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ACCESSION NR: AP4042116

of nitrogen in niobium, the mixture of α- and β-phases, and pure niobium have hole-type conductivity the proportion of which decreases with increasing nitrogen content. At a nitrogen content of 27.3 at%, the alloy conductivity is predominantly of the electron type; only in the region of δ' + δ phases does hole-type conductivity become again predominant. The composition dependence of resistivity and of the Hall constant is rather complicated (See Fig. 2 of the Enclosure). The composition dependence of density, thermal emf, and heat conductivity were also determined. Orig. art. has: 4 figures, and 1 table.

ASSOCIATION: Institut metallokeramiki i spetssplavov AN USSR (Institute of Powder Metallurgy and Special Alloys, AN USSR); Khersonskiy pedagogicheskiy institut (Kherson Pedagogic Institute)

SUBMITTED: 05Jul63 ATD PRESS: 3068 ENCL: 01

SUB CODE: IC, MM NO REF SOV: 004 OTHER: 004

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ACCESSION NR: AP4042116

ENCLOSURE: 01

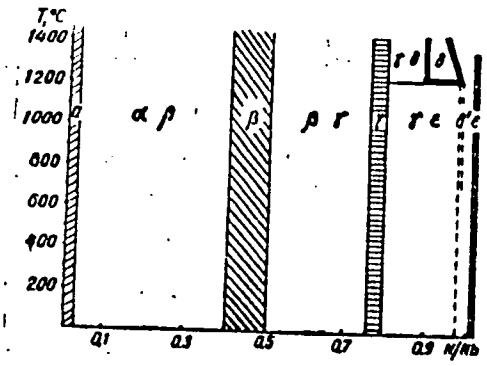

Fig. 1. Phase diagram of the niobium-nitrogen system

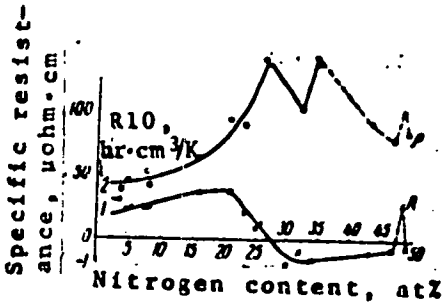

Fig. 2. Composition dependence of resistivity and Hall constant of niobium-nitrogen alloys

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"APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001136510009-5

ACCESSION NR: AP4042211 S/0020/64/157/002/0408/0411

AUTHOR: L'vov, S. N.; Nemchenko, V. F.; Kosolapova, T. Ya.; Samsonov, G. V.

TITLE: Physical properties of titanium carbide in the homogeneity region

SOURCE: AN SSSR. Doklady*, v. 157, no. 2, 1964, 408-411

TOPIC TAGS: titanium carbide, carbon deficient titanium carbide, titanium carbide electrical property, titanium carbide electric conductivity, titanium carbide semiconducting property

ABSTRACT: An investigation has been made in the 20—1200C range of the time dependence of the specific resistivity and the coefficient of thermal emf of titanium carbide with a stoichiometric composition and also of carbon-deficient compositions, $TiC_{0.50}$ (87.3% Ti, 12.47% C_{fix}), $TiC_{0.72}$ (84.3% Ti, 15.3% C_{fix}), $TiC_{0.81}$ (82.4% Ti, 17.1% C_{fix}), and $TiC_{0.988}$ (79.8% Ti, 19.6% C_{fix}, 0.4% free C). The Hall coefficient and magnetic susceptibility have also been measured at room temperature. The specific resistivity at room temperature was found to decrease from 174 to 52.2 ohm·cm as the titanium carbide approached

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the stoichiometric composition. The Hall coefficient increased from $-4.0 \cdot 10^4$ to $+6.7 \pm 0.2 \cdot 10^4$ $cm^3 \cdot coul$. The Hall coefficient and thermal emf, which varied from -7.7 ± 0.2 to $+12.5 \pm 0.2$ μv/degC, were both of the same sign and changed analogously with increasing carbon content. The magnetic susceptibility per unit mass, varying from $3.0 \pm 0.1 \cdot 10^{-6}$ to $3.22 \pm 0.36 \cdot 10^{-6}$, remained almost unchanged and practically equal to that of pure titanium, i.e., $3.2 \cdot 10^{-6}$. The charge carrier mobility increased quite sharply from 2.3 to 12.8 $cm^3/v \cdot sec$ as the titanium approached the stoichiometric composition. The negative values of the Hall coefficient and thermal emf indicate a predominantly electron conductivity in the entire homogeneity portion of the carbide studied. The relative contribution of electrons to electric conductivity increased on approaching the stoichiometric composition, with a particularly sharp increase in the region of 46—50 atZC. The increasing electric conductivity with increased carbon content observed can be explained by the higher mobility of conductivity electrons. The experimental data show the metallic nature of the electric conductivity of titanium carbide with stoichiometric and nonstoichiometric compositions in

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ACCESSION NR: AP4042211

the entire temperature range investigated. The data indicate no possibility of the appearance of semiconductor-type conductivity in the titanium carbide investigated. Orig. art. has: 4 figures and 1 table.

ASSOCIATION: Institut problem materialovedeniya Akademii nauk UkrSSR (Institute of Problems in the Science of Materials, Academy of Sciences, UkrSSR); Khersonskiy pedagogicheskiy institut imeni N. K. Krupskoy (Kherson Pedagogic Institute)

SUBMITTED: 06Mar64 ATD PRESS: 3073 ENCL: 00

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"APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001136510009-5

L 29603-66 EWT(m)/ETC(f)/EWP(e)/EWP(t)/ETI IJP(c) AT/WH/JD/JG/GD
ACC NR: AT6013556 (A) SOURCE CODE: UR/0000/65/000/000/0100/0107

AUTHOR: L'vov, S. N.; Nemchenko, V. F.

ORG: Kherson Pedagogical Institute (Khersonskiy pedagogicheskiy institut im. N. K. Krupskoy)

46
B+1

TITLE: Temperature dependence of thermal emf and the specific resistance of titanium, vanadium, and chromium and their borides, carbides, and nitrides

SOURCE: AN UkrSSR. Institut problem materialovedeniya. Vysokotemperaturnyye neorganicheskiye soyedineniya (High temperature inorganic compounds). Kiev, Naukova dumka, 1965, 100-107

TOPIC TAGS: thermal emf, titanium, vanadium, chromium, boride, carbide, nitride

ABSTRACT: The temperature dependence of thermal emf and specific resistance of Ti, TiB_2, TiC, TiN, V, VB_2, VN, VC, Cr, Cr_4B_2, CrB_2, $Cr_{23}C_6$, Cr_7B_3, Cr_3B_2, Cr_2N, Cr_3C_2, and CrN were investigated in the 20°-1200°C range. The pure metals were over 99.9% pure. The specific resistance (ρ) and the coefficient of thermal emf (E_T) were measured in a special vacuum furnace ($2\cdot10^{-4}$-$8\cdot10^{-5}$ mm Hg). The temperature dependence of ρ for Ti- and V borides, carbides and nitrides and Ti and V, and Cr and its

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borides is given. Data are also given on the temperature dependence of ρ and of the coefficient of thermoelectromotive force (E_T) for chromium nitrides and the temperature dependence of E_T for Cr, Ti, and V and their borides, carbides, and nitrides. Orig. art. has: 6 figures and 2 tables.

SUB CODE: 07/ SUBM DATE: 03Jul65/ ORIG REF: 012/ OTH REF: 002

Card 2/2

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"APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001136510009-5

L 31874-66 EWT(m)/EWP(w)/T/EWP(t)/ETI IJP(c) GD/JD/WH
ACC NR: AT6013561 (A) SOURCE CODE: UR/0000/65/000/000/0237/0242

AUTHOR: L'vov, S. N.; Nemchenko, V. F.; Kosolapova, T. Ya.; Samsonov, G. V.

ORG: Institute of Materials Science Problems AN UkrSSR (Institut problem materialovedeniya AN UkrSSR)

TITLE: Effect of carbon on physical properties of titanium carbide in the range of its homogeneity

SOURCE: AN UkrSSR. Institut problem materialovedeniya. Vysokotemperaturnyye neorganicheskiye soyedineniya (High temperature inorganic compounds). Kiev, Naukova dumka, 1965, 237-242

TOPIC TAGS: titanium, carbide, nonferrous metal, titanium compound

ABSTRACT: The effect of carbon content (from 18-50 atm % C) on specific resistance and temperature dependence of thermal electromotive force of titanium carbide was studied in the 20°-1200°C range. The Hall coefficient and magnetic susceptibility were also measured at room temperature. The object of the work was to verify data in the literature. The results of the work are summarized in figs. 1-4. Orig. art. has: 4 figures, 1 table.

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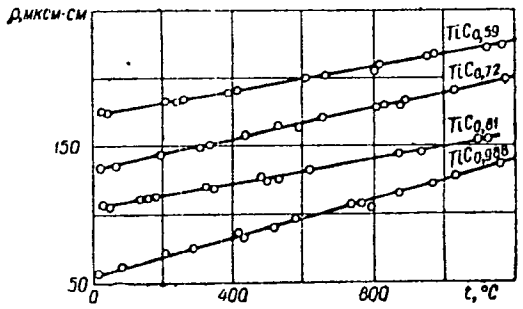

Fig. 1. Temperature dependence of specific resistance of titanium carbide.

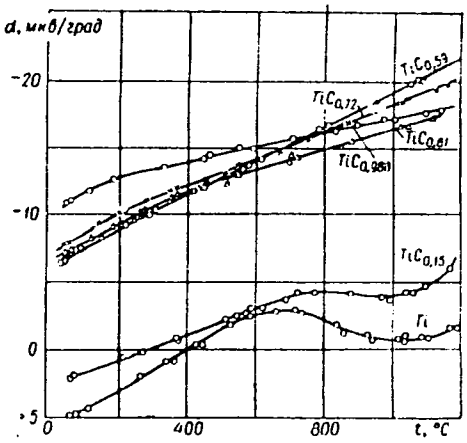

Fig. 2. Temperature dependence of the coefficient of thermal electromotive force of titanium and titanium carbide.

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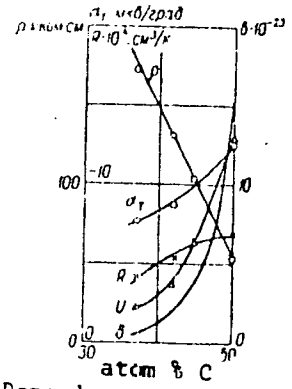

Fig. 3. Dependence of the specific resistance (G), the Hall coefficient (R), the thermal electromotive force (α_T) and the mobility of current carriers (u) and the difference $\delta = n_- u_-^2 - n_+ u_+^2$ on the carbon content in titanium carbide.

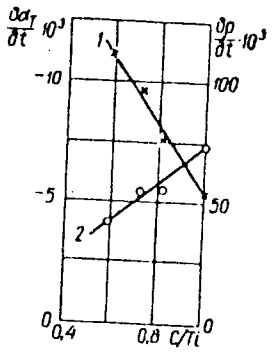

Fig. 4. The dependence of the slope of the ρ-temperature, line (1), and the α_T-temperature, line (2), upon carbon content in titanium carbide.

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Nemchenko, V.I.

3(7) PHASE I BOOK EXPLOITATION SOV/2131

Akademiya nauk SSSR. Morskoy gidrofizicheskiy institut

Termika morya. Khimiya morya (Thermal Regime of the Sea. Chemistry of the Sea) Moscow, AN SSSR, 1958. 145 p. (Series: Its: Trudy, tom 13) Errata slip inserted. 1,300 copies printed.

Resp. Ed.: A.G. Kolesnikov, Doctor of Physical and Mathematical Sciences; Ed. of Publishing House: L.K. Nikolayeva; Tech. Ed.: N.F. Yegorova.

PURPOSE: This collection of articles is intended for geophysicists, hydrophysicists, and oceanographers.

COVERAGE: These articles deal with problems in the physics and chemistry of sea water. Individual papers treat the turbulent thermal conductivity and heat exchange in sea water, the pulsations in air temperature, the salinity of the Black Sea, the determination of calcium, magnesium, and copper in sea water, and the determination of sodium in atmospheric precipitates. Figures, tables, and graphs accompany the articles. There are 121 references: 92 Soviet, 18 English, 8 German, 2 French, and 1 Swedish.

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"APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001136510009-5

SOV/169-59-7-7092

Translation from: Referativnyy zhurnal, Geofizika, 1959, Nr 7, p 88 (USSR)

AUTHOR: Nemchenko, V.I.

TITLE: The Thermobattery for Measuring the Temperature Fluctuations of the Air

PERIODICAL: Tr. Morsk. gidrofizich. in-ta AS USSR, 1958, Vol 13, pp 73-77

ABSTRACT: The manufacture of a differential thermobattery (TB) by the well-known galvanic method is described. The author proposes an original device for determining the time constant and estimating the TB-sensitivity; the functioning of the device is based on the principle of the adiabatic heating of an isolated gas volume being compressed instantaneously. The rapid compression of the gas volume, which is enclosed within a glass receiver having a volume of 350 cm^3 and sealed by a rubber diaphragm, is realized by a special striker hitting sharply against the diaphragm. A system of electric contacts record beginning and end of the stroke. The TB records the temperature increase. The POB-12 galvanometer oscillograph

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SOV/169-59-7-7092

The Thermobattery for Measuring the Temperature Fluctuations of the Air

registers the processes. Examples of oscillograms are added. Theoretical calculations of the sensitivity of the TB are carried out for comparing the theoretical and experimental data; the results of the comparison are tabulated. The author draws some practical conclusions on the reasonable selection of the parameters of the TB.

N.A. Panteleyev

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"APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001136510009-5

NEMCHENKO, V.I.

Device for recording the distribution of the seawater according to depth. Okeanologiia 2 no.4:727-730 '62. (MIRA 15:7)

1. Morskoy gidrofizicheskiy institut AN USSR.
(Ocean temperature)

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"APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001136510009-5

KORYAKIN, Sergey Fedorovich, kand. ekon. nauk, dots.; BERNSHTEYN, Iosif L'vovich, kand. ekon. nauk, dots.; Prinimal uchastiye: FILINSKIY, Yu.A., st. prep.; SHRABSHTEYN, Ye.A., dots., retsenzent; CHERKASOV-TSIMIZOV, A.A., st. prepod., retsenzent; FILYUKOV, M.A., st. prepod., retsenzent; MOZHAROV, N.D., kand. ekon. nauk, retsenzent; PAKAL'SKIY, I.I., kand. ekon. nauk, retsenzent; KLEMER, B.A., inzh., retsenzent; PETRUCHIK, V.A., kand. ekon. nauk, red.; GUBERMAN, A.L., kand. ekon. nauk, red.; RODIN, Ye.P., kand. ekon. nauk, red.; DUBCHAK, V.Kh., inzh., red.; MARTIROSOV, A.Ye., inzh., red.; PALYUSHKIN, V.A., inzh., red.; BELOV, M.I., doktor geogr. nauk, red.; SINITSYN, N.T., inzh., red.; KOLESNIKOV, V.G., kand. tekhn. nauk, red.; ZAMAKHOVSKIYA, A.G., kand. ekon. nauk, red.; KUZ'MIN, T.P., inzh., red.; NEMCHIKOV, V.I., kand. tekhn. nauk, red.; GEKHTBARG, Ye.A., inzh., red.; FILIPPOV, K.D., red.; KAUGLOVA, Ye.K., red.

[Economics of the merchant marine] Ekonomika morskogo transporta. Izd.2., perer. i dop. Moskva, Transport, 1964. 527 p. (MIRA 18:1)

APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001136510009-5"

"APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001136510009-5

NEMCHENKO, V.I.

Study of horizontal [illegible]ulent diffusion in the Atlan[illegible] [illegible]ean.
Okeanologiia 4 no.5 [illegible]-308 '64 (MIRA [illegible])

1. Morskoy gidrofizicheskiy institut AN UkrSSR.

APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001136510009-5"

"APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001136510009-5

KOLESOV, A.P. (Leningrad, K-9, Lesnoy prosp.,d.4, kv.78); NEMCHENKO,V.I.

Surgical treatment of mitral and tricuspid heart defects. Grud. khir. 5 no.1:34-40 Ja -F'63. (MIRA 16:7)

1. Iz khirurgicheskoy kliniki dlya usovershenstvovaniya vrachey No.1 (nachal'nik - desystvitel'nyy chlen AMN SSSR prof. P.A. Kupriyanov) Voyenno-meditsinskoy ordena Lenina akademii imeni Kirova.

(HEART—VALVES) (HEART—SURGERY)

APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001136510009-5"

"APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001136510009-5

NEMCHENKO, V.I. (Leningrad C-19, prospekt Obukhovskoy oborony, d.21, kv.2)

Open-heart surgical treatment of mitral insufficiency. Grud. khir. 5 no.5:103-109 S-O '63. (MIRA 17:8)

1. Iz kliniki khirurgii dlya usovershenstvovaniya vrachey No.1 (nachal'nik - deystvitel'nyy chlen AMN SSSR prof. P.A. Kupriyanov [deceased]) Voyenno-meditsinskoy ordena Lenina akademii imeni Kirova.

APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001136510009-5"

"APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001136510009-5

NEMCHENKO, V.I.; BONK, G.M.; DAVYDENKO, V.A.

Role of X-ray examination in the detection of mitral insufficiency. Khirurgiia no.10:8-15 '64. (MIRA 18:8)

1. Klinika khirurgii usovershenstvovaniya vrachey No.1 (nachal'nik - prof. A.P.Kolesov) Voyenno-meditsinskoy Ordena Lenina akademii imeni Kirova, Leningrad.

APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001136510009-5"

"APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001136510009-5

BLESTKINA, T.G., kand. med. nauk; NEMCHENKO, V.I.

Some problems of the diagnosis and surgical therapy of combined heart defects. Vest. khir. 94 no.2:22-27 F '65. (MIRA 18:5)

1. Iz 1-y khirurgicheskoy kliniki usovershenstvovaniya vrachey (nachal'nik - prof. P.A. Kupriyanov [deceased]) Voyenno-meditsinskoy ordena Lenina akademii imeni Kirova.

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"APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001136510009-5

S/185/62/007/003/013/015
D299/D301

24.7700

AUTHORS: L'vov, S.M., Nemchenko, V.P. and Samsonov, H.V.

TITLE: Electrical properties of titanium carbide-titanium nitride alloys

PERIODICAL: Ukrayins'kyy fizychnyy zhurnal, v. 7, no. 3, 1962, 331 - 334

TEXT: The resistivity ρ, Hall coefficient R, thermo e.m.f. τ and the thermal coefficient of resistivity α_0 of the system TiC-TiN, were measured. The study of the electrical properties of TiC-TiN alloys is important for ascertaining the influence (on these properties) of the relative concentration of C and Ni atoms (found in the same type of lattice) with different ionization-potential (11.24 and 14.51 ev., respectively). The alloys were prepared from powder mixtures, by hot pressing. The measurements were conducted by a method, given in the references. The obtained results are listed in 2 tables, together with the values of the effective concentrations n and the mobilities u, calculated by the pertinent formulas. The negative sign of the Hall coefficients and of the

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thermo e.m.f. shows that n-type conductivity prevails in the investigated alloys. Substitution of the C-atoms by Ni atoms is accompanied by a decrease in effective carrier concentration. The resistivity curve of the TiC-TiN alloys is non-monotonous, reaching its maximum at a concentration of 25 mol. % TiC (which is in agreement with theory). The increase in resistivity with TiC concentration, can be explained by the scattering of electrons by the carbon atoms, which can be regarded as impurity centers. This is confirmed by the concentration curve of [illegible]. The effective carrier-mobility in TiC is higher as compared to that in Ti, whereas the effective concentration is lower, owing to hybridization of 4s-electrons of Ti and 2p-electrins of C. The change in magnetic susceptibility follows that in carrier concentration. The conclusion is reached that (in the alloys under consideration), the principal carrier are the 4s-electrons of Ti with a small contribution by holes of the 3d-band in TiC, and a greater contribution of holes -- in TiN; the carbon and nitrogen are mainly acceptors of 4s-electrons. There are 2 figures, 1 table and 11 references: 9 Soviet-bloc and 2 non-Soviet-bloc.

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"APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001136510009-5

Electrical properties ... S/185/62/007/003/013/015
D299/D301

ASSOCIATIONS: Instytut metalokeramiky i spetsial'nykh splaviv AN URSR (Institute of Powder Metals and Special Alloys of the AS UkrRSR), Kyyiv; Khersons'kyy pedinstytut (Kherson Pedagogical Institute)

SUBMITTED: May 6, 1961

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"APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001136510009-5

L 00533-66 EWT(1)/EWP(e)/EWT(m)/EPF(c)/EWP(i)/EWG(m)/EWP(t)/EWP(b) IJP(c)
ACCESSION NR: AP5018640 JD/JG/AT/WH UR/0185/65/010/007/0805/0806

AUTHOR: L'vov, S. M.; Nemchenko, V. P.

TITLE: The Nernst-Ettingshausen effect in titanium, its diboride, carbide, and nitride

SOURCE: Ukrayins'kyy fizychnyy zhurnal, v. 10, no. 7, 1965, 805-806

TOPIC TAGS: Nernst effect, titanium, conduction electron, electron mobility, electron scattering, phonon scattering

ABSTRACT: The Nernst-Ettingshausen coefficient is obtained for titanium and its diboride, carbide, and nitride. The concentration of conduction electrons, the mobility, the Fermi energy, the effective mass of the electrons, and the relaxation time are determined for TiB_2 under the assumption of a spherical Fermi surface, a weak magnetic field, and under the assumption that one scattering mechanism predominates employing a one-zone model. The samples were rectangular in shape. A temperature gradient of 20--30 C/cm was maintained. The magnetic field in the gap was 12,000 Oe. The Nernst-Ettingshausen voltage was measured with a PPTN-1 potentiometer with an electrophotooptical amplifier. The experimental results lead to the following values for TiB_2: concentration of conduction electrons -- 3.5×10^{21} cm^{-3}, mobility -- 124 $cm^2/v\text{-}sec$, $r = -0.56$, Fermi energy -- 0.33 eV, effective mass -- 0.26 m_e, re-

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L 00533-66

ACCESSION NR: AP5018640

6

laxation time -- 1.8×10^{-14} sec. Thus the criteria of strong degeneracy of current carriers and the weakness of the magnetic field are well satisfied. The value of $r = -0.56$ is close to $r = -0.5$ for scattering by acoustic oscillations. The results obtained for TiB_2 are sensible and indicate that the initial assumptions are acceptable. "The authors express their gratitude to V. S. L'vov for participation in a discussion of the obtained results." Orig. art. has: 1 figure, 6 formulas, and 1 table.

ASSOCIATION: Khersons'kyy pedinstytut im. N. K. Krups'koyi [Khersonskiy pedagogicheskiy institut im. N. K. Krupskoy] (Kherson Pedagogical Institute)

SUBMITTED: 05Mar65 ENCL: 00 SUB CODE: SS

NR REF SOV: 005 OTHER: 000

Card 2/2

APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001136510009-5"

"APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001136510009-5

NEMCHENKO, V. S.

Nemchenko, V. S. -- "Mechanization of the Extraction of Coal in the Gently Sloping Strata of the Don Basin in the First Five-Year Plan (1928-1932)." Acad Sci USSR, Inst of the History of Natural Sciences and Engineering, Moscow, 1955 (Dissertation for the Degree of Candidate in Technical Sciences)

SO: Knizhnaya Letopis', No. 23, Moscow, Jun 55, pp 87-104

APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001136510009-5"

"APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001136510009-5

NEMCHENKO, V.V., inzhener-kapitan

Determination of damage to cable communication lines by means of the KP-50 apparatus. Vest. protivovozd. obor. no.8:55-61 Ag '61. (MIRA 14:8)
(Electric cables--Testing)

APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001136510009-5"

"APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001136510009-5

NEMCHENKO, V.V., inzh.; SEYVKOV, S.V., inzh.; [illegible], [illegible], inzh.

Burning of Nazarov coals in boiler systems with small evaporative capacity. Prom. energ. 19 no.12:22-23 [illegible] '64.

[illegible]

APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001136510009-5"

"APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001136510009-5

MEMCHENKO, Ye.G.

Device for the removal of turning plates. Energetik 2 no.6:15-16 Je '54.
(Furnaces) (MLRA 7:7)

APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001136510009-5"

"APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001136510009-5

MIMCHENKO, Ye.G., tekhnik.

Installation of a movable crane on top of a fuel conveyor gantry. Energetik 2 no.8:16 Ag '54. (MLRA 7:9)
(Cranes, derricks, etc.)

APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001136510009-5"

"APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001136510009-5

NEMCHENKO, Ye.G.

Painting insulated hot surfaces. Energetik 3 no.1:17 Ja '55.
(Painting, Structural) (MLRA 7:12)

APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001136510009-5"

"APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001136510009-5

NEMCHENKO, Ye.G.

Controlling the flushing of filters for chemical water purification. Energetik 3 no.3:16-17 Mr '55. (MLRA 8:2)
(Feed-water purification)

APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001136510009-5"

"APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001136510009-5

ZHEZHERIN, Vsevolod Petrovich; NIEMCHENKO, Ye.M.[Niemchenko, IE.M.], red.; MOYSEYENKO, A.G.[Moiseienko, A.H.], tekhn. red.

[Predatory birds of the Ukraine and their protection] Khyzhi ptakhy Ukrainy ta ikh okhorona. Kyiv, Derzh. uchbovo-pedagog. vyd-vo "Radians'ka shkola," 1961. 41 p. (MIRA 15:3)

(Ukraine—Birds of prey)

APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001136510009-5"

"APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001136510009-5

ACC NR: AT6008854

SOURCE CODE: UR/0000/65/000/000/0147/0156

AUTHOR: Konotop, V. V.; Gladkov, V. S.; Nemchenko, Yu. S.

ORG: none

TITLE: Investigation of the operation of a capacitor bank with stored energy of 625 kJ using a physical model

SOURCE: AN UkrSSR. Magnitnyye lovushki (Magnetic traps). Kiev, Naukova dumka, 1965, 147-156

TOPIC TAGS: electric network, test model, electric capacitor, differential equation

ABSTRACT: The authors describe a model constructed to simulate the low-inductance capacitor bank described in a companion paper (Acc. Nr. AT6008853). The equivalent circuit of the battery consisted of 99 reactive elements, so connected that the order of differential equations to be solved is reduced to 29. The purpose of the test was to check whether the capacitor bank is correctly connected (the switching elements installed in the proper places), to determine the voltages that can occur in the capacitor-bank elements during normal and emergency conditions, and to assess the effect of different lengths of the interconnecting cables on the operation of the bank. Low-voltage capacitors (KBG, KSO, and KTK) were used in the model. The coaxial cable was replaced by artificial lines with lumped constants. Tables showing the characteristics of the different circuits and oscillograms showing the results of simulated transient tests are presented. The emergency conditions simulated wre a short circuit

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ACC NR: AT6008854

of the load, a short circuit of the cable during the charging of the capacitor bank, and a short circuit of one capacitor at nominal charging voltage. The tests have shown that the increase in the current of individual capacitors occurring under the abnormal conditions does not exceed the safety factor incorporated in the design. Orig. art. has: 5 figures, 5 formulas, and 2 tables.

SUB CODE: 09/ SUBM DATE: 20Oct65

Card 2/2

APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001136510009-5"

"APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001136510009-5

86435

9.4160 (3201, 1003, 1137)

S/181/60/002/011/021/042
B006/B056

AUTHORS: Shul'man, A. R., Kapitsa, M. L., Nemchenok, R. L., and Zelenetskaya, Ye. V.

TITLE: Photoelectric Emission of the Systems W-BaO and W-Ba

PERIODICAL: Fizika tverdogo tela, 1960, Vol. 2, No. 11, pp. 2805-2812

TEXT: The authors' aim was a comprehensive investigation of the photoelectric properties of the W-BaO and W-Ba systems, a comparison of the properties of these two systems, and a study of the nature of the photoeffect of these systems. First of all, the measuring method is described, Fig. 1 gives a schematic representation of the device working in plane geometry. Figs. 2 and 3 show typical spectral characteristics of W-BaO systems. On the whole it could be observed that the quantum yield increases monotonically with the layer thickness. In the series of measurements illustrated in Fig. 3, however, this was not the case, which may be explained by the somewhat less favorable vacuum conditions. The work function of the tungsten backing (10 - 25μ) measured by the Fowler method was found to be 4.3 - 4.4 ev, whereas the Richardson method yielded a value of 4.5 - 4.6 ev. The yield curves were evaluated according to Fowler, and the

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Photoelectric Emission of the Systems W-BaO and W-Ba

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B006/B056

result (Fig. 4) is discussed. The spectral characteristics of the photoemission of the W-Ba system take a similar course as those of W-BaO. It is, however, partly smoother and without any noticeable connection between quantum yield and layer thickness. Figs. 5 and 6 show the characteristics; those shown in Fig. 6 were recorded at a much lower rate of sputtering. Fig. 7 shows the Fowler curves which take a similar course as those of the W-BaO system. Summing up: 1) An investigation was carried out of the change in the work function (Fig. 8 shows the work function as a function of the sputtering time on a cold backing) and of the quantum yield for a thickness from 0 to 3 - 10 monomolecular layers (Figs. 2-6). 2) The spectral characteristics of the photoeffect of W-Ba are largely monotonic up to a thickness of about 10 monomolecular layers, except for a thickness of about one layer, where the characteristic takes an anomalous course. 3) The spectral characteristics of the system W-BaO showed no peculiarities for a thickness of less than one monomolecular layer, and in photoemission the photoelectrons of the metal with reduced work function play the main part. 4) For BaO coatings on a W-base with a thickness of more than one monomolecular layer, the quantum yield curves show peculiarities which cannot be ascribed neither to the properties of the W-backing nor to BaO. Thus, BaO coatings of a thickness of one or several molecules

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Photoelectric Emission of the Systems W-BaO and W-Ba

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B006/B056

not only cause a decrease of the work function of the metal, but also change the emission mechanism. Yu. S. Vedula and V. M. Gavrilyuk are mentioned. There are 8 figures and 9 references: 5 Soviet, 2 US, 1 Japanese and 1 German.

ASSOCIATION: Politekhnicheskiy institut im. M. I. Kalinina Kafedra elektroniki Leningrad (Polytechnic Institute imeni M. I. Kalinin, Chair of Electronics, Leningrad)

SUBMITTED: July 1, 1960

Legend to Figs. 2, 5: The numbers of the curves denote the sputtering time. The higher the number, the longer the duration.
Legend to Fig. 8: 1) Source - barium beryllate, $5 \cdot 10^{-8}$ mm Hg; 2) the same source, $5 \cdot 10^{-9}$ mm Hg; 3) and 4) "Bati" source, $5 \cdot 10^{-9}$ mm Hg.

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"APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001136510009-5

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B006/B056

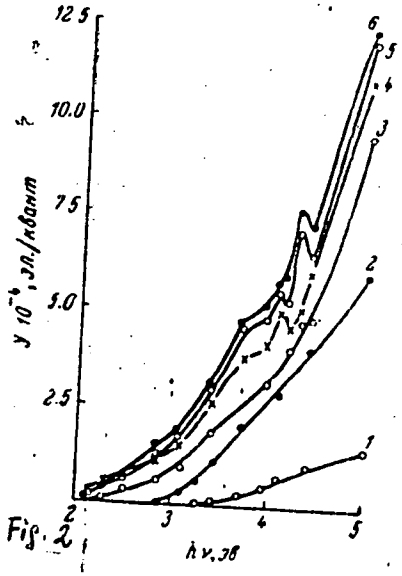

Fig. 2

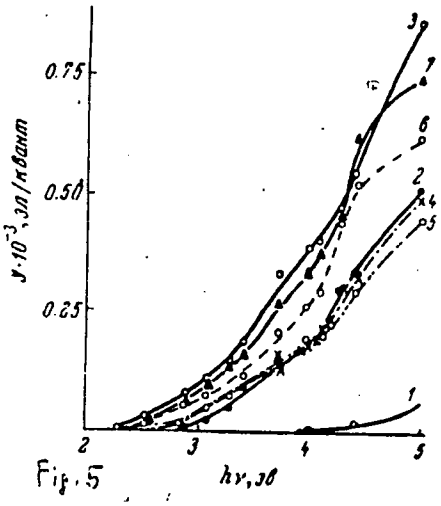

Fig. 5

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S/181/60/002/011/021/042
B006/B056

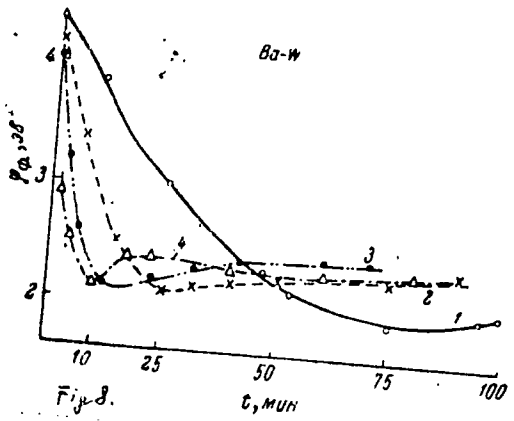

Fig. 8.

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"APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001136510009-5

30798
81/61/003/011/044/056
B104/B138

9.4175 (also 1163,1482)

AUTHORS: Kapitsa, M. L., Nemchenok, R. L., and Filippov, Yu. Ye.

TITLE: Spectral characteristics of the W-BaO system in polarized light

PERIODICAL: Fizika tverdogo tela, v. 3, no. 11, 1961, 3529-3531

TEXT: The photoactivity of the system W-BaO was measured in polarized light on barium oxide evaporated onto a tungsten film (99.95% W, 0.029% Mo), and the temperature time dependence of the spectral characteristics were determined. The specimens were heated to 1200°K and the measurements were made with a glass-prism monochromator with a dispersion of 2 to 6 mμ/mm at 2 to 3 ev. Light from a filament lamp was polarized by МИН-8 (MIN-8) filters. Light rays from the monochromator were directed onto the target of the vacuum tube at an angle of 45°. Vacuum pressure was not more than $5 \cdot 10^{-9}$ mm Hg. Distinct polarization selectivity was found for BaO films from 0.7 to about 4 monolayers thick. The quantum yield of the photocurrent in natural light is mainly determined essentially by the light

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Spectral characteristics of the W-BaO ... B104/B138

polarized in the plane of incidence. The polarization selectivity of BaO films of about 3 monolayers has a maximum around 3 ev, which shifts to about 2.6 ev after 2 min heating at 1200°K, when an increase in photo-activity is also observed. Longer heating causes "stabilization" of photo-activity (Fig. 2). The $\gamma_{\parallel}/\gamma_{\perp}$ ratio (where γ is the quantum yield) is greater than 3 and sometimes as much as 10. No explanation could be found for the spectra maxima of the quantum yield. They are assumed to be related to structural changes. Professor A. R. Shul'man is thanked for his interest. There are 2 figures and 4 Soviet references.

ASSOCIATION: Leningradskiy politekhnicheskiy institut im. M. I. Kalinina (Leningrad Polytechnic Institute imeni M. I. Kalinin)

SUBMITTED: July 6, 1961

Card 2/2

APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001136510009-5"

"APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001136510009-5

NEMCHENOK, R.L.; SHUL'MAN, A.R.

Photoelectric and optical properties of a gold-barium system.
Radiotekh. i elektron. 7 no.9:1619-1625 S '62. (MIRA 15:9)
(Gold) (Barium) (Cathodes)

APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001136510009-5"

"APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001136510009-5

NEMCHENOK, R.L.; SHUL'MAN, A.R.; GRISHIN, V.S.

Barium adsorption on a polycrystalline gold base layer. Fiz. tver. tela 5 no.12:3544-3548 D '63. (MIRA 17:2)

1. Politekhnicheskiy institut imeni M.I.Kalinina, Leningrad.

APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001136510009-5"

"APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001136510009-5

ACCESSION NR: AP4039680 S/0181/64/006/006/1854/1856

AUTHORS: Nemche*nok, R. L.; Prokof'yeva, K. Ye.

TITLE: Photo- and thermionic emission characteristics of the copper-barium system

SOURCE: Fizika tverdogo tela, v. 6, no. 6, 1964, 1854-1856

TOPIC TAGS: photoemission, thermionic emission, copper alloy, barium alloy, work function, quantum yield

ABSTRACT: The photo- and thermionic emission characteristics were investigated for the system $Cu_x - Ba_y$ where in the samples used $2 \leq x \leq 10$ and $y = 1$. The samples were prepared by evaporating a layer of copper onto a tungsten backing, followed by a layer of barium, or vice versa and then heating. The emission characteristics depend primarily on the deposition sequence of the components on the tungsten backing. The photoelectric work function for samples with barium on copper as a function of temperature remained fixed at ~ 2.6 ev up to 700K, went through a minimum reaching ~ 1.9 ev in the region 700-1100K, then rose roughly linearly to ~ 4.5 ev at ~ 2000K. At 800 and 1000K the thermal emission current was $1.5\text{-}2 \times 10^{-5}$ and 1.5×10^{-3} a/cm^2 respectively. These results were very

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ACCESSION NR: AP4039680

reproducible and were practically independent of the initial thickness of the barium layer. The spectral characteristics of the quantum yield were determined for samples with copper on barium as a function of the heat treatment. It was found that after heating the samples to 900K there was a definite stabilization of the spectral response level in the region $h\nu \simeq 3 - 5$ ev. From these measurements the surface photoelectric work function was 3.0 ev. The authors thank A. B. Shul'man for his interest in the work. Orig. art. has: 2 diagrams.

ASSOCIATION: Leningradskiy politekhnicheskiy institut im. M. I. Kalinina (Leningrad Polytechnic Institute)

SUBMITTED: 02Jan64 ENCL: 00

SUB CODE: MM, EM NO REF SOV: 005 OTHER: 000

Card 2/2

APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001136510009-5"

"APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001136510009-5

ACCESSION NR: AP4038633 S/0109/64/009/004/0761/0762

AUTHOR: Nemchenok, R. L.; Strakovskaya, S. Ye.

TITLE: Emission properties of the gold-barium system

SOURCE: Radiotekhnika i elektronika, v. 9, no. 4, 1964, 761-762

TOPIC TAGS: gold, barium, gold barium system, gold barium cathode emission, gold barium intermetallic compound, gold antiemission property, work function

ABSTRACT: The effect of the heating temperature on the thermionic and photoemission properties of the gold-barium system was investigated in order to obtain data on the antiemission properties of gold. The experimental technique was described elsewhere (A. R. Shul'man, M. L. Kapitza, R. L. Nemchenok, Ye. V. Zelenetskaya, Fizika tverdogo tela, 1960, v. 2, no. 11, 2805). The tests show that in the temperature interval 950-1200 K the evaporated substance is essentially gold. Starting with 1200 K, the evaporation of the Au-Ba layer as a whole begins. The temperature variation of the work function, as obtained from the photoemission data, differs from that obtained from thermionic emission measurements, (see Fig. 1 of Enclosure). This may be due to the evaporation of the

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ACCESSION NR: AP4038633

"excess" gold and formation of an intermetallic compound which evaporates at higher temperatures, when both work functions stabilize at approximately the value of the work function of gold. "The authors are grateful to A. R. Shul'man for valuable advice and interest in the work." Orig. art. has: 2 figures.

ASSOCIATION: none

SUBMITTED: 08Jul63 ENCL: 01 SUB CODE: IC, SM

NO REF SOV: 003 OTHER: 003

Card 2/3

APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001136510009-5"

"APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001136510009-5

DALIN, M.A.; BERGO, B.G., GERSH, V.S., MARKOSOV, P.I., MONRO, Ya.I.; Prinimali uchastiye: GUSEYNOVA, Z.D.; TANIYANTS, K.I., SARKISYANTS, G.I.; TURSKIY, Ye.N.; NEMCHIK, L.G.

Low temperature rectification of pyrolysis gas on a sectional column. Khim. prom. 40 no.10 785-790 O '64. (MIRA 18:1)

APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001136510009-5"

"APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001136510009-5

NEMCHIKOV, A.A., inzh.

Hydraulic lubricant distribution tank for mechanical shops. (MIRA 15:4)
Torf.prom. 39 no.3:31 '62.
(Lubrication and lubricants)

APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001136510009-5"

"APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001136510009-5

[illegible], D.P., [illegible]: [illegible]

Changes in the arterial pressure [illegible] r[illegible] - [illegible] [illegible]

[illegible]

1. [illegible] terapevticheskaya klinika (zav. - prof. [illegible]) [illegible] po [illegible] nauchno-issledovatel'skogo [illegible] imeni V.P. Vladimirskogo ([illegible] - kand. [illegible] [illegible]).

APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001136510009-5"

"APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001136510009-5

NEMCHIKOV, V. I.

NEMCHIKOV, V.I.: "The effect of certain external sailing conditions on the speed of a [illegible] transport ship, and the principles for calculating normatives of operational speed." Central Sci Res Inst of the Economics and Exploitation of Water Transport. Leningrad, [illegible]. (Dissertation for the Degree of Candidate in Technical Sciences)

So: Knizhnaya Leiopis', No. 19, [illegible]

APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001136510009-5"

"APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001136510009-5

KEMCHIKOV, Vladimir Ivanovich; KOZHUKHOV, V.P., redaktor; ALEKSANDROV, L.A., redaktor; TIKHONOV, Ye.A., tekhnicheskiy redaktor.

[Determining tide factors affecting navigation] Opredelenie elementov prilive-otlivnykh iavlenii v shturmanskoi praktike. Moskva, Izd-vo "Morskoi transport", 1956. 80 p.
(Tides) (Navigation) (MLRA 9:5)

APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001136510009-5"

"APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001136510009-5

ROZEN, S.Ya., Prinimali uchastiye: SEMEKA, V.A., kand.tekhn.nauk; MAKSIMADZHI, A.I., kand.tekhn.nauk; NEMCHIKOV, V.I., kand.tekhn.nauk; KHOMYAKOV, N.M., doktor tekhn.nauk. POGREBNYA, L.L., red.; BRUDNO, K.F., tekhn.red.

[German-Russian dictionary of water transportation] Nemetsko-russkii slovar' vodnogo transporta. Moskva, Gos.izd-vo fiziko-matem.lit-ry, 1959. 622 p. (MIRA 13:3)

(German language--Dictionaries--Russian)
(Shipping--Dictionaries)

APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001136510009-5"

"APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001136510009-5

NEMCHIKOV, Vladimir Ivanovich; KOZHUKHOV, V.P., spetsred.; KAMENEV, N.P., red.izd-va; KOZLYAKOVA, O.I., tekhred.

[Factors of high tide in navigation] Uchet prilivov v sudovozhdenii. Leningrad, Izd-vo "Morskoi transport," 1959. 103 p.

(Tides) (Navigation) (MIRA 12:9)

APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001136510009-5"

"APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001136510009-5

NEMCHIKOV, V.

Planning maritime transportation in the Polish People's Republic. Mor. flot 19 no.2:41-42 F '59. (MIRA 12:3)

1. Nachal'nik sektora otdela ekonomiki i ekspluatatsii flota Tsentral'nogo nauchno-issledovatel'skogo instituta morskogo flota.
(Poland--Merchant marine)

APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001136510009-5"

"APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001136510009-5

NEMCHIKOV, V.I., kand.tekhn.nauk

Planning the operations of a vessel. Trudy TSNIIMF 7 no.37:57-69 '61. (MIRA 15:3)
(Shipping—Accounting) (Merchant marine—Cost of operation)

APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001136510009-5"

"APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001136510009-5

DRABKIN, Yakov Markovich, kapitan dal'nego plavaniya; Prinimali uchastiye: VETRENKO, L.D., kand. tekhn.nauk; DRABKIN, Ya.M., NEMCHIKOV, V.I., kand.tekhn.nauk; MESHERUY, V.F., kand. yurid. nauk; KANTOROVICH, Ya.B., kand.tekhn.nauk; MATYUSHINA, S.P., red.; TIKHONOVA, Ye.A., tekhn. red.

[Freight transportation by sea]Perevozka gruzov morem. Izd.3., ispr. i dop. Moskva, Izd-vo "Morskoi transport," 1962. 384 p. (MIRA 15:8)

(Shipping)

APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001136510009-5"

"APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001136510009-5

NEMCHIKOVA, Z., prepodavatel'

Suggestions for technical innovations made by students of technical schools. Zhil.-kom. khoz. 10 no.8:26-27 '60. (MIRA 13:9)

1. Leningradskiy elektromekhanicheskiy tekhnikum, g. Leningrad.
(Leningrad—Technical education)
(Technical innovations)

APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001136510009-5"

"APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001136510009-5

NEMCHIKOVA, Zoya Mikhaylovna; ZEL'DIN, Lev Avseyevich; FRIDLYAND, Mikhail Matveyevich; KHALTTUNEN, Viktor Vasil'yevich [deceased]; IL'INSKIY, A.I., red.; OTOCHEVA, M.A., red. izd-va; SALAZKOV, N.P., tekhn. red.

[Technical norms, estimates and accounting in city electric transportation] Tekhnicheskoe normirovanie, smety i uchet na gorodskom elektricheskom transporte. Pod obshchei red. Z.M. Nemchikovoi. Moskva, Izd-vo M-va kommun.khoz. RSFSR, 1962. 203 p. (MIRA 16:6)

(Street railways--Production standards)
(Street railways--Accounting)

APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001136510009-5"

"APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001136510009-5

NEMCHIN, F. I.

Potatoes

Periods for summer planting of potatoes in Moldavia. Sad i og. No. 5, 1952.

9. Monthly List of Russian Accessions, Library of Congress, July 1952, Uncl.

APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001136510009-5"

"APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001136510009-5

NEMCHIN, F. I.

Potatoes

Effect of time of summer planting on the yeld of potatoes, Sel. i sem. 19, No. 8, 1952.

9. Monthly List of Russian Accessions, Library of Congress, October 1952. Unclassified.

APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001136510009-5"

"APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001136510009-5

Nemchin, F.I

USSR/Plant Diseases. Diseases of Cultivated Plants. N

Abs Jour : Ref Zhur - Biologiya, No 16, 25 Aug 57, 69548

Author : Koloshina, L.M., Nemchin, F.I.

Title : The Effect of Agrotechnical Measures and Methods of Storage on the Development of Potato Rhizoctoniosis in Moldavia.

Orig Pub : Uch. zap. Kishinevsk. un-ta, 1956, 23, 123-132.

Abstract : The study was conducted in Kishinev University on the effect of dates (1st and 12th of April) of planting potatoes, the depth of tuber plantings (12, 16, 20 and 24 cm), vernalization and combinations with bacterial fertilizers as to the development of rhizoctoniosis. The experiments were conducted with Octyabrenok, Yubel and Courier varieties. In addition a study was made on the influence of irrigation on destruction of 16 potato varieties. During the period of winter storage in a storeroom and in trenches for formation of scleroses Rhizoctonia solani Kubn was observed

Card 1/2

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"APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001136510009-5

USSR/Plant Diseases. Diseases of Cultivated Plants.

Abs Jour : Ref Zhur - Biologiya, No 16, 25 Aug 57, 69548

Abstract : on potato bulbs of the Courier variety. The investigation proved that the disease is developed in spring sowings of potatoes independently of agrotechnical conditions. The interaction of the mold with the host plant had a specific character. The mold would settle on the underground part of the stalk and on the roots; however, the plants developed normally and the crop of tubers was not diminished. The prevalence of sceleroses in the tubers was higher when potatoes were stored in trenches with a covering of soil, than by placing them in storerooms.

Card 2/2

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"APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001136510009-5

M

Country : USSR
Category: Cultivated Plants. Potatoes. Vegetables. Cucurbits.

Abs Jour: RZhBiol., No 22, 1958, No 100291

Author : Nemchin, F.
Inst : -
Title : A Promising Potato Variety for Moldavia.

Orig Pub: Zemledeliye i zhivotnovodstvo Moldavii, 1957, No 12, 62-64

Abstract: In 1951, the propagation of a potato form with an early formation of tubers, discovered on a personal plot, was started in Solobodzeyskiy Rayon in Moldavia. The variety was named Kolkhoznaya Roza. A description of the morphological characteristics of the variety is cited.

Card : 1/3

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"APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001136510009-5

Country : USSR
Category: Cultivated Plants. Potatoes. Vegetables. Cucurbits.

M

Abs Jour: RZhBiol., No 22, 1958, No 100291

The flavor qualities are middling. The storage quality is good. It is not resistant to canker. It is less affected with phytophtora and macrosporosis than Kur'yer and Priyekul'skiy Ranniy, and surpasses them in yield. In the trial at Moldavia Institute of Irrigated Agriculture and Vegetable Growing in 1956, with spring planting and two irrigations, this variety produced after conversion to one hectare, 297 centners, with four irrigations - 410 centners, and with summer planting - 165 centners. With the yearly spring planting, it degenerates slowly, how-

Card : 2/3

M-56

APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001136510009-5"

"APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001136510009-5

Country : USSR
Category: Cultivated Plants. Potatoes. Vegetables. Cucurbits.

M

Abs Jour: RZhBiol., No 22, 1958, No 100291

ever. To secure a second crop, the Institute recommends cutting the tubers of spring plantings in half, after washing, soaking them for 2 hours in 2% solution of thiourea and planting them immediately in moist soil. -- M.V. Dranishnikov

Card : 3/3

APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001136510009-5"

"APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001136510009-5

FAVOROV, A.M.; IL'IN, V.F.; IL'YASHENKO, A.F.; NEMCHIN, F.I.; BALASHEV, N.N.; SERGEYEV, V.I., red.; PEVZNER, Ye.I., tekhn. red.

[Summer potato planting] Letnie posadki kartofelia. Moskva, Sel'-khozgiz, 1961. 109 p. (MIRA 15:6)

(Potatoes)

APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001136510009-5"

"APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001136510009-5

NEMCHIN, F.I.

Preserving potatoes against degeneration and increasing their productivity in the southern potato growing areas. Agrobiologia no.4:615-617 Jl-Ag 63. (MIRA 16:9)

1. Moldavskiy nauchno-issledovatel'skiy institut oroshayemogo zemledeliya i ovoshchevodstva, g. Tiraspol'.
(Moldavia--Potatoes)

APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001136510009-5"

"APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001136510009-5

NEMCHIN, F., kand. sel'skokhoz. nauk

Results of growing seed potatoes in the south over a period of many years. Agrobiologiia no.3:378-382 My-Je '65. (MIRA 18:11)

1. Moldavskiy nauchno-issledovatel'skiy institut oroshayemogo zemledeliya i ovoshchevodstva, g. Tiraspol'.

APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001136510009-5"

"APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001136510009-5

YUDITSKIY, S.B., kandidat tekhnicheskikh nauk; NEMCHIN, S.Ye., inzhener.

Rectifier for a narrow-gauge locomotive. Elektrichestvo no.5: 55-58 My '56. (MLRA 9:8)

1. Vsesoyuznyy elektrotekhnicheskiy institut imeni Lenina.
(Electric locomotives) (Electric current rectifiers)

APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001136510009-5"

"APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001136510009-5

NEMCHINOV, A.A., kand. sel'khoz. nauk; KAZANSKIY, M.M., red.; SMIRNOV, P.S., tekhn. red.

[Recent developments in the use of peat as a fertilizer] Novoe v ispol'zovanii torfa na udobrenie. Leningrad, Lenizdat, 1948. 44 p. (MIRA 16:8)
(Fertilizers and manures) (Peat)

APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001136510009-5"

"APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001136510009-5

NEMCHINOV, A. A.

Bolotnye pochvy i ikh ispol'zovannie [Marshlands and their use]. Moskva, Sel'khozgiz, 1953. 108 p.

SO: Monthly List of Russian Accessions, Vol. 7 No. 1 April 1954.

APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001136510009-5"

"APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001136510009-5

NEMCHINOV, A.A. Doc Agr Sci -- (diss) " Swampy soils of ~~the~~ Northern European ~~North of the~~ USSR. (Genesis, properties, ~~characteristics~~ and methods of their agricultural exploitation ~~utilization~~ and use in ~~for~~ fertilization)."

Len, 1957. 42 pp ~~pages~~ 22 cm. (Acad Sci USSR. Soil Inst im V.V. Dokuchayev). 200 copies. (KL, 23-57, 114)

~~-95-~~
87

APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001136510009-5"

"APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001136510009-5

Country : USSR J
Category : Soil Science. Soil Genesis and Geography.

Abs. Jour. : 53341

Author : Nemchinov, [illegible]
Institut. : The Central Museum of Pedology, A.S. USSR
Title : The Bog Formation Process and Its Occurrence in the Turf-Podzolic Zone

Orig. Pub. : Sb. rabot Tsentr. muzeya pochvoved. AN SSSR, 1957, vyp. 2, 57-101

Abstract : The interlinking of sod, podzol and bog formation processes has been observed in the poorly drained regions of the turf-podzolic zone, where the increase in soil podzolization and bogging is caused by intensification of the anaerobic restorative processes in the soil and by increased action of base-saturated organic acids. The change from the sod formation process to bog formation is accompanied by an intensification of the restorative processes, which also produce an accumulation of organic matter in the soils. The humification of

Card: 1/4

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"APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001136510009-5

Country :
Category : J

Abs. Jour. : 53541

Author :
Institut. :
Title :

Orig. Pub. :

Abstract : of organic substances in bog soil slackens. This results in an accumulation of scarcely modified plant residues, which have on the whole only undergone pectin fermentation. The primary criterion for classifying bog soils is the degree to which they are supplied with ash substances and N. The following two types of bog soil have been differentiated: those irrigated by soft and slightly hard waters, and bog soils irrigated with hard water. The soils of the former type are widely distributed

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"APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001136510009-5

Country :
Category : J

Abs. Jour. : 53341

Author :
Institut. :
Title :

Orig. Lab. :

Abstract : throughout the northern part of the turf-podzolic zone and form on carbonateless deposits. All soils of this type are distinguished by high acidity during all stages of bor formation. They are also marked by weak base saturation, by low ash content and by retarded biochemical processes. Soils of the latter type, irrigated with hard water, are enriched with carbonates of calcium, magnesium and other ash elements. They are characterized by a weakly acid and even weakly alkaline reaction, by base saturation and a larger supply

Card: 3/4

APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001136510009-5"

"APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001136510009-5

NEMCHINOV, A.A.

Dissertations Dept. Biological Sci. Jul - Dec 1957.
Vest. Ak Nauk SSSR, 1958, No. 4, pp. 182-

At the Inst. of Plant Physiology im. K. A. Timiryazev the following dissertations were defended

for the degree of Doctor of Biological Sciences-
A. N. Gusev - Some Rules of the WaterRRegime of the Plants.

for the degree of Cand. of Biological Sciences:
MOLOTOVSKIY, Ya. G. - On the Problem of the Physiologic Characteristics of Heat Resistivity of Some Cultivated Plants.

At the Soil Inst. im V. V. Dokuchayev the following dissertations for degree Doctor of Agricultural Sciences were defended:
IVANOV, S. N. - Phosphate Regimes of the Peats and Meadow-Podsols of the Belorusskaya SSR

NEMCHINOV, A. A. - Swampy Grounds of the North of the European Part of the USSR

APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001136510009-5"

"APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001136510009-5

NEMCHINOV, A.G.

Ice columns on Lake Baikal. Priroda 50 no. 2:30 F '61.
(MIRA 14:2)

1. Yakutskiy filial Sibirskogo otdeleniya AN SSSR.
(Baikal, Lake--Ice on rivers, lakes, etc.)

APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001136510009-5"

"APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001136510009-5

NEMCHINOV, A.G.

Periodic fluctuations of the level of lakes in Central Yakutia. Nauch. soob. IAFAN SSSR no.1:30-37 '58. (MIRA 17:1)

APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001136510009-5"

"APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001136510009-5

NEMCHINOV, A.G.

Commission on conservation of the Yakut Branch of the Academy of Sciences of the U.S.S.R. Okhr. prir. Sib. i Dal'. Vost. no.1:237-238 '62. (MIRA 17:5)

APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001136510009-5"

"APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001136510009-5

NEMCHINOV, A.V.; TIKHONOV, V.M.

Loading and unloading machines used in airports. Biul.tekh.-ekon. inform. no.5:72-76 '61. (MIRA 14:6)
(Airports—Equipment and supplies)

APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001136510009-5"

"APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001136510009-5

32645

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S/084/62/000/001/003/003
D045/D114

AUTHOR: Nemchinov, A. V., Senior Engineer of the GosNII, GVF

TITLE: Conveyor in an aircraft

PERIODICAL: Grazhdanskaya aviatsiya, no. 1, 1962, 18

TEXT: In order to help mechanize baggage loading and unloading operations inside aircraft, the Gosudarstvennyy nauchno-issledovatel'skiy institut (State Scientific Research Institute - GosNII - of the GVF developed and manufactured two experimental models of an aircraft conveyor belt. The development of this mechanism was also prompted by the fact that the baggage compartments on board the Ту -104Б (Tu-104B), Ил-18 (Il-18), Ан-10 (An-10) and Ту -114 (Tu-114) aircraft are very long and low. The ЛСТ -1 (LST-1) aircraft conveyor belt is made of metal and consists of a driving section, a driven section and two intermediate sections, all of which can be assembled and disassembled. The machine is 7.5 m long, 0.09 m high, 55 cm wide and weighs 110 kg. The

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D045/D114

Conveyor in an aircraft

conveyor belt, which moves at 0.6 m/sec in both directions, can take a maximum load of 400 kg. The maximum load which can be placed on one part of the belt is 120 kg. A ГСК-1500 (GSK-1500) motor operating on d.c. current is used in the driving section. The individual parts of all four sections are described. By placing special plates on the belt, up to 1000 kg load can be placed over the entire length of the conveyor. The conveyor can be switched on and off from a control point fixed on the inner wall of the baggage compartment near the hatch. Two loaders are used; the first one takes the load at the hatch and places it on the conveyor belt. It also directs the belt to the required side. The second loader removes the load from the belt and places it in empty spaces in the baggage compartment. The electric motor of the conveyor can be fed from battery carts, ЭК-2 (EK-2) power trucks or ТА-1 (TA-1) and ТА-1М (TA-1M) tow cars. The two experimental models were installed on Tu-104B and Il-18 aircraft and tested at Vnukovo Airport. Both successfully passed the tests. It was shown that three loaders took

Card 2/3

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"APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001136510009-5

NEMCHINOV, G. A., Cand of Vet Sci -- (diss) "Experimental-clinical data on the action of neurothropic preparations on the contracting action of the uterus in sheep." Leningrad, 1957, 15 pp (Leningrad Veterinary Institute. Chair of Obstetrics, Leningrad Institute for the Advanced Training of Veterinarians), 100 copies (KL, 32-57, 96)

APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001136510009-5"

"APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001136510009-5

USSR/Diseases of Farm Animals. Pathology of Reproduction R-3

Abs Jour : Ref Zhur - Biol., No 7, 1958, No 31149

Author : Nerchinov G.A.
Inst : Buryat-Mongol Zooveterinary Institute
Title : Treatment of Sheep with Carbocholin and Proserin in Postparturient Disorders

Orig Pub : Tr. Buryat-Mong. zoovet. in-ta, 1957, vyp. 11, 171-174

Abstract : For the treatment of endometria, carbocholin* (C) was administered subcutaneously in the region of the internal surface of the hip or behind the elbow projection as a 0.01% solution, in a dose of 2 ml. once a day, during 2-3 days. In case of an incomplete cure, the course of treatment was repeated after 2-3 days. In case of retained afterbirth, C was administered in the same dose at an interval of 4-6 hours between injections, not more than 2 injections during a day. In primary weakness of contractions, P was introduced in a single dose of 2 ml. of 0.01% solution. Proserin** (P)

*[Carbamylcholine chloride, U.S.P.] **[Neostigmine methylsulfate, U.S.P.]

Card : 1/2

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"APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001136510009-5

LAMKINA, V.Yu.; NEMCHINOV, G.A.; ZAVADSKAYA, V.A.

Use of pituitrin in cases of difficult egg-laying. Ptitsevodstvo 8 no.8:45 Ag '58. (MIRA 11:10)

1. Kafedra akusherstva i ginekologii Buryat-Mongol'skogo zoovetinstituta.

(Eggs--Production) (Pituitrin)

APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001136510009-5"

"APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001136510009-5

NEMCHINOV, G.P.

ISTOMIN, G.I.; NEMCHINOV, G.P.

Lathe for making bimetallic bushings using cast iron base. Rats. i izobr. predl. v stroi. no.103:16-20 '54. (MLRA 8:11)
(Lathes)

APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001136510009-5"

"APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001136510009-5

NEMCHINOV, I. V.

Studies of Mechanics and Applied (Cont.) 1035

Mathematics, Moscow, Oborongiz, 1958, 218pp. (ed. Sokolovskiy, V. V.)
free surface; 3) Interaction of reflected waves.

Nemchinov, I.V. Certain Problems of Gas Dynamics Taking Into Account Dissociation and Ionization of Air. 173

A Generalization of Taylor's Series 190
The article contains the following sections: 1) Lemma 1; 2) Lemma 2; 3) Lemma 3; 4) Abel's theorem; 5) Abel's second theorem; 6) Tauber s theorem.

Nechepurenko, M.I. Lagrange Series in V_k spaces. 197

Mirakov, V.Ye. Convergence of the Method of Tangential Hyperbolas for Nonlinear Functional Equations Under Conditions of Cauchy Type 204

Babayan, B.A. Arithmetical Operations on Digital Computers [Parallel Type] 214

AVAILABLE: Library of Congress

Card 6/6

LK/mf'd
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"APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001136510009-5

31279
S/124/61/000/010/010/056
D251/D301

26.2120

AUTHOR: Nemchinov, I.V.

TITLE: Calculating the effect of dissociation and ionization of air in certain problems of gas dynamics

PERIODICAL: Referativnyy zhurnal. Mekhanika, no. 10, 1961, 20-21, abstract 10 B111 (Tr. Mosk. fiz. tekhn. in-ta, 1958, no. 1, 173-189)

TEXT: A scheme is introduced for calculating the effect of excitation of the internal degrees of freedom and also of ionization and dissociation on a flow with shock-waves at high Mach numbers. In view of the great difference in heats of reaction of the dissociation of O_2 and N_2, and neglecting the form NO, the author defines a region of comparatively low temperatures where O_2 dissociates in the presence of N_2, a region of much higher temperatures where N_2 dissociates in an atmosphere of atomic O, and finally, a

X

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D251/D301

Calculating the effect...

region where the ionization of the monatomic gases takes place. The variation in pressure, temperature and angle of leap in dependence on the Mach number is calculated for the equation of state of an ideal gas. The adiabatic motion of the gas is also considered. [Abstracter's note: Complete translation]

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"APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001136510009-5

NEMCHINOV, I.V. (Moskva)

Some nonstationary problems of radiative heat transfer. PMTF no.1:36-57 My-Je '60. (MIRA 14:8)
(Heat--Radiation and absorption)

APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001136510009-5"

"APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001136510009-5

MEMCHINOV, I.V. (Moskva); FONAREV, A.S. (Moskva)

Couette flow, taking radiative heat transfer into account. (MIRA 14:7)
PMTF no.3:146-151 S-O '60.
(Heat--Radiation and absorption)
(Gas flow)

APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001136510009-5"

"APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001136510009-5

NEMCHINOV, I.V. (Moskva); TOPEKHA, L.P. (Moskva)

Boundary layer near the forward critical point of a cylinder in radiative heat transfer. PMTF no.4:29-35 N-D '60. (MIRA 14:7)

(Boundary layer)
(Heat--Radiation and absorption)

APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001136510009-5"

"APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001136510009-5

NEMCHINOV, I.V. (Moskva)

Spreading apart of a laminar gas layer in the case of gradual energy release. PMTF no.1:17-26 Ja - F '61.

(MIRA 14 :6)

(Laminar flow)

APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001136510009-5"

"APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001136510009-5

L 18383-63 EPR/EPA(b)/EWT(1)/BDS/T-2 AFFTC/ASD Ps-4/Pd-4 WW
ACCESSION NR: AP3006125 S/0207/63/000/004/0058/0067

65

AUTHOR: Adushkin, V. V. (Moscow); Nemchinov, I. V. (Moscow)

TITLE: Approximate determination of gas parameters behind a shock-wave front according to the law of shock propagation

SOURCE: Zhurnal prikladnoy mekhaniki i tekhnicheskoy fiziki, no. 4, 1963, 58-67

TOPIC TAGS: shock wave, shock front, shock-wave propagation, Lagrange coordinate, Euler coordinate, linear extrapolation, strong explosion, back pressure, heat transfer, radiative de-excitation, bremsstrahlung, integral-correlation method

ABSTRACT: A method is outlined for approximate determination of gas parameters behind a shock-wave front according to the known law of shock-wave propagation. The method, based on calculation of basic derivatives of gasdynamic parameters at the shock-wave front in Lagrange's coordinate system, is similar to that of L. I. Sedov for calculation of derivatives in Euler's coordinates. It consists in the linear extrapolation of pressure along the mass of gas in motion with

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