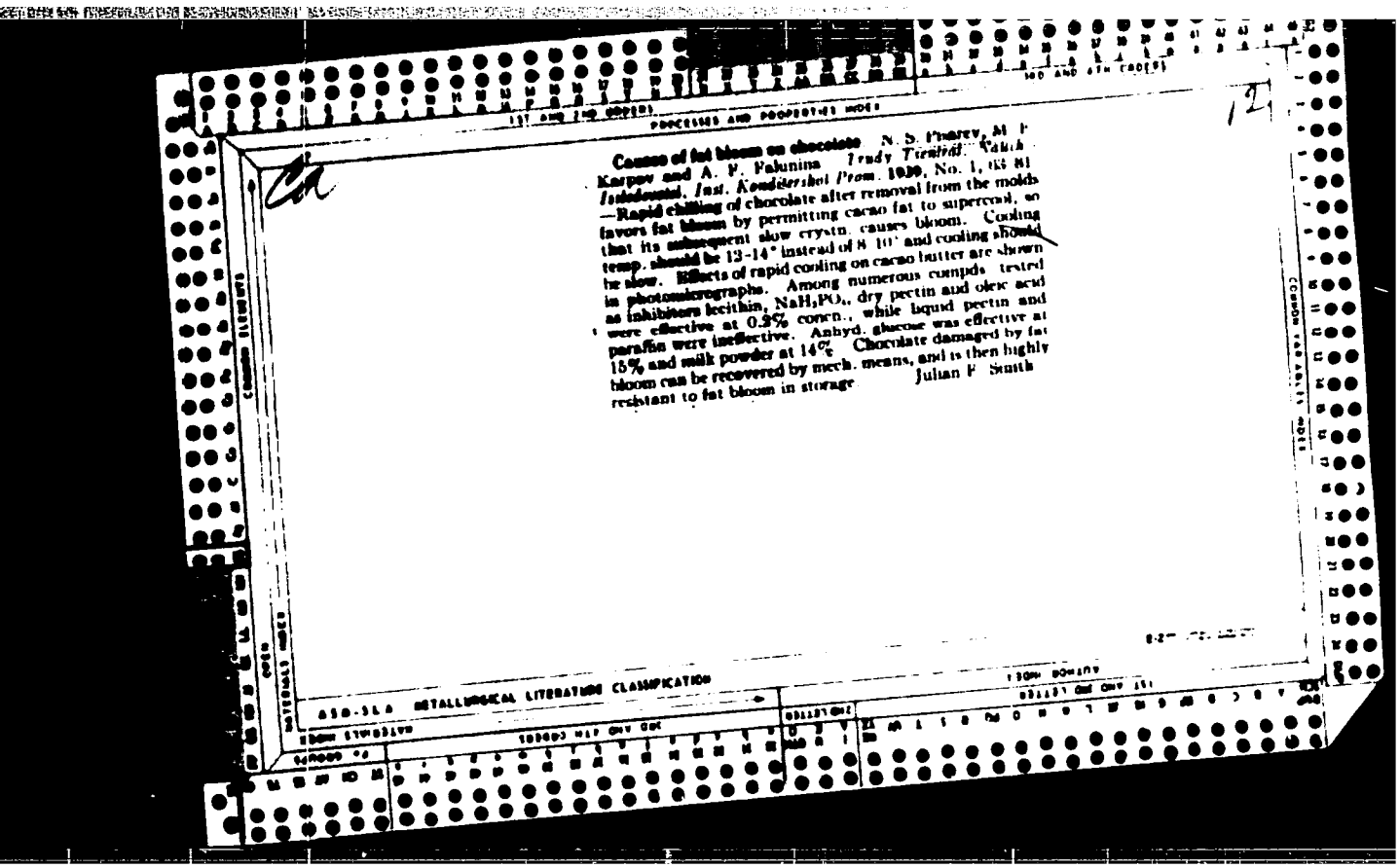
Card 2/3 low temperatures. 4) The effectiveness of shaping by pressure of austenitic steels at low temperatures is the

SOV/129-59-4-4/17

Influence of Rolling at Low Temperatures on the Mechanical Properties of Austenitic Steels

same irrespective of whether the material has or has not been cold-worked before. 5) Plastic deformation at low temperatures is accompanied by formation of martensite along three planes of an octahedron. Formation of martensite at room temperature during the process of plastic deformation is observed predominantly in a single crystallographic direction.
There are 3 figures and 3 references, of which 2 are Soviet and 1 English.

Card 3/3



Causes of fat bloom on chocolate N. S. Pinaev, M. F. Karpov and A. F. Fakunina *Trudy Tsentral. Nauch.-Issledovatel. Inst. Konditerskoi Prom.* 1939, No. 1, 65-81 —Rapid chilling of chocolate after removal from the molds favors fat bloom by permitting cacao fat to supercool, so that its subsequent slow crystn. causes bloom. Cooling temp. should be 13-14° instead of 8-10° and cooling should be slow. Effects of rapid cooling on cacao butter are shown in photomicrographs. Among numerous compds. tested as inhibitors lecithin, NaH_2PO_4, dry pectin and oleic acid were effective at 0.5% concn., while liquid pectin and paraffin were ineffective. Anhyd. glucose was effective at 15% and milk powder at 14%. Chocolate damaged by fat bloom can be recovered by mech. means, and is then highly resistant to fat bloom in storage Julian F. Smith

MELIK-PASHAYEV, Nersess Ivanovich, dotsent, kand.tekhn.nauk, inzhener-podpolkovnik; PISAREV, M.S., inzhener-polkovnik zapasa, red.; STRKL'NIKOVA, M.A., tekhn.red.

[Liquid-fuel rocket engine] Zhidkostnyi reaktivnyi dvigatel'. Moskva, Voen.izd-vo M-va obor.SSSR, 1959. 141 p. (MIRA 12:12)
(Airplanes--Rocket engines)
(Rockets (Aeronautics)--Engines)

ROZENOVICH, Yevgeniy Vasil'yevich, inzhener-polkovnik; GRACHEV, V.V., inzhener-polkovnik, red.; PISAREV, M.S., inzhener-polkovnik, red.; SOKOLOVA, G.F., tekhn.red.

[Aviation fuels, oils, greases and special liquids; textbook for engineers and technicians of the air force] Aviatsionnye topliva, masla, smazki i spetsial'nye zhidkosti; posobie dlia inzhenerno-tekhnicheskogo sostava VVS. Pod red. V.V.Gracheva. Moskva, Voen. izd-vo M-va obor. SSSR, 1956. 195 p. (MIRA 11:6)
(Airplanes--Equipment and supplies)
(Fuels) (Lubrication and lubricants)

TATARCHENKO, Aleksandr Yevgen'yevich; PISAREV, M.S., redaktor; MYASNIKOVA, T.F., tekhnicheskiy redaktor

[Helicopter] Vertolet. Moskva, Voen.izd-vo Ministerstva obor. SSSR, 1955. 148 p. [Microfilm] (MLRA 9:1)
(Helicopters)

PISAREV, M.S.

KAZANDZHAN, P.K.; ALEKSEYEV, L.P.; GOVOROV, A.N.; KONOVALOV, N.Ye.; NECHAYEV, Yu.N.; PAVLENKO, V.F.; FEDOROV, R.M.; PISAREV, M.S., inzhener-polkovnik redaktor; KUZ'MIN, I.F., tekhnicheskiy redaktor

[Theory of jet engines] Teoriia reaktivnykh dvigatelei. Moskva, Voen. izd-vo Ministerstva oborony SSSR, 1955. 295 p. (MLRA 9:3)
(Jet propulsion)

VINOGRADOV, Rostislav Ivanovich; MIKAYEV, Aleksey Vasil'yevich; PISAREV, M.S., inzhener-polkovnik, redaktor; SOLOMONIK, R.L., tekhnicheskiy redaktor.

[Brief study of the development of airplanes in the U.S.S.R.] Kratkii ocherk razvitiia samoletov v SSSR. Moskva, Voen. izd-vo Ministerstva oborony SSSR, 1956. 254 p. (MLRA 9:5)
(Aeronautics--History)

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Vinogradov, Rostislav Ivanovich, and Minayev, Aleksey Vasil'yevich

Kratkiy ocherk razvitiya samoletov v SSSR (Brief Outline of Aircraft Development in the USSR) Moscow, Voyen. izd-vo Min-va obor. SSSR, 1956. 254 p. No. of copies printed not given.

Ed.: Pisarev, M.S., Engineer-Colonel; Tech. Ed.: Solomonik, R.L.

PURPOSE: The book is intended for students at aeronautical engineering schools and for the flying and technical personnel of the Air Force and the All-Union Voluntary Society for the Promotion of the Army, Aviation, and Navy.

COVERAGE: The book contains a historical outline on the development of Russian aircraft, beginning with A.F. Mozhayskiy's plane and embracing contemporary high-speed jet aircraft. It was compiled from archive material; part of it was published before in magazines, part is published for the first time. No personalities are mentioned. There are 51 references, of which 50 are Soviet and 1 German.

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AVAILABLE: Library of Congress

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PISAREVA, N. A. (Kursk)

Change in the functional state of the thyroid gland as a manifestation of the general radiation reaction in the treatment of cancer of the cervix uteri. Med. rad. no.4:79-80 '62.
(MIRA 15:6)

(UTERUS—CANCER) (THYROID GLAND)
(IODINE—ISOTOPES)

SOV/124-58-10-11243

Translation from Referativnyy zhurnal Mekhanika 1958 Nr 10 p 78 (USSR)

AUTHOR Pisarev N M

TITLE Diametrically Antisymmetric Convection With Heat Losses in a Vertical Tube of Circular Cross Section (Diametral'no antisimmetrichnaya konvektsiya v vertikal'noy trube krugovogo secheniya s teplopoteryami)

PERIODICAL Tr Ural'skogo politekhn in-ta 1957, Nr 72 pp 214-224

ABSTRACT An approximate solution is given for the problem specified in the title

G A Tirskiy

Card 1/1

PISAREV, V.M.

Heat losses by axisymmetric convection in a vertical pipe. Trudy Ural. politekh. inst. no.72:225-232 '57. (MIRA 11:4)
(Heat--Convection)

BEREZIN, N.; PISAREV, N.; POTEMKIN, V.; TSEREVITINOV G.

"Fishery products" by V.I.Vzorov. Reviewed by N.Berezin and others
Sov.torg. 35 no.4:37-38 Ap '62. (MIRA 15:4)
(Fishery products) (Vzorov, V.I.)

SOV 124-58-[illegible]1249

Translation from Referativnyy zhurnal Mekhanika, 1958, Nr [illegible] p 85 (USSR)

AUTHOR Pisarev, N.M

TITLE Determination of the Diffusion Rate Through the Walls of an Elongated Cylinder With Noncoaxial Surfaces (Opredelenive skorost[illegible] diffuzii cherez stenki dlinnogo tsilindra s nekoaksial'nymi poverkhnostyami)

PERIODICAL Tr Ural skogo politekhn in-ta, 1957, Nr 72 pp 233-236

ABSTRACT If the axes of the outer and the inner surfaces of the walls of a cylinder are displaced with respect to one another by a distance h, then the diffusion rate of a gas through the cylinder walls is given by the formula

$$M = 2D\,l\,(c_2 - c_1)\int_0^{\pi} \frac{d\varphi}{\log_e (R/R_1)}$$

$$R = \sqrt{R_2^2 - h^2 \sin^2\varphi} + h\cos\varphi$$

Card 1/2

Determination of the Diffusion Rate Through the Walls (cont.)

where R_1 and R_2 are the radii of the inner and outer surfaces of the cylinder respectively, c_1 and c_2 are the respective concentrations of gas within and without the cylinder, D is the diffusion coefficient, and l is the length of the cylinder. When $h \ll R_1$, R_2, the following expression is obtained

$$M = 2D\pi l(c_2 - c_1) \log_e \frac{R_2}{R_1} = (\frac{h}{R_2})^2 \cdot 12$$

A.S. Mo[illegible]

Card 2/2

L 323-64 EWP(q)/EWT(m)/EWP(b)/BDS AFFTC/ASD JD/MLK(a)
ACCESSION NR: AP3008372 S/0286/63/000/014/0021/0021

AUTHOR: Pisarev, N. M.; Kozhin, V. M.

TITLE: Free cutting stainless steel. Class 18, No. 155813

SOURCE: Byulleten' izobret. i tovarn. znakov, no. 14, 1963, 21

TOPIC TAGS: free cutting stainless steel, free machining stainless steel, corrosion resistant steel, free machining steel, molybdenum sulfur phosphorus stainless steel.

ABSTRACT: A patent has been issued for a free machining stainless steel containing 0.35—0.45% C, 16—18% Cr, 1.5—2.5% Ni, 0.7—1.2% Mn, and up to 0.5% Si. To improve mechanical and corrosion properties 0.7—0.9% Mo, 0.15—0.2% S, and 0.08—0.15% P are added.

ASSOCIATION: none

SUBMITTED: 18May62 DATE ACQ: 29Oct63 ENCL: 00

SUB CODE: ML NO REF SOV: 000 OTHER: 000

Card 1/1

3/[illegible]
A[illegible]/A0[illegible]

AUTHOR: Pisarev, N. M.

TITLE: [illegible] parallelepiped and [illegible]

PERIODICAL: Izvestiya vysshikh [illegible]/ Chernaya metallurgiya, No. [illegible], [illegible]

TEXT: High hydrogen [illegible] cause premature failure, and different methods are used for decreasing the hydrogen content in billets. One of these consists in holding samples at a certain temperature in a medium where the partial pressure of hydrogen is infinitesimal. The holding time is usually determined empirically. A theoretical solution is suggested for two samples (Figure 1). The time t_1 during which the hydrogen content at a point P in the parallelepiped specimen will be reduced n times from the value C_0 that it had at the moment t_0 is calculated, assuming that at the moment t_0 hydrogen content is constant at all points [illegible] and zero in all points determined by the [illegible]

Card 1/[illegible]

S/148/60/000/011/004/0..
A161/A030

Determining the hydrogen content ...

... The concentration is determined as the function of coordinates and time using the equation ... from Ref. ... ("Nauchnyye trudy Dnepropetrovskogo metallurgicheskogo instituta" "Proceedings of the Dnepropetrovsk Metallurgical Institute") ... :

$$\frac{\partial C}{\partial t} = D\left(\frac{\partial^2 C}{\partial x^2} + \frac{\partial^2 C}{\partial y^2} + \frac{\partial^2 C}{\partial z^2}\right);$$

the general solution of which is

$$C_t = \ldots \sum e^{\ldots} A_i \ldots \frac{\ldots}{a} + \sum e^{\ldots} B_i \sin \frac{\ldots}{b} \ldots$$

$$\ldots \sum e^{\ldots} E_i \sin \frac{\ldots}{\ldots}$$

This equation is transformed, and the solution is found for the center of a parallelepiped shaped steel specimen with ... mm, ... mm and

Card ...

Determining the hydrogen content ...

[illegible] 200 cm in 650°C. The result is [illegible] $4.5 \cdot 10^{6}$ sec. [illegible] 40.5 days. For points with coordinates [illegible] and [illegible] it is 35 and [illegible] days respectively. For the cylindrical specimen with radius R and length [illegible], the equation [illegible] cylindrical coordinates and has the form

[illegible]

($\xi = \frac{r}{R}$ [illegible] dimensionless radial coordinate; [illegible] the azimuth; [illegible] the vertical coordinate), and the general [illegible]

[illegible]

where D [illegible] diffusion factor; [illegible]

Card [illegible]

S/148/60/000/011/004/017
A161/A030

Determining the hydrogen content ....

Bessel function of zero order, and the factors A_1 and B_n are to be found using the Fourier-Bessel method. Calculated for a practical example of a cylinder with 50 cm radius, 1 m length and D = $1 \cdot 10^{-4}$ cm²/sec, the hydrogen concentration in the center will decrease three times in 100 days. Consequently, the elimination of gas from billets of such size at 650°C is a long process. But for a parallelepiped of 1 cm thickness (and same length and width) the time for reducing the hydrogen content in the mid would be 1.5 hours, and for a specimen 2 cm deep it would be only 3 hours. This means that billets could possibly be produced with holding in the vacuum. There are 1 figure and 3 Soviet references.

ASSOCIATION: Ural'skiy lesotekhnicheskiy institut (Ural Institute of Wood Chemistry)

SUBMITTED: March 10, 1960

Card 4/5

PISAREV, Nikolay Semenovich, prof.; LYUBARSKIY, L.N., prof., red.; RUDCHENKO, A.M., red.; YERKHOVA, Ye.A., tekhn. red.

[Laboratory manual for the study of marketing]Laboratornyi praktikum po tovarovedeniiu. Moskva, No.4.[Grain examination]Issledovanie zerna. Pod red. L.N.Liubarskogo. 1962. 97 p. (MIRA 16:3)

1. Moscow. Institut mezhdunarodnykh otnosheniy.
(Grain--Analysis and chemistry)

PISAREV, N.S.

Improving the quality of oat products ("Tolokno" and "Gerkules") by applying the processes of saccharization in the production methods. N. S. Pisarev and G. S. Korobkina (Nutrition Inst., Acad. Med. Sci. U.S.S.R., Moscow). *Voprosy Pitaniya* 15, No. 5, 48–52(1956).—Oat products, "Tolokno" (oatmeal) (I) and "Gerkules" (oat flocks) (II), contain about 14–15% protein, 6.5–7.5% fat, 0.2–0.4% sol. substances, and 0.9–2% reducing substances (mainly maltose). The products obtained from normal technological processing acquire a bitter taste after 3–6 months' storage owing to fat oxidation. The results indicate that addns. of the prepns. from germinated seeds of oat or barley to raw oat material used for the production of I and II greatly improved the storage life and organoleptic qualities of the finished products. The prepns. from the germinated seeds, contg. 14–16% dry substance and highly active diastase, were added to cooked oat raw products contg. added H_2O and the mixt. was held for a few hrs. at 50–55° for saccharization. Further technological steps include drying, milling, sifting, and (or) rolling (for II). The final products obtained by the technological processing described here contain about 25% sol. substances (of which 20% are reducing sugars), are characterized by a superior taste and flavor after cooking, and can be stored for 12 months without developing the undesirable bitter taste. The germinated seeds contain active antioxidants. Control and exptl. samples of I and II stored at 40° for 270 days were examd. each 15 days

2

Med

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PISAREV, N.S.; KOROBKINA, G.S.

for peroxide no. (those stored at 18-20° each 30-45 days); in all instances the shapes of the curves are analogous (first increase and then decrease with time); however, the max. peroxide no. (at 40°) of 0.8 was reached in the case of the control after [illegible] days, while the exptl. required [illegible] days' storage to reach this value. Suggestions are given for the industrial production of the [illegible] I and II. E. W.

2/2

PISAREV, N.S.; KOROBKINA, O.S.

Improvement in the quality of oat products (fine and coarse rolled oats) by means of saccharification during production. Vop.pit. 15 no.5:48-53 S-O '56. (MLRA 9:11)

1. Iz otdela pishchevoy tekhnologii (zav. - kandidat tekhnicheskikh nauk S.M.Bessonov) Instituta pitaniya AMN SSSR, Moskva.
(GRAIN,
oatmeal, saccharification (Rus))

PISAREV, Nikolay [illegible]ovich, prof.; KAZAKOV, Ye.D., prof., red.; LEVCHUK, K.V., red.izd-va; PAVLOVSKIY, A.A., tekhn.red.

[Study of commercial products and foodstuffs] Tovarovedenie promyshlennykh i prodovol'stvennykh tovarov. Moskva, Vneshtorgizdat. Vol.3. [Foodstuffs] Pishchevye tovary. 1959. 366 p. (MIRA 12:10)

(Food industry)

PISAREV, O.I. [Pisariev, O.I.]

Using the RSP-8 grain harvester with two pickups. Mekh. sel'. hosp. [9] no.5:12-13 My '58. (MIRA 11:6)

1.Golovnii inzhener Pershoi Odes'koi mashinno-traktornoi stantsii.
(Harvesting machinery)

L 8163-66 EWA(c)/EWT(1)/EWT(m)/ETC/EWG(m)/T/EWP(t)/SWP(z)/JD/AT
ACCESSION NR: AP5019891 UR/0181/65/007/008/2556/2558

AUTHOR: Pisarev, R. V.; Smolenskiy, G. A.

TITLE: Estimate of the exchange interaction of the Mn^{2+} ion in the excited state in MnO

SOURCE: Fizika tverdogo tela, v. 7, no. 8, 1965, 2556-2558

TOPIC TAGS: absorption line, line shift, line splitting, manganese compound, excited state, single crystal

ABSTRACT: The magnitude of the exchange interaction was estimated by determining the shift of the absorption line on going through the magnetic-order temperature, using for this purpose the Mn^{2+} ion in the state $^4A_{1g} + {}^4E_g(^4G)$. The single crystals of MnO were obtained by transport reaction and deposition on MgO [(100) plane]. The optical-spectrum was investigated with a double monochromator (DMR-4) at temperatures (77 and 295K) both above and below the magnetic-ordering temperature T_N = 116K. The measured spectrum is shown in Fig. 1 of the Enclosure, in the region of the transition $^6A_{1g} \rightarrow {}^4A_{1g} + {}^4E_g$. It is concluded from an analysis of the re-

Card 1/3

L 8163-66

ACCESSION NR: AP5019891

3

sult that the effective exchange field acting on the Mn^{2+} ion in the excited state is approximately half the exchange field acting on Mn^{2+} on the ground state. This is deduced from the values of the splitting between the neighboring spin sublevels of the two states, which are 50 and 90 cm^{-1}, respectively. "The authors thank Ya. M. Kesmdzov for supplying the MnO single crystals." Orig. art. has: 2 figures.

44153

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

SUBMITTED: 03Apr65 ENC: 01 SUB CODE: SS

NR REF SOV: 001 OTHER: 006

Card 2/3

L 8163-66

ACCESSION NR: AP5019891

ENCLOSURE: 01

0

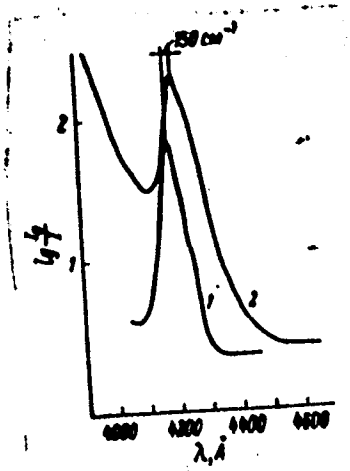


Fig. 1. Absorption spectrum in the region of the transition $^6A_{1g} \rightarrow {}^4A_{1g} + {}^4E_g$ at 77 (1) and 295K (2).

jw

Card 3/3

AGEYEV, A.N.; VENETSKAYA, M.M.; ZABLOTSKIY, G.A.; MYL'NIKOVA, I.Ye.; PISAREV, R.V.; PROSKURYAKOV, O.B.

Study of single crystals of ferrites-garnets with vanadium. Fiz. tver. tela 7 no.9:2853-2856 S '65. (MIRA 18:10)

1. Institut poluprovodnikov AN SSSR, Leningrad.

L 9246-66 EWT(l)/EWP(e)/EWT(m)/T/EWP(t)/EWP(b)/EWA(c) IJP(c) JD/JG/GG/WH

ACC NR: AP5022740 SOURCE CODE: UR/0181/65/007/009/2853/2856

AUTHOR: Asgerov, A. N.; Vynotskaya, N. N.; Zablotskiy, G. A.; Myl'nikova, I. Ye.; Pisarev, R. V.; Proskuryakov, O. B.

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

TITLE: Investigation of ferrite-garnet single crystals with vanadium

SOURCE: Fizika tverdogo tela, v. 7, no. 9, 1965, 2853-2856

TOPIC TAGS: single crystal, vanadium, garnet, ferrite, absorption spectrum

ABSTRACT: Some data are given from preliminary studies on single crystals of garnets which contain vanadium ions. Specimens of $(Bi_{3-2x}Ca_{2x})$ $[Fe_2]$ $(Fe_{3-x}V_x)O_{12}$ single crystals were grown, using Bi_2O_3, Fe_2O_3, V_2O_5 and $CaCO_3$ as initial components. The best crystals were those with $x = 1.33$ and dimensions of 5-7 mm. Measurements of magnetization from room temperature to the Curie point show that the composition of the synthesized crystals corresponds to that of the initial charge. Curves are given for $2AM$ as a function of temperature along crystallographic axes [111], [110] and [100] in plane (110) for a garnet crystal with $x = 1.33$. Spectral studies of thin plates (about 5 μ) show an absorption maximum at about 0.87 μ and a second weaker maximum at about 0.69 μ, with transparency in the visible and infrared regions. The

Card 1/2

L 9246-66

ACC NR: AP5022740

6

authors are grateful to G. A. Smolenskiy and A. G. Gurevich for directing the work.
Orig. art. has: 2 figures, 1 table.

SUB CODE: 20,07/ SUBM DATE: 09Apr65/ ORIG REF: 002/ OTH REF: 007

Card 2/2 pw

L 23028-66 EWT(1)/EWT(m)/T IJP(c) JD/HW

ACC NR: AP6009660 SOURCE CODE: UR/0181/66/008/003/0783/0787

AUTHORS: Pisarev, R. V.; Belyayeva, A. I.; Syrnikov, P. P.

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

TITLE: Structure of energy levels and exchange interaction of Co^{2+} ions in $NaCoF_3$

SOURCE: Fizika tverdogo tela, v. 8, no. 3, 1966, 783-787

TOPIC TAGS: energy band structure, cobalt compound, single crystal, light absorption, optic transition, line shift

ABSTRACT: The authors investigated the spectrum of optical absorption of $NaCoF_3$ in the interval from 5,000 to 30,000 cm^{-1} (2 -- 0.33 μ). The single crystals were obtained by chemical reaction of NaCl with CoF_2. The experiments were made in tightly sealed platinum crucibles. The absorption spectra were investigated in the ultraviolet and

Card 1/2

L 23028-66
ACC NR: AP6009660

visible regions using diffraction spectrographs (DFS-8 and DFS-12) and a double prism monochromator (DMR-4). The measurements were made at 4.2, 20.4 -- 60, 77, and 295K. The observed absorption bands are identified with transitions inside the 3d electron shell of the Co^{2+} ion in a cubic crystalline field. It is shown that near 35K one of the absorption lines is strongly shifted, owing to the transition of the $NaCoF_2$ into a magnetically-ordered state. It is observed that at low temperatures the state $^2E(^2H)$ splits into two lines ($\Delta\nu = 36$ cm^{-1}), one of which disappears when the temperature is raised to 60K. The possibility that this splitting is due to exchange interaction between the paramagnetic ions is discussed, although the data obtained so far do not prove this completely. The authors thank G. A. Smolenskiy for interest in the work and a discussion of the results, V. V. Yeremenko for a discussion of the results, and E. V. Matyushkin for help with the measurements. Orig. art. has: 4 figures, 2 formulas and 1 table.

SUB CODE: 20/ SUBM DATE: 24Jul65/ ORIG REF: 002/ OTH REF: 005

Card 2/2 KC

L 24379-66 EWT(m) JD/HW

ACC NR: AP6009702 SOURCE CODE: UR/0181/66/008/003/0975/0977

AUTHOR: Pisarev, R. V.; Prokhorova, S. D.; Syrnikov, P. P.

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

TITLE: Changes in the intensity of the electronic transitions of the Mn^{2+} and Ni^{2+} ions in the antiferromagnet $NaNi_{0.96}Mn_{0.04}F_3$

SOURCE: Fizika tverdogo tela, v. 8, no. 3, 1966, 975-977

TOPIC TAGS: antiferromagnetic material, manganese, nickel, light absorption, electron transition, absorption spectrum, line intensity, spectral line

ABSTRACT: The authors report on an investigation of the intensity of the electronic transitions of both Mn^{2+} and Ni^{2+} in the antiferromagnets $NaNiF_3$ and $NaNi_{0.96}Mn_{0.04}F_3$, by measuring the optical absorption in a broad spectral interval, making it possible to draw certain definite conclusions concerning the growth of the transition intensity. The absorption spectra were investigated photmetrically with a double prism monochromator (DMR-4). The results (Fig. 1) show the effect of a mutual influence of the Mn^{2+} and Ni^{2+} ions, resulting in an increase in the intensity of certain absorption lines of these ions. The greatest interaction was observed in those regions of the spectrum where both ions have closely lying levels, provided that the symmetry principles impose no limitations on the possible interaction. It is concluded that the greatest role in the observed intensification of the spectral-line intensity is probably played by exchange interaction between 3d-ions. The transitions responsible for

Card 1/2

ACC NR: AP6009702

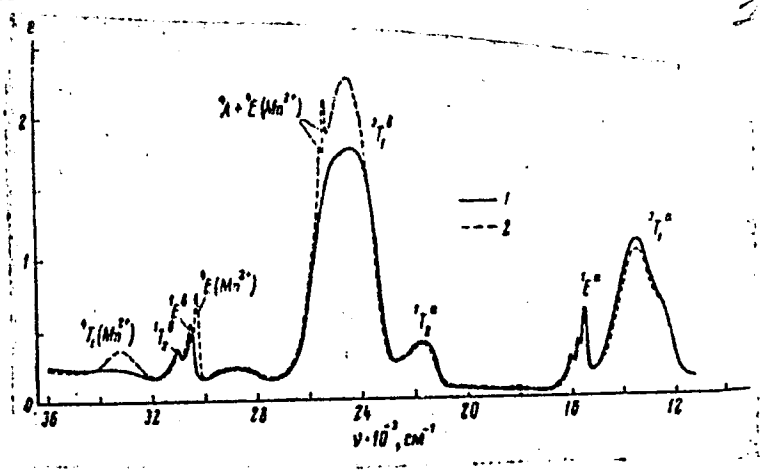


Fig. 1. Absorption spectrum of single crystals of $NaNiF_3$ (1) and $NaNi_{0.92}Mn_{0.04}F_3$ (2) at 77K. ε -- coefficient of molecular extinction

the different spectral lines are briefly analyzed and the absorption spectra evaluated and compared with other data. The authors thank G. A. Smolenskiy for interest in the work and valuable remarks, and P. V. Usachev for a chemical analysis of the crystals. Orig. art. has: 1 figure and 1 table.

SUB CODE: 07 / SUBM DATE: 21Oct65/ OTH REF: 002

Card 2/2 ULR

PISAREV, P.V.; SMOLENSKIY, G.A.

Estimation of exchange interaction for Mn^{2+} ions in the excited state in MnO. Fiz. tver. tela 7 n.8:2556-2558 Ag '65. (MIRA 18:9)

1. Institut poluprovodnikov AN SSSR, Leningrad.

L 15363-66 EWT(l)/EWT(m)/T/EWP(t)/EWP(b) IJP(c) JD/GG
ACC NR: AP6000198 SOURCE CODE: UR/0056/65/049/005/1445/1449

AUTHOR: Pisarev, R. V.

52
1/9
B

ORG: Institute of Semiconductors, Academy of Sciences SSSR (Institut poluprovodnikov Akademii nauk SSSR)

TITLE: Temperature dependence of optical absorption in the antiferromagnet NaNiF3

21,44,55 21,44,55

SOURCE: Zhurnal eksperimental'noy i teoreticheskoy fiziki, v. 49, no. 5, 1965, 1445-1449

TOPIC TAGS: antiferromagnetic material, sodium compound, line splitting, absorption line, spin orbit interaction, temperature dependence, single crystal growth

ABSTRACT: In view of the unusual nature and anamalous temperature dependence of the splitting of the $^3A_{2g} \rightarrow {}^1E_g$ transition, the author investigated the splitting, the position, and the intensity of this transition in the antiferromagnet $NaNiF_3$ (Neel temperature 149K) in the

Card 1/3

2

temperature range from 77 to 295K. The single crystal was grown from a melt of NaCl and NiF_2. The optical absorption was measured with a double-prism monochromator (VMR-4) with average resolution 15 cm^{-1}, and the crystal was mounted in a metal vacuum cryostat. The absorption line corresponding to the electron transition from the ground state $^3A_{2g}$ of the Ni^{2+} ion to the excited state ^1E_g was found to shift towards higher frequencies with decreasing temperature. The total shift amounted to 230 cm^{-1} and was greatest in the temperature range from 120 to 180K. The change is attributed mostly to the variation in the lattice parameter with changing temperature and to the fact that the crystal goes over into a magnetically ordered state at the Neel temperature. The anomalous change in the dependence of the intensity of the transition on the temperature is attributed to spin-orbit interaction between the states ^1E_g and $^3T_{1g}$. The complex shape of the line, characterized by a series of maxima of decreasing intensity, is interpreted as a result of electronic-vibrational interac-

L 15365-66

ACC NR: AP6000198

3

tions. Author thanks Professor G. A. Smolenskiy for directing this investigation and valuable comments, and P. P. Syrnikov for supplying the single crystals. Orig. art. has: 4 figures, 1 formula, and 2 tables.

SUB CODE: 20/ SUBM DATE: 18Jun65/ ORIG REF: 002/ OTH REF: 009

Card 3/3 BC

L 1305-66 EWT(l)/EWT(m)/EPF(c)/EWP(t)/EWP(b) IJP(c) JD/JW

ACCESSION NR: AP5012546 UR/0181/65/007/005/1382/1388

AUTHOR: Pisarev, R. V. 44,55

TITLE: Optical absorption spectrum of the antiferromagnet $NaNiF_3$ 21,44,55

SOURCE: Fizika tverdogo tela, v. 7, no. 5, 1965, 1382-1388

TOPIC TAGS: light absorption, absorption spectrum, antiferromagnetic material, excited state, spin orbit coupling

ABSTRACT: The author investigated the absorption spectra of the Ni^{2+} ion in $NaNiF_3$ in the wavelength range from 0.35 to 2 μ at 77 and 295K. The $NaNiF_3$ single crystals were grown from a melt of NaCl and NiF_2. The absorption spectra were observed with a DMR-4 double monochromator with two glass prisms. The light receivers were photomultipliers and a vacuum PbS. The light was modulated at 1000 cps. The spectrum disclosed absorption bands corresponding to transitions from the ground level $^3A_{2g}$ to the excited states $^3T_{2g}$, $^3T_{1g}^A$, ^1E_g, $^1T_{2g}$, and $^3T_{1g}^b$. The parameters of the crystal field (10 dq = 7610 cm^{-1}) and the Racah parameters (B = 940 and C = 4160 cm^{-1}) were determined. The energy levels calculated from these parameters, neglecting spin-orbit interaction, agree well with the observed transition energy. A complex splitting of the ^1E_g was observed at 77K and cannot be fully attributed to exchange interaction of the Ni^{2+} below the Neel temperature. "The author thanks

Card 1/2

L 1305-66

ACCESSION NR: AP5012546

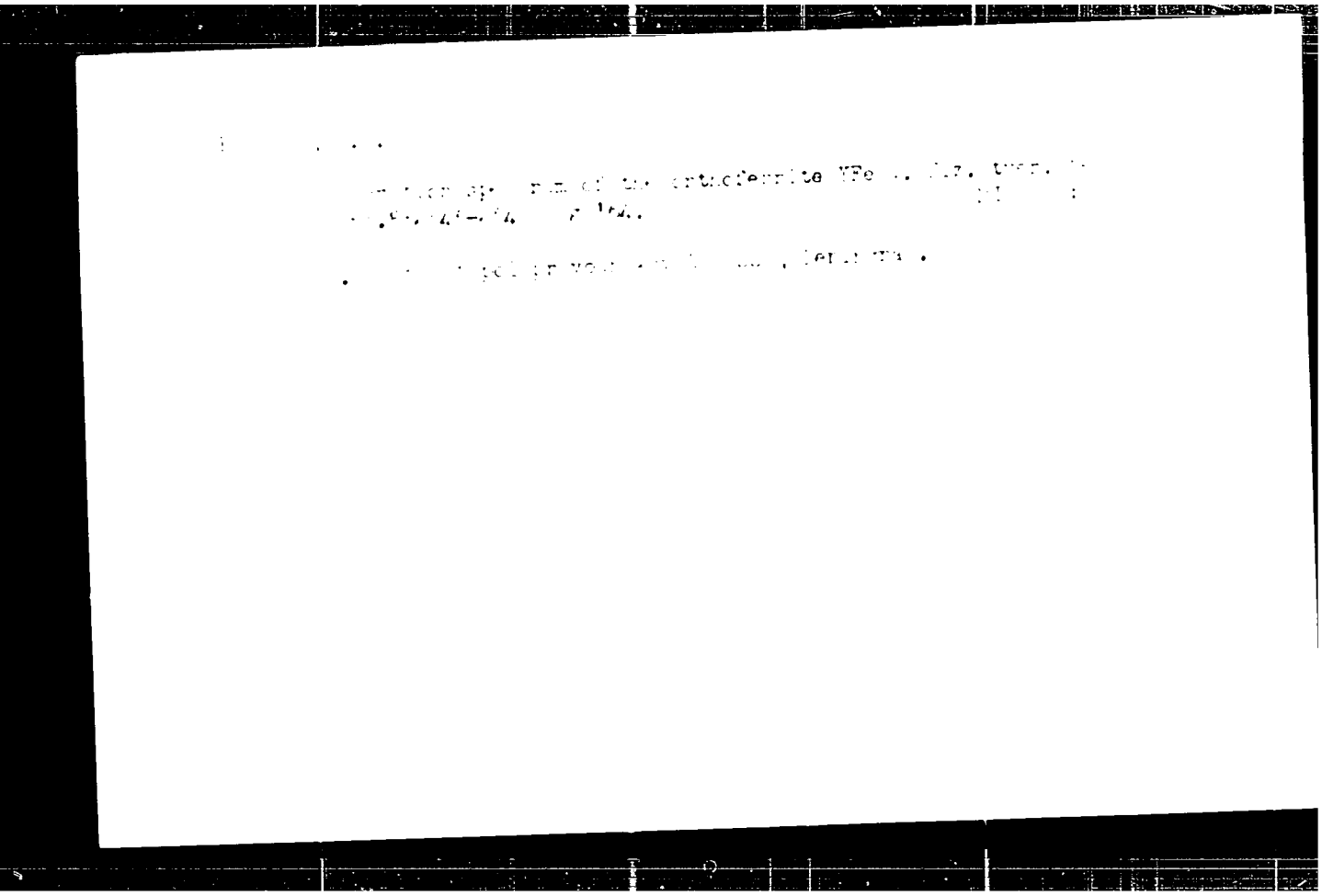
G. A. Smolenskiy for interest in the work and important remarks, and P. P. Syrnikov for supplying the single crystals." Orig. art. has: 5 figures and 2 tables.

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

SUBMITTED: 13Nov64 ENCL: 00 SUB CODE: SS, OP

NR REF SOV: 000 OTHER: 013

Card 2/2



S/0181/75/007/001/0207/0209

[illegible] Absorption Spectra of the Fe^{3+} ion in $FeFe_{0.5}Nb_{0.5}O_3$ and in $Ga_{2-x}Fe_xO_3$

[illegible] Fizika tverdogo tela, v. 17, no. 1, 1975, 207-209

[illegible] antiferromagnetism, ferrimagnetism, iron ion, absorption spectrum, magnetic ordering, crystal field

The absorption spectrum was investigated by means of a double monochromator (DMR-4) with two glass prisms. The light was modulated at a frequency of 1,000 cps. The light receiver comprised FEU-27 and FEU-22 photomultipliers and a PbS vacuum photoresistance. The transparency of the samples was determined by comparing the intensity of the light after passage through two calibrated apertures, on one of which was placed a plate of the investigated crystal. The observed absorption bands are identified with transition in an Fe^{3+} ion in octahedral coordination. A shift was observed in the absorption bands in $FeFe_{0.5}Nb_{0.5}O_3$ on going through the Neel temperature (143K), and is attributed to

Card 1/2

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[redacted] the magnetically ordered state, no strong influence of the crystalline field on the energy levels of the Fe^{3+}, which would be expected from magnetic measurements, was observed in $Ga_{2-x}Fe_xO_3$. The measurements do indicate, however, that the energy levels of Fe^{3+} in this compound are the same as in other iron compounds, and that the crystalline field is not strong. "The author thanks Professor [illegible] A. Smolenskiy for interest in the work and for a review of the manuscript, I. Ye. Mykl'nikova and L.V. Zarubskaya for supplying the single crystals, S. A. Kizhayev for the magnetic measurements, and N. N. Parfenova for a chemical analysis of the samples." Orig. art. has: 4 figures and 1 table.

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

[redacted] SUBM DATE: [illegible] 00 SUB CODE: SS, OP

NR REF SOV: 003 OTHER: 006

PISAREV, R.V.

Optical absorption spectrum of the antiferromagnet $NaNiF_3$. Fiz. tver. tela 7 no.5:1382-1388 My '65. (MIRA 18:5)

1. Institut poluprovodnikov AN SSSR, Leningrad.

ACCESSION NR: AP4043395 S/0181/64/006/008/2545/2547

AUTHOR: Pisarev, R. V.

TITLE: Absorption spectrum of orthoferrite $YFeO_3$

SOURCE: Fizika tverdogo tela, v. 6, no. 8, 1964, 2545-2547

TOPIC TAGS: ir absorption spectrum, orthoferrite, single crystal, yttrium iron garnet, yttrium compound, ytterbium compound, dipole transition

ABSTRACT: The author investigated the absorption spectrum of orthoferrite $YFeO_3$ in the wavelength interval from 0.5 to 2 microns. The single crystals of $YFeO_3$ were grown from a melt of PbO and oxides Fe_2O_3 and Y_2O_3. The polished crystals measured approximately 2 x 2 mm and were 95 microns thick. The monochromatic radiation came from a DMR-4 double monochromator with two glass prisms, having a

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dispersion 50 Å/mm in the 0.5 μ region. The light receivers were photomultipliers and a vacuum PbS photoresistance. The light was modulated at 200 cps and the signal from the receiver was amplified with a narrow band amplifier. The results obtained agree well with the data on ytterbium orthoferrite, but are shifted somewhat towards the long-wave region compared with yttrium garnet. The strong absorption observed in the vicinity of 0.5 μ is attributed to a transition from the ground level $^6A_{1g}(^6S)$ of the Fe^{3+} ion to the $^4T_{1g}(^4P)$ state, but the absence of such absorption in yttrium-gallium garnet doped with iron makes it necessary to reject this assumption. Another possibility could be a dipole transition from the 2p-band of O^{2-} to the 3d band of Fe^{3+}. Observation of photoconductivity in the 0.5 μ region would be a confirmation of this fact.

"The author is sincerely grateful to Professor G. A. Smolenskiy for interest in the work and for a review of the manuscript, and also

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to I. Ye. My*l'nikova and P. P. Sy*rnikov for supplying the single crystal yttrium orthoferrite." Orig. art. has: 2 figures.

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

SUBMITTED: 21Mar64 ENCL: 01

SUB CODE: SS NR REF SOV: 000 OTHER: 011

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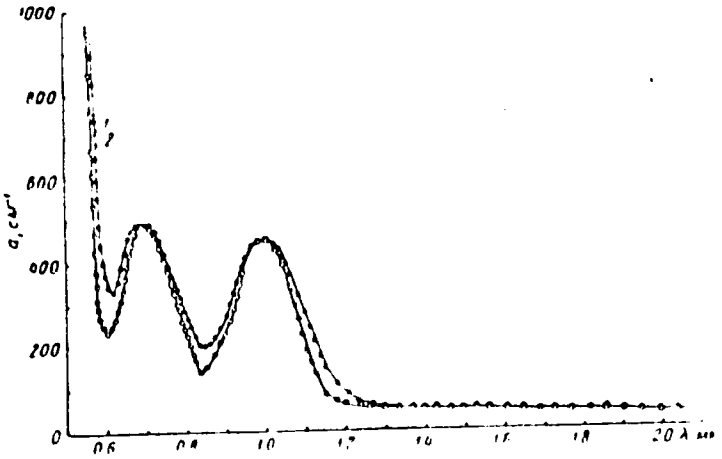
ACCESSION NR: AP4043395 ENCLOSURE: 01



Dependence of the absorption coefficient of orthoferrite $YFeO_3$ on the wavelength. 1 - 77°K, 2 - 295°K

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L 04140-67 EWT(1)/EWT(m)/T/EWP(t)/ETI IJP(c) JD/JW/HW/JG/AT
ACC NR: AP6026673 SOURCE CODE: UR/0181/66/008/008/2300/2306

AUTHOR: Pisarev, R. V.

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

TITLE: Electron structure of Ni^{2+} in hexagonal $RbNiF_3$

SOURCE: Fizika tverdogo tela, v. 8, no. 8, 1966, 2300-2306

TOPIC TAGS: electron structure, electron spin, crystal absorption, crystal optic property, single crystal structure, NICKEL, ABSORPTION LINE

ABSTRACT: The optical absorption of hexagonal $RbNiF_3$ single crystals is studied, with the aid of a DMR-4 double prism monochromator, at 77 and 295K and wavelengths from 0.24 to 2μ. The monochromator employed quartz prisms in the UV region and glass prisms in the visible and near IR regions of the spectrum. The mean spectral resolution of the device was 15 cm^{-1}. Transitions are observed from the principal state $^3A_2$ of the Ni^{2+} ion to excited levels $^3T_2$, $^3T_1^a$, $^1E^a$, $^1T_2^a$, $^3T_1^b$, $^1T_1$, $^1E^b$, and $^1T_2^b$. The structure of some of the absorption lines, in particular of the $^3T_1^a$, $^1E^a$, and $^1E^b$ lines, indicates that noncubic distortions of $RbNiF_3$ play a significant part in band splitting. A detailed analysis of the transition $^3A_2 \rightarrow {}^1E^b$ in $RbNiF_3$, and a comparison with both the analogous transition $^3A_2 \rightarrow {}^1E^b$ in the UV region

and the corresponding transitions in $NaNiF_3$ and $KNiF_3$ crystals show that splitting of the $^1E^a$ state is apparently caused by spin-orbital interaction of the $^1E^a$ and $^3T^a$ states, rather than by exchange interaction of paramagnetic ions below T_N. An observed increase in intensity of the $^3A_2 \rightarrow {}^1E^b$ transition with decreasing temperature is seen to contradict the concept of an electron-vibrational mechanism of this transition. The author is indebted to G. A. Smolenskiy for constant attention to the work and important comments on the manuscript, P. P. Syrnikov for providing the single crystals, and S. D. Prokhorova for making some of the measurements. Orig. art. has: 5 figures and 2 tables.

SUB CODE: 20/ SUBM DATE: 20Nov65/ ORIG REF: 002/ OTH REF: 010

ACC NR: AP7007624 SOURCE CODE: UR/0386/67/005/003/0096/0099

AUTHOR: Pisarev, R. V.; Siniy, I. G.; Smolenskiy, G. A.

ORG: Institute of Semiconductors, Academy of Sciences, SSSR (Institut poluprovodnikov Akademii nauk SSSR)

TITLE: Anomalous dispersion of the Faraday effect in ferrimagnetic $RbNiF_3$

SOURCE: Zhurnal eksperimental'noy i teoreticheskoy fiziki. Pis'ma v redaktsiyu. Prilozheniye, v. 5, no. 3, 1967, 96-99

TOPIC TAGS: rubidium compound, Faraday effect, light dispersion, ferrimagnetic material, laser modulation, gas laser, ruby laser, light polarization

ABSTRACT: The authors investigated the Faraday effect in $RbNiF_3$ in the wavelength interval from 0.35 to 1.1 μ and observed a strong spectral dependence of the rotation of the plane of polarization of the light. The investigated sample was a plate 0.6 mm thick perpendicular to the hexagonal axis. The measurements were made in magnetic fields up to 16.5 kOe at 77 and 295K. The results show that the Faraday rotation reverses sign several times and its magnitude changes greatly in the investigated spectral interval. This complicated behavior is explained by examining the connection between the rotation and the absorption, and the experimentally observed strong sensitivity of the Faraday effect to the absorption lines and their fine structure. It is shown that this sensitivity can yield important additional information on the electronic structure of paramagnetic ions in crystals. In regions where there are no ab-

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ACC NR: AP7007629

sorption bands, the rotation is connected essentially with the ferrimagnetic moment of the crystal and therefore depends little on the wavelength. At 295K, the paramagnetic rotation of the plane of light polarization was 0.06 - 0.08 min/cm-Oe and depended little on the wavelength. The results show that the strong rotation of the plane of polarization can make $RbNiF_3$ useful for the modulation of light at the wavelengths of argon and neodymium lasers, where it is transparent, and also for helium-neon and ruby lasers, where its absorption is slight. It can also be used effectively at infrared wavelengths up to 11 μ, at which it is transparent. The authors thank P. P. Syrnikov for growing the single crystals. Orig. art. has: 2 figures.

SUB CODE: 20/ SUBM DATE: 11Nov66/ ORIG REF: 002/ OTH REF: 005

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APPROVED FOR RELEASE: 07/13/2001 CIA-RDP86-00513R001341020017-2"

ACC NR: AP7005318 SOURCE CODE: UR/0181/67/009/001/0021/0026

AUTHOR: Nesterova, N. N.; Siniy, I. G.; Pisarev, R. V.; Syrnikov, P. P.

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

TITLE: Infrared absorption spectrum of the antiferromagnets $NaCoF_3$, $KCoF_3$, and $RbCoF_3$

SOURCE: Fizika tverdogo tela, v. 9, no. 1, 1967, 21-26

TOPIC TAGS: antiferromagnetic material, ir spectrum, absorption spectrum, absorption edge, spin orbit coupling

ABSTRACT: The authors investigated the optical absorption of these antiferromagnets (with perovskite structure) in the region 750 - 2000 cm^{-1} at 77 and 295K. One of the purposes of the investigation was to determine the influence of the exchange interaction and to obtain a clear cut spectrum. The single crystals were grown from the melt and the absorption spectra were measured with an IKS-21 spectrometer. All the compounds exhibited an absorption band near 1200 cm^{-1} and weak bands at the absorption edge of the lattice. The 1200 cm^{-1} band is identified with the $\Gamma_8 \rightarrow \Gamma_7$ transition between the split levels of the orbital triplet. When the temperature is decreased from 295 to 77K, an increase of 40 cm^{-1} in the half-width of this absorption band is observed in $KCoF_3$, and decreases of 55 and 20 cm^{-1} are observed in the half-widths of the absorption bands in $RbCoF_3$ and $NaCoF_3$. The results show that the spin-

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ACC NR: AP7005318

orbit interaction constant does not depend on the crystalline field. The authors thank G. A. Smolenskiy for continuous interest in the work and a discussion of the results and S. D. Prokhorova for many measurements. Orig. art. has: 4 figures, 2 formulas, and 2 tables.

SUB CODE: 20/ SUBM DATE: 16Apr66/ ORIG REF: 004/ OTH REF: 010

Card 2/2

P

85-8-2/18

AUTHORS: Pisarevskiy P., Pisarev, P., Shcherbak, A., Malyshkov, V.

TITLE: Please, Mother Country, Accept the Gifts Your Winged Sons Offer You on the Great Anniversary (Primi, otchizna, v chest' velikoy daty podarki ot synov tvoikh krylatykh)

PERIODICAL: Kryl'ya Rodiny, 1957, Nr 8, pp. 2-3 (USSR)

ABSTRACT: The article consists of four signed letters from various parts of the USSR, and one unsigned reporter's note from Moscow, all glorifying various recent achievements of the local sport organizations. The only information of possible value is contained in the letter from Leningrad: Students A. Avilov, M. Korsakov, and O. Alekseyev, and Aspirant V. Bokiya, of the Institute for Building Aviation Instruments (Institut aviatsionnogo priborostriyeniya), are said to be working on a system of small-size radio equipment for remote multiple simultaneous control of aircraft models; crystal triodes are used. According to the author of the letter, the construction of the equipment is almost finished. The letter from Khabarovsk, signed by P. Pisarevskiy, a

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Please, Mother Country, Accept the Gifts Your Winged Sons (Cont.)

in the Methodology of Training at the Young Technicians Center of the Kabardino-Balkar ASSR, extolls the success of a competition of high school students of the Republic in aircraft model building. One photo. The unsigned reporter's note from Moscow relates a record glider flight accomplished by A.Teplykh, Pilot-Instructor in Gliding at the Central DOSAAF School for Gliding and Helicopter Sports. The pilot is said to have covered 310 km in 7 hours of uninterrupted flight. The flight has assertedly been attempted to celebrate the 40th anniversary of the October Revolution. One photo.

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PISAREV, S.; KIPROV, D.

Role of the stimulation of pharyngeal and articular receptors on the appearance of experimental myocarditis and arthritis. Suvrem med., Sofia no.7-8:20-26 '60.

1. Iz Katedrata po patofiziologiia pri VMI, Sofiia (Rukov. na katedrata prof. St.Pisarev)

(PHARYNX physiol)
(ARTHRITIS exper)
(MYOCARDITIS exper)
(JOINTS physiol)

PISAREV, St.; NEDEVA, V.

Significance of sensitization and desensitization in the pathogenesis and course of experimental arthritis and myocarditis. Suvrem med., Sofia no.9:73-79 '60.

1. Iz Katedrata po patofiziologiia pri VMI, Sofiia (Rukov. na katedrata prof. St. Pisarev)

(ARTHRITIS exper.)
(MYOCARDITIS exper.)
(ALLERGY exper.)

L 33506-66

ACC NR: AP6023497 SOURCE CODE: BU/0016/65/000/007/0400/0405

AUTHOR: Pisarev, S.--Pissarev, S. (Professor); Milanov, S.; Marinov, Kn.--Marinov, K.; Zherev, S.--Jerev, S.

ORG: Department of Pathological Physiology/headed by Prof. S. Pisarev/, Medical College, Sofia (Katedra po patologichna fiziologiya pri VMI)

TITLE: Experimental studies on etiology and pathogenesis of rheumatoid diseases 22

SOURCE: Suvremenna meditsina, no. 7, 1965, 400-405

TOPIC TAGS: pathogenesis, rat, tissue disease, bacteriology, medical research

ABSTRACT: Comparison of 3 models of rheumatic fever including one developed by authors and involving 3 s.c. injections of 0.2 ml / kg of 24-hour culture of β hemolytic Streptococcus A over 14 days with induced permanent irritation of pharyngeal receptors, with submucosal injection of 2% formaldehyde in rats. Based on tabulated lab data and discussion, this model is considered closest to the clinical type. Orig. art. has: 3 figures and 1 table. [Based on authors' Eng. abst.] [JPRS]

SUB CODE: 06 / SUBM DATE: 00Jan65 / ORIG REF: 006 / SOV REF: 00[illegible]

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