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S/056/62/043/004/018/061
B102/B180

AUTHORS: Aleksandrov, A. Yu., Delyagin, N. N., Nitrofanov, K. P., Polak, L. S., Shpinel', V. S.

TITLE: Quadrupole interaction and isomeric shifts of 23.8-kev gamma transition of Sn^{119} nucleus in organo-tin compounds

PERIODICAL: Zhurnal eksperimental'noy i teoreticheskoy fiziki, v. 43, no. 4(10), 1962, 1242 - 1247

TEXT: In continuation of earlier studies (ZhETF, 42, 637, 1962; 43, 448, 1962) on the Mössbauer resonance absorption spectra of 23.8-kev γ-quanta by Sn^{119}, this work deals with the effect of substituting certain atomic groups in organic compounds of the $(C_4H_9)_2SnX_n$ type, and SnX_4 by others on the isomeric shift δ, and the quadrupole interaction; X is an element or a group of atoms, n = 1, 2. The resonance absorption spectra were recorded with a) an absorber whose velocity was varied linearly with time and b) one of constant velocity, the thicknesses varying from 30 - 100 mg/cm^2. The latter method yielded more accurate spectra since the device used had

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MITROFANOV, K.P.; SHPINEL', V.S.

Resonance absorption of 23.8 Kev. gamma rays by Sn^{119}, as observed from conversion electrons. Zhur.eksp.i teor.fiz. 40 no.3:983-985 Mr '61. (MIRA 14:8)

1. Institut yadernoy fiziki Moskovskogo gosudarstvennogo universiteta.
(Gamma rays) (Tin--Isotopes) (Electrons--Emission)

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APPROVED FOR RELEASE: 06/23/11: CIA-RDP86-00513R001134700020-6

SOROKIN, A.A.; MITROFANOV, K.P.

Investigating the decay chain for Gd^{149}. Izv. AN SSSR. Ser. fiz. 25 no.7:808-812 Jl '61. (MIRA 14:7)

1. Nauchno-issledovatel'skiy institut yadernoy fiziki Moskovskogo gosudarstvennogo universiteta im. M.V. Lomonosova.
(Gadolinium--Decay)

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APPROVED FOR RELEASE: 06/23/11: CIA-RDP86-00513R001134700020-6

SOROKIN, A.A.; MITROFANOV, K.P.

Investigating the decay chain for Gd^{147}. Izv. AN SSSR. Ser. fiz. 25 no.7:799-807 Jl '61. (MIRA 14:7)

1. Nauchno-issledovatel'skiy institut yadernoy fiziki Moskovskogo gosudarstvennogo universiteta im. M.V. Lomonosova.
(Gadolinium--Decay)

APPROVED FOR RELEASE: 06/23/11: CIA-RDP86-00513R001134700020-6

APPROVED FOR RELEASE: 06/23/11: CIA-RDP86-00513R001134700020-6

MITROFANOV, K.P.

S/048/60/024/012/009/011
B019/B055

AUTHORS: Sorokin, A. A., Mitrofanov, K. P., Kryukova, L. N., Nikitina, N. V., Rybakov, V. V., Shestakov, V. P.

TITLE: Study of the Decay of Te^{119} and Te^{121} and the Level Scheme of Sb^{119}

PERIODICAL: Izvestiya Akademii nauk SSSR. Seriya fizicheskaya, 1960, Vol. 24, No. 12, pp. 1484-1487

TEXT: The present paper was read at the 10th All-Union Conference on Nuclear Spectroscopy, which was held in Moscow from January 19 to January 27, 1960. The scintillation-spectrometer results were obtained by a one and a half hours' irradiation with a D-D-neutron generator (Joint Institute of Nuclear Research). The collection was chemically separated 1-2 days after irradiation. The measured β-spectrum and the β-γ coincidences were carried out by means of a scintillation spectrometer. The β-γ coincidences were measured by means of a β-spectrometer, which was connected with a coincidence circuit with a γ-spectrometer. The β^+ spectrum of Te^{119} consists essentially of a component with the upper edge at 2700 ± 50 kev. As seen by an exact investigation, this β^+-spectrum is furnished by the series Sb^{119} which is in coincidence with Te^{119}. On the basis of these results, the authors assume that the Te^{119} and Te^{121} decay mainly into the ground state of the daughter nuclei. For the ground state of Sn^{118}, 0^+, and for the initial state of Sb^{118}, 0^+ or 1^+ is given. 6.1 ± 0.1 days are given as the half-life of Te^{119}. From investigations carried out with the scintillation-β-spectrometer in which Sb^{119}, Te^{121}, and Te^{123} were detected, the authors are able to state that all γ-transitions having a half-life of 4.75 days are related to the decay of Te^{119}. They are transitions between the Sb^{119} levels. From a thorough study of these lines and the angular correlation of the γ-radiation, the authors were able to set up the decay scheme of Te^{119} seen in Fig. 4. Finally, the authors deal with the Te^{119} isomers. They arrive at the conclusion that the isomer of Te^{119} with a half-life of 4.75 days is an excited isomeric state with the spin 11/2 and that the state of Te^{119} with a half-life of 12 hours is the ground state. The authors thank T. K. Mukhalov for producing the source, and L. Tsaidin, B. A. Tonkonogova, and Chang-chuan, students of physics at MGU, for carrying out measurements and evaluating experimental results. There are 10 figures and 14 references, 10 Soviet, 3 US, and 1 Dutch.

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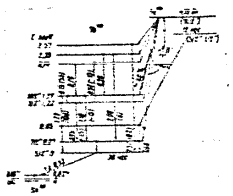

Рис. 4. Схема распада Te^{119}. В скобках приведены относительные интенсивности γ-переходов

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The Decay of Te^{131} ($T_{1/2}$ = 30 hours) SOV/56-37-1-55/64

shown by a figure. There are 1 figure, 2 tables, and 6 references, 1 of which is Soviet.

ASSOCIATION: Institut yadernoy fiziki Moskovskogo gosudarstvennogo universiteta (Institute of Nuclear Physics of Moscow State University)

SUBMITTED: April 8, 1959

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ergies 780, 850, 925, 1140, 1220, 1600, 1850 and 2200 kev amounted to 100, 40, 15, 35, 25, 5, 2, 0.5 % in the same order. The transitions 80, 100, 147, 240, 330, 440 and 590 kev were found both in single spectra and in the spectra of $\beta\gamma$- and $\gamma\gamma$-coincidences; (147 kev - first excited state of J^{131}, 780 kev - ground state). Table 2 shows the results obtained by determining the conversion coefficients onto the K-shell:

E_γ [kev]	$\alpha_k^{exp} \cdot 10^3$	$\alpha_k^{theor} \cdot 10^3$ E1	E2	M1	Identification
780	0.8 ± 0.2	0.84	2.3	3.0	E1
850	1.6 ± 0.6	0.71	1.9	2.5	E2 (+ M1)
147	260 ± 50	-	330	220	M1 + E2

The life-time of the 147 kev level was determined as amounting to $T_{1/2} = (8 \pm 1) \cdot 10^{-10}$ sec., which is in good agreement with reference 5. The decay scheme of T^{131} found by the authors is

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21 (8)

AUTHORS: Bedesku, A., Mitrofanov, K. P., Sorokin, A. A., Shpinel', V. S.

SOV/56-37-1-55/64

TITLE: The Decay of Te^{131} ($T_{1/2}$ = 30 hours) (Raspad Te^{131} ($T_{1/2}$ = 30 chas))

PERIODICAL: Zhurnal eksperimental'noy i teoreticheskoy fiziki, 1959, Vol 37, Nr 1, pp 314 - 315 (USSR)

ABSTRACT: Te^{131}-decay has already been investigated in a number of papers, and in reference 3 also a decay scheme, basing upon the energy equilibrium in β- and γ-transitions was published. The authors of the present "Letter to the Editor" have set up an exact scheme of the lower levels of J^{131} (excited in the decay of the isomer Te^{131}) for which purpose a number of new data concerning the γ-transitions in Te^{131} were used. The investigations were carried out in a magnetic lens spectrometer and a scintillation spectrometer connected in coincidence. The Te^{131}-source was obtained by the irradiation of metallic tellurium of high chemical purity by slow neutrons. The measured γ-intensities at the en-

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85859

Investigation of the Te^{131} Decay Scheme ($T_{1/2}$ = 30 Hours)

S/048/59/023/012/003/009
B006/B060

conversion coefficients for these lines are given (theoretical and experimental data) in Table 2. Finally particulars with reference to the proposed decay scheme (Fig. 12) and the complete results of investigations are discussed. According to the shell model $1g_{7/2}$ is regarded as the ground state and $2d_{5/2}$ as the first excited level (147 kev). Fig. 13 illustrates the level distance $2d_{5/2} - 1g_{7/2}$ for different iodine isotopes as a function of the even neutron number. The authors thank Yu. M. Ukrainskiy, N. P. Rudenko, O. M. Kalinkina, as well as L.P.Sorokina and V. V. Skvortsov, students of the Physics Department of Moscow State University, for their assistance. There are 13 figures, 2 tables, and 24 references: 4 Soviet.

ASSOCIATION: Nauchno-issledovatel'skiy institut yadernoy fiziki Moskovskogo gos. universiteta im. M. V. Lomonosova (Scientific Research Institute of Nuclear Physics of the Moscow State University imeni M. V. Lomonosov)

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85859

Investigation of the Te^{131} Decay Scheme ($T_{1/2}$ = 30 Hours)

S/048/59/023/012/003/009
B006/B060

were found to correspond to transitions and do not occur by superpositions. Fig. 3 shows the spectrum of the conversion electrons in the range of 600 - 1,300 kev, the L- and K-photopeaks corresponding to γ-transitions with 780, 850, 925, 1140, and 1220 kev. Further the β-γ- and the γ-γ-coincidence spectra were investigated. Fig. 4 shows the block diagram of the equipment applied to the measurement of the so-called "summing coincidences". The spectrum of γ-rays accompanied by β-particles is shown in Fig. 5 for $E_\beta > 1$ Mev and in Fig. 6 for $E_\beta > 1.4$ Mev. The best noticeable peak is at 147 kev; it is assumed that this peak corresponds to the first excited level of J^{131}. Further details of the γ-β-coincidence spectrum are to be seen in Figs. 7 and 8. Figs. 9, 10, and 11 show the weak part of the γ-spectrum in coincidence with 780 kev γ-rays, the spectrum of the "summing coincidences" (E_{sum} = 770 kev) and the part of the electron conversion spectrum of Te^{131} with the 780 and 850 kev lines. The 780 kev transition ends in the ground state of $_{53}J^{131}_{78}$. For both these aforementioned lines the multipolarities E1 and E2 are assumed, and the internal

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B006/B060

Investigation of the Te^{131} Decay Scheme ($T_{1/2}$ = 30 Hours)

25 min (0.22 b). After the establishment of an equilibrium between both isomers and after the total decay of the 25 min - Te^{131} created directly by the (n,γ) process, the specimen was dissolved in concentrated nitric acid. The J^{131}, created by Te^{131} decay, was extracted by carbon tetrachloride. Tellurium dioxide served as source with low specific activity due to the small activation cross-section of the 30 h - Te^{131}. The γ-spectrum of this specimen purified of iodine, was measured by a scintillation γ-spectrometer. The measurements took several days because the contribution of the long-lived Te-isotopes and of other impurities had to be estimated. Fig. 1 shows a section of the Te^{131}-spectrum (energy range 500 - 1,400 kev) and Fig. 2 shows the same for the range of 700 - 2,400 kev. Data on the relative intensities of the lines are shown in Table 1 (related to the intensity of the 780 kev line - 100). Transitions with 2.2 and 1.85 Mev were found, and instead of the 1.15 Mev transition (Ref. 6) two with 1.12 and 1.20 Mev were found. A telescope with smaller solid angle was applied to the investigation of the hard region of the spectrum, and the transitions with 1.6, 1.85 and 2.2 Mev

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B006/B060

24.6810

AUTHORS: Bedesku, A., Mitrofanov, K. P., Sorokin, A. A., Shpinel', V. S.

TITLE: Investigation of the Te^{131}_{79} Decay Scheme ($T_{1/2}$ = 30 Hours)

PERIODICAL: Izvestiya Akademii nauk SSSR. Seriya fizicheskaya. 1959. Vol. 23, No. 12, pp. 1434 - 1444

TEXT: The knowledge, how far the neutron levels $3s_{1/2}$, $1h_{11/2}$, and $2d_{3/2}$ are occupied in a number of iodine isotopes, plays an important part in nuclear shell theory. According to it the authors investigated thoroughly the decay scheme of $_{52}Te^{131}_{79}$, of which β-decay excites the levels of the isotope $_{53}J^{131}_{78}$. The specimen was prepared by bombardment of highly purified metallic Te with thermal neutrons. For Te^{130}, occurring with an abundance of 34.49% in the natural isotopic mixture, a (n,γ)-reaction was initiated producing simultaneously two Te^{131} isomers: one with a half-life of 30 h (activation cross-section < 8 mb) and another with a half-life of

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48-12-0/15

Further Investigation of Electron-Focusing in a Two-Lens-B-Spectrometer

with S = 1,5 mm. The investigation of the performance characteristics was made in a special scheme and the results are in a good agreement with those η-values (=3,0 % and 1,0 %) obtained in the measurements by means of the electron-gun.
In the work assisted: A. P. Alekseyev, a student and N. I Ivanova, a laboratory assistant (laborantka). There are 9 figures, 1 table, and 6 references, 2 of which are Slavic.

ASSOCIATION: Scientific Research Institut for Nuclear Physics, Moscow State University im. M. V. Lomonosov
(Nauchno-issledovatel'skiy institut yadernoy fiziki Moskovskogo gosudarstvennogo universitata im. M. V. Lomonosova)

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46-12-6/15

Further Investigation of Electron-Focusing in a Two-Lens-E-Spectrometer

In the case of d (distance between the lenses) > 44 cm it becomes smaller than the aberration of the solenoidal spectrometer. The drawing apart of the lenses also leads to a reduction of the focusing quality of the spectrometer, i.e. to a reduction of the constant k in the formula $H\rho = kI$. The improvement of the method made it possible very exactly to determine the course of electron-trajectories in the spectrometer. Based on the knowledge of the trajectories the interval of the angles of flight α which brings about the best ratio between the light intensity ω and the dissolving power η can be selected and the dimensions and positions of the diaphragms in the spectrometer-camera can be determined. It is shown that the best ratio between the light intensity and dissolving power is attained when the centers of the lenses coincide with the position of the source and of the detector. In the investigation of the influence of the correcting outer coil it is shown that the introduction of a correcting field offers the possibility to improve the dissolving power of the spectrometer, without reducing the light intensity, chiefly at the expense of an increase in the dispersion D of the electron beam. In the investigation of the performance characteristics of the spectrometer it was shown that a η = [illegible] % was obtained in the case of ω = [illegible] % with a source of S = 5 mm and η = 1.0 % in the case of ω = 1,8 %

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Mitrofanov, K. P.

[illegible]

AUTHORS: Mitrofanov, K. P. [illegible], V. S.

TITLE: Further Investigation of Electron-focusing in a Two-Lens β-Spectrometer (Dal'neyshoye izucheniye fokusirovki elektronov v dvukhlinzovom β-spektrometre)

PERIODICAL: Izvestiya AN SSSR, Seriya Fizicheskaya, 1957, Vol. 21, Nr 12, pp. 1607 - 1613 (USSR)

ABSTRACT: The focusing properties of the two-lens β-spectrometer БМЛ -1 with different lens-positions and the influence of the correcting outer coil were investigated by means of an electron-cannon. The method employed here was already earlier used and is described in detail in reference 1. For supplementing that method the construction of the electron-cannon was improved here and an additional movable diaphragm was inserted. The latter permits to modify the size of the angle of flight of electrons α without disturbing the vacuum. The measurement of the displacement of luminous places on the screen in modifications of the focusing current or displacement of the screen gave the possibility of determining the performance characteristics of the spectrometer and to draw the electron-trajectory diagrams for different lens-positions. It is shown that the spherical aberration is diminished by drawing apart the lenses.

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MITROFANOV, K.

Aboard the cruiser "Avrora" to-day; a photo sketch. Voen.znan. 33 no.11:20b-20c N '57. (MIRA 10:12)
(Avrora (Cruiser))

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DMITRIYEV, S.V.; YEGOROV, G.A.; KUZ'MIN, G.A.; MITROFANOV, I.Ya.

Position pulse-phase programmed control system. Trudy KAI no.76:11-17 '63. (MIRA 18:10)

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[illegible] 8/[illegible]/64/000/004/A060/A060

[illegible] 621.[illegible]

[illegible] telemech. i vychisl. tekhn. [illegible], Abs. [illegible]A354 26

B

[illegible] pulse indicants

[illegible] in-ta, [illegible] 1963, 80-84

[illegible] remote control, supervisory control, pulse indicant

[illegible] suggested that the a-c signal polar indicants be used for select- [illegible] The indicant is defined as a sign of the first half-wave of [illegible] the indicants, polar [illegible] circuits for a-f signals [illegible] and thyratron circuits at higher frequencies are recommended. [illegible] polarized relays and two gates can be used for determining [illegible] In the case of h-f signals (up to 20 kc), a two- [illegible] operating on the last half-wave can be used. Principal circuits [illegible] the indicants are described. Seven illustrations. Bibliography: [illegible]

[illegible] SUB CODE: [illegible] ENCL: 00

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APPROVED FOR RELEASE: 06/23/11: CIA-RDP86-00513R001134700020-6

L 15154-65
ACCESSION NR: AT4047566

possibilities in the design of various telemechanical systems operating on the basis of AC pulse structure. Orig. art. has: 7 figures.

ASSOCIATION: Kazanskiy aviatsionny'y institut (Kazan Aviation Institute)

SUBMITTED: 18Sep61 ENCL: 00 SUB CODE: EE, AC

NO REF SOV: 001 OTHER: 000

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L 15130-63 EWT(1)/EWT(m) AFETR JD S/2529/63/000/075/0080/0084
ACCESSION NR: AT4047566

AUTHOR: Mikrofanov, I.Yu.

B

TITLE: Polar pulse attributes in alternating current

SOURCE: Kazan. Aviatsionny*y institut. Trudy*, no. 75, 1963, Aviatsionny*ye pribory* i avtomaty* (Aeronautical instruments and automatic equipment), 80-84

TOPIC TAGS: aircraft automation, telemechanics, polar pulse, alternating current pulse

ABSTRACT: Noting that in telemechanics for selection purposes electrical current pulses are used which differ from one another in terms of specific attributes, the author calls special attention to polar attributes as the most reliable and convenient. Other possible attributes are phase, frequency, amplitude, time, digital and certain other pulse qualities. In view of the limited applicability of polar pulse attributes, techniques are discussed for rendering them more universal. The author analyzes the circuit diagrams of specific devices which can be employed for the formation of alternating-current pulses with polar attributes. The operational principles of this apparatus are described, and considerations are given with respect to pulse quality and system reliability. In general, the author finds that the use of AC polar pulse attributes may well lead to new

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A frequency relay

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D413/D308

experimental results are stated to be in good agreement with calculations from the formulas derived. 6 figures. 1 reference.
[Abstracter's note: Complete translation]

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APPROVED FOR RELEASE: 06/23/11: CIA-RDP86-00513R001134700020-6

S/271/63/000/001/001/047
D413/D308

AUTHOR: Mitrofanov, I.Ye.

TITLE: A frequency relay

PERIODICAL: Referativnyy zhurnal, Avtomatika, telemekhanika i vychislitel'naya tekhnika, no. 1, 1963, 10, abstract 1A43 (Tr. Kazansk. aviats. in-ta, no. 59, 1960, 81-96)

TEXT: A description is given of a frequency relay used for registering pulsed frequency indications and for a number of other technical purposes. The relay may be made up with electron tubes and thyratrons. A very long-term project is to use cold-cathode thyratrons. The circuit of the relay is simple, capable of tuning over a wide range (particularly when it is difficult to use resonant devices) and also has a sharp resonance curve. An oscillogram is given to illustrate the process of operation of the relay. An analysis of the circuit is given for the conditions where both tubes are passing current and where only one of the tubes is conducting. The

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MITROFANOV, I. Ye.

"Some Problems of the Reliability of Telemechanical Systems." Cand Tech Sci, Leningrad Inst of Aviation Instrument Building, Leningrad, 19[illegible]. (RZhFis, [illegible], [illegible])

Survey of Scientific and Technical Dissertations Defended at USSR Higher Educational SO: Sum. No 5[illegible], 2[illegible] Jul 55

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VORONKOV, L.A., inzh; MITROFANOV, I.M., kand. tekhn. nauk; FILYUNIN, G.I., inzh.

Regulation of a double-shaft gas-turbine system according to the traction characteristics of the locomotive. Trudy TNIIT MPS no.282. 96-104 '64. (MIRA 17:10)

APPROVED FOR RELEASE: 06/23/11: CIA-RDP86-00513R001134700020-6

APPROVED FOR RELEASE: 06/23/11: CIA-RDP86-00513R001134700020-6

MEYLIKHOV, M.Ye., inzh.; MITROFANOV, I.M., kand. tekhn. nauk

Results of the field tests of GL-01 gas-turbine locomotives.
Vest. TSNII MPS 22 no.4:3-8 '63. (MIRA 16:8)

(Gas-turbine locomotives--Testing)

APPROVED FOR RELEASE: 06/23/11: CIA-RDP86-00513R001134700020-6

APPROVED FOR RELEASE: 06/23/11: CIA-RDP86-00513R001134700020-6

MITROFANOV, I.M.

LISTOV, A.M., kandidat tekhnicheskikh nauk; MITROFANOV, I.M., kandidat tekhnicheskikh nauk

Smoke removal equipment for locomotive depots. Trudy TSNIS no.14: 40-67 '55. (MLRA 8:11)

(Smoke prevention)

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GUSHCHIN, V.V., gornyy inzh.; LITVINOV, I.D., gornyy inzh.; MITROFANOV, I.K., gornyy inzh.; NOVOZHILOV, M.G., gornyy inzh.; POLYAKOV, V.G., gornyy inzh.; SKVORTSOV, P.V., gornyy inzh.

"Mining handbook," vol. 1: Strip mining. Reviewed by V.V.Gushchin and others. Gor.zhur. no.4:76-77 Ap '61. (MIRA 14:4)
(Strip mining--Handbooks)

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GUSEV, A.A.; KURNAKOV, K.V.; KOZLOV, Yu.A.; MITROFANOV, I.A.; KHACHON, G.P.

Determining condensate accumulations in gas pipelines by a radiometric indicator. Gaz. prom. 10 no.8:42-45 '65. (MIRA 18:9)

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MITROFANOV, Ivan Andreyevich; BARMIN, S.F., nauchn. red.; SEGAL', Z.G., ved. red.

[Maintenance of the linear portion of a main gas pipeline] Obsluzhivanie lineinoi chasti magistral'nogo gazoprovoda. Leningrad, Nedra, 1965. 146 p. (MIRA 18:4)

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GUSEV, E.K.; MITROFANOV, I.A.

Flow-through capacity and delivery of a gas pipeline. Gaz. delo no.11:16-18 '64. (MIRA 18:2)

1. Leningradskoye upravleniye magistral'nykh gazoprovodov.

APPROVED FOR RELEASE: 06/23/11: CIA-RDP86-00513R001134700020-6

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TIKHOMIROV, Yevgeniy Nikolayevich; KHOR'KOV, A.I., red.; BARMIN, S.F., red.; MITROFANOV, I.A., red.; NECHAYEV, M.A., red. OL'VOVSKIY, I.G., nauchn. red.; NEVEL'SHTEYN, V.I., ved. red.

[Assembly, adjustment, and operation of devices for the electrical protection of pipelines] Montazh, naladka i ekspluatatsiia ustroistv elektrozashchity magistral'nykh truboprovodov. Leningrad, Nedra, 1964. 126 p. (MIRA 17:12)

APPROVED FOR RELEASE: 06/23/11: CIA-RDP86-00513R001134700020-6

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KUBLITSKIY, Mikhail Afanas'yevich; [illegible], A.I., red.; [illegible], S.F., red.; TIKHOMIROV, Ye.N., red.; [illegible], red.; [illegible], M.A., red.; [illegible], S.S., red. izd.

[Safety technique on main gas pipelines; Tekhnika bezopasnosti na magistral'nykh gazoprovodakh. Leningrad, Izd-vo "Nedra," 1964. 106 p. (MIRA 17:8)

APPROVED FOR RELEASE: 06/23/11: CIA-RDP86-00513R001134700020-6

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GVOZDEV, B.P.; ZAYTSEV, V.I.; MITROFANOV, I.A.; SHUSHLYAKOV, N.N.; CHERNOBYL'SKIY, V.A.

Testing a remodelled vertical oil dust collector in the "Shosseinaia" gas-distribution station. Gaz. delo no.10:13-18 '63. (MIRA 17:4)

1. Vsesoyuznyy nauchno-issledovatel'skiy institut prirodnogo gaza (for Gvozdev, Zaytsev). 2. Leningradskoye upravleniye magistral'nykh gazoprovodov (for Mitrofanov, Shushlyakov). 3. Gosudarstvennyy proizvodstvennyy komitet po gazovoy promyshlennosti SSSR (for Chernobyl'skiy).

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ANDREYEV, German Sergeyevich; KHOR'KOV, A.I., red.; BARMIN, S.F., nauchn. red.; LEBEDEV-TSVETKOV, Yu.Yu., red.; MITROFANOV, I.A., red.; NECHAYEV, M.A., red.; RUSAKOVA, L.Ya., ved. red.; YASHCHURZHINSKAYA, A.B., tekhn.red.

[Firing-line method on main gas pipes] Vedenie ognevykh rabot na magistral'nom gazoprovode. Leningrad, Gostoptekhizdat, 1963. 110 p. (MIRA 16:10)
(Gas, Natural--Pipelines)

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KOTLYAR, Iosif Yakovlevich; KHOR'KOV, A.I., red.; MITROFANOV, I.A., nauchn. red.; RUSAKOVA, L.Ya., ved. red.; YASHCHURZHINSKAYA, A.B., tekhn. red.

[Operational organization of main gas pipelines] Organizatsii magistral'nykh gazoprovodov. Leningrad, Gostoptekhizdat, 1963. 109 p. (MIRA 17:1)
(Gas, Natural--Pipelines)

APPROVED FOR RELEASE: 06/23/11: CIA-RDP86-00513R001134700020-6

APPROVED FOR RELEASE: 06/23/11: CIA-RDP86-00513R001134700020-6

NECHAYEV, Mikhail Aleksandrovich. Prinimal uchastiye MITROFANOV, I.A., inzh.; ZUBAREV, S.A., retsenzent; LEVIN, A.M., retsenzent; SIGAL, I.Ya., retsenzent; KOLYADA, I.A., retsenzent; STOLPNER, Ye.B., nauchnyy red.; FEDOTOVA, M.I., ved. red.; SAFRONOVA, I.M., tekhn. red.

[Safety measures in the transportation, distribution, and use of gas fuel] Tekhnika bezopasnosti pri transportirovke, raspredelenii i ispol'zovanii gazovogo topliva. Izd.3., perer. i dop. Leningrad, Gostoptekhizdat, 1962. 299 p. (MIRA 15:4)

(Gas as fuel—Safety measures)

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NECHAYEV, Mikhail Aleksandrovich. Prinimal uchastiye MITROFANOV, I.A., inzh.. STOLPNER, Ye.B., nauchnyy red.; DESHALYT, M.G., vedushchiy red.; YASHCHURZHINSKAYA, A.B., tekhn.red.

[Safety measures in the transportation, distribution and uses of gas fuel.] Tekhnika bezopasnosti pri transportirovke, raspredelenii i ispol'zovanii gazovogo topliva. Izd.2., perer. i dop. Leningrad, Gos.nauchno-tekhn.izd-vo neft. i gorno-toplivnoi lit-ry. Leningr. otd-nie, 1960. 259 p. (MIRA 13:9)

(Gas as fuel--Safety measures)

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MITROFANOV, I.A.; MALEYEV, M.A., inzh.

Flaws in designing caissons. Transp. stroi. 13 no.6:18-19 Je '63. (MIRA 16:9)

(Caissons)

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MITROFANOV, I.A., inzh.; MALEYEV, M.A., inzh.

Construction of the grillage of a bridge footing at great depth.
Transp. stroi. 12 no.6:14-17 Je '62. (MIRA 15:6)
(Bridges--Foundations and piers)

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KOLESOV, Yu. G.; MITROFANOV, I.A.

Changing the mode of fastening scrapers to automatic chain haulers. Torf. prom. 35 no. 4:34 '58. (MIRA 11:7)

1. Torfopredpriyatiye Naziya.
(Peat machinery)

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ZLATOUSTOV, S.; MITROFANOV, I.

On D.I. Ageikin's book "Magnetic [illegible]." Izv. vys. ucheb. zav.; prib. 7 no.1:161-162 '64. (MIRA [illegible])

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MITROFANOV, G.O., aspirant

Nitrous oxide anesthesia in dental surgery. Stomatologiia no.4: 28-29 Jl-Ag '55. (MLRA 8:10)

1. Iz kafedry khirurgicheskoy stomatologii (zav.--prof. A.I. Yevdokimov) Moskovskogo meditsinskogo stomatologicheskogo instituta (dir.dotsent G.N.Beletskiy)

(DENTISTRY, OPERATIVE, anesthesia and analgesia
nitrous oxide)
(NITROUS OXIDE, anesthesia and analgesia,
dent.)
(ANESTHESIA, in dentistry
nitrous oxide in dent.)

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VASILEVSKIY, V.V., inzh.; SHPANOV, I.A., arkhitektor; CHESNOKOV, M.M., kand.tekhn.nauk; MITROFANOV, G.K., inzh.

Make fuller use of natural resources of ashlar and trim stone. (MIRA 15:11)
Stroi.mat. 8 no.10:32-33 O '62.
(Building stones)

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V. Trend and Development of Geological Prospecting Work 28

VI. Supply of Auxiliary Molding Materials 33

Appendix [Classification of reserves of mineral resources for molding purposes] 38

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the known deposits of sand, fire clay and other materials used for making molds. He describes trends and developments in prospecting for these materials. Railroad transportation of these materials to the machine-building plants is discussed and steps taken by plants to supply themselves with auxiliary molding materials are mentioned. No personalities are mentioned. There are no references.

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II. Future Demands for Basic Molding Materials 15

III. Resources of Basic Molding Materials by Economic-industrial Regions of the USSR 21

IV. Railroad Transport of Basic Molding Materials 24

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25(1) PHASE I BOOK EXPLOITATION SOV/3331

Mitrofanov, G.K.

Formovochnyye materialy, sovremennoye sostoyaniye i perspektivy snabzheniya liteynogo proizvodstva SSSR (Molding Materials; Present State and Outlook for Supplying the USSR Founding Industry) Moscow, 1958. 38 p. Errata slip inserted. 4,000 copies printed. (Series: Metallurgicheskaya promyshlennost')

Sponsoring Agencies: USSR. Sovet Ministrov. Gosudarstvennyy nauchno-tekhnicheskiy komitet, and Akademiya nauk SSSR. Vsesoyuznyy institut nauchnoy i tekhnicheskoy informatsii. Otdel nauchno-tekhnicheskoy informatsii. Sektor metallurgicheskoy promyshlennosti.

Ed.: D.P. Ivanov, Candidate of Technical Sciences.

PURPOSE: The booklet is intended for foundry workers.

COVERAGE: The booklet provides data on mineral deposits, sand, refractory materials, fire clay, and other materials used for making molds. The author discusses

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MITROFANOV, G.K.

19

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The production of the refractory clay, "extra." G. K. Mitrofanov. *Ogneupory* 6, 1045-51(1938); *Chem. Zentr.* 1939, I, 496 7.—Refractory, Al_2O_3-rich clays are freed from impurities sufficiently to meet the qualifications for clays classified as "extra." Lumps, contg. 19-21% moisture, are first pulverized by running them through a fine cutting app.

M. G. Moore

ASM-SLA METALLURGICAL LITERATURE CLASSIFICATION

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KARASEV, M.A.; LEVIN, V.P.; MITROFANOV, G.I.; TIMOFEYEV, I.V.; SHAROBOYKO, T.N., red.

[Descriptive geometry; a textbook] Nachertatel'naia geometriia; uchebnoe posobie. Leningrad, In-t inzhenerov zhel-dor. transp. Pt.1, no.2. 1964. 75 p. (MIRA 17:12)

1. Leningrad. Institut inzhenerov zheleznodorozhnogo transporta. Kafedra "Nachertatel'naya geometriya i grafika.

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ALIYEV, M.A.; MITROFANOV, G.G.; MALKOVSKIY, O.L.; SHCHEGOLIKHINA, I.N.

Case of myocardial infarct during surgery. Zdrav. Kazakh. 23 no.4: 73-74 '63. (MIRA 17:5)

1. Iz Kazakhskogo instituta onkologii i rentgenologii (direktor - dotsent S.N. Nugmanov).

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ALIYEV, M.A.; MITROFANOV, G.G.; MAL'KOVSKIY, O.L.; SHCHEGOLIKHINA, I.N.

Two cases of osteopoikilosis. Zdrav. Kazakh. 23 no.4:73-74 '63. (MIRA 17:5)

1. Iz Kazakhskogo instituta onkologii i radiologii (direktor - dotsent S.N. Nugmanov).

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ALIYEV, M.A.; MITROFANOV, G.G.; TOGAYBAYEV, A.A.

Some results of anesthesia in oncological surgery. Zdrav. Kazakh. 23 no.2:15-18'63. (MIRA 16:10)

1. Iz Kazakhskogo instituta onkologii i radiologii.
(ANESTHESIA) (TUMORS)

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KOZLOV, V.G.; EYGENSON, V.Ye.; MEDVEDANOV, G.G.; SHEKHTER, L.S.

Modern anesthesia in neurosurgery. Trudy Inst. klin. i eksp. khir. AN Kazakh. SSR 9:139-142 '63. (MIRA 17:12)

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MITROFANOV, G.G., dots.

Wisdom tooth. Zdorov'e 7 no.3:31 Mr '61. (MIRA 14:3)
(DENTITION)

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MITROFANOV, G.G.; SOKOLOV, M.M.; KOSTYLEVA, S.G.

Instruments for equipping stomatological surgery departments. Stomatologiia 38 no.1:77-81 Ja-F '59. (MIRA 12:3)

1. Iz kafedry khirurgicheskoy stomatologii (zav. - prof. A.I. Yevdokimov) Moskovskogo meditsinskogo stomatologicheskogo instituta (dir. - dots. G.N. Beletskiy) i iz Nauchno-issledovatel'skogo instituta eksperimental'noy khirurgicheskoy apparatury i instrumentov (Dir. M.G. Anan'yev).
(SURGICAL INSTRUMENTS AND APPARATUS)

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VARES, E.Ya., kandidat meditsinskikh nauk; MITROFANOV, G.G., mladshiy nauchnyy storudnik

Possibility of the use of ultrasonic waves in the treatment of hard tooth substance. Stomatologiia 35 no.2:18-19 Mr-Ap '56. (MLRA 9:8)

1. Iz kafedry khirurgicheskoy stomatologii (zav.-prof. A.I.Yevdokimov) Moskovskogo meditsinskogo stomatologicheskogo instituta (dir.-dotsent G.N.Beletskiy) i kafedry gistologii i embriologii (zav.-prof. V.G.Yeliseyev) I Moskovskogo ordena Lenina meditsinskogo instituta imeni I.M.Sechenova (dir.-prof. V.V.Kovanov)
(SUPERSONIC WAVES)
(DENTAL INSTRUMENTS AND APPARATUS)

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MITROFANOV, G. G.

Mirtofanov, G. G.

"The use of nitrous oxide for anesthesia in stomatological operations," Min Health RSFSR. Moscow Medical Stomatological Inst. Moscow, 1953. (Dissertation for the Degree of Candidate in Medical Science)

So: Knizhnaya letopis', No. 25, 1956

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USHAKOV, S.M.; MITROFANOV, G.D.

Taps with three-step intake parts. Stan.i instr. 30 no.4:35 Ap '59. (MIRA 12:6)

(Taps and dies)

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OBRUCHEV, S.V.; NIKITINA, L.P.; MITRONANOV, F.P.; BUZIKOV, I.P.

Basic characteristics of the Pre-Cambrian and Lower Paleozoic history of the development of main structural elements in the southeastern part of the Eastern Sayan Mountains. Izv. AN SSSR. Ser. geol. 30 no.3:73-90 Mr '65. (MIRA 18:3)

1. Laboratoriya geologii dokembriya AN SSSR, Leningrad.

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NIKOLINA, [illegible]; [illegible]

Rejuvenation [illegible]
in the Eastern [illegible]
219-228 '64 [illegible]

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[illegible], [illegible]; [illegible], [illegible]
V.Ya.

Basic characteristics of the [illegible] the [illegible] Mountain mobile [illegible]

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MITROFANOV, F.P.

Correlation of Lower Paleozoic granitoids of eastern Tuva and the eastern part of the Eastern Sayans. Vest.LGU 17 no.6: 47-56 '62. (MIRA 15:4)
(Tuva A.S.S.R.--Granite) (Sayan Mountains--Granite)

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MITROFANOV, F.P.

Potassium feldspars in the [illegible] (Eastern Sayan). Trudy [illegible] (MIRA [illegible])

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SHURKIN, K.A.; DUK, V.L.; MITROFANOV, F.P.

Geology and petrography of Archean gabbro-labradorites in northern Karelia. Trudy Lab.geol dokem. no.9:120-149 '59. (MIRA 13:11)
(Karelia--Gabbro)

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KOLOSHNIKOV, Grigoriy Vasil'yevich; MITROFANOV, Filipp Ivanovich; GREBTSOV, P.P., red.; GUREVICH, M.M., tekhn.red.

[Experience in introducing crop rotation on collective farms] Opyt vvedeniia sevooborotov v kolkhozakh. Moskva, Gos. izd-vo sel'khoz. lit-ry, 1958. 149 p. (MIRA 11:12)
(Rotation of crops)

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MITROFANOV F. I.

USSR / Cultivated Plants. Experimental Methods. M-2

Abs Jour: Ref Zhur-Biol., 1958, No 16, 72862.

Author : Kalashnikov, I. G.; Koloshnikov, G. V.; Mitrofanov, F. I.
Inst : Not given.
Title : On the Economical Effectiveness of Fertilizers in Experiments and in Production.

Orig Pub: Byul geogr. setl opytov s udobreniyami, 1957, No 1, 67-72.

Abstract: No abstract.

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MITROFANOV, D.I.

Socialist competition in automobile plants. Avt.i trakt.prom. no.4: 1-2 Ap '56. (MLRA 9:8)

1. Ministerstvo avtomobil'noy promyshlennosti.
(Automobile industry)

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MITROFANOV, D.I.

Socialist competition to increase labor productivity in the automobile industry. Avt. trakt. prom. no.12:7 D '53. (MLRA 6:12)

1. Ministerstvo mashinostroyeniya.
(Automobile industry)

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APPROVED FOR RELEASE: 06/23/11: CIA-RDP86-00513R001134700020-6

MITROFANOV, B.Ye.; BERENGILOVA, V.V.

Kyakhta rutile-bearing sillimanite shale deposit. Trudy Vost.-Sib. fil. AN SSSR no.13:39-46 '58. (MIRA 12:12)

1.Selenginskaya poiskovo-razvedochnaya partiya tsentralizovannoy ekspeditsii tresta No.1 Ministerstva tsvetnoy metallurgii SSSR.

(Kyakhta District--Sillimanite)
(Kyakhta District--Rutile)

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KONYAKHIN, I.R.; MITROFANOV, B.P.; RAKHVALOVA, G.A.; TSUKUBLINA, K.N.

Determination of the hardness and some other mechanical characteristics of materials by compressing conical specimens. Zav.lab. 30 no.4:485-486 '64. (MIRA 17:4)

1. Tomskiy politekhnicheskiy institut.

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KONTAKHIN, I.R.; MITROFANOV, B.P.

Determining losses for mechanical hysteresis in a sliding contact. Fiz. met. i metalloved. 17 no.6:941-943 De '64. (MIRA 17:8)

1. Tomskiy politekhnicheskiy institut imeni Kirova.

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MITROFANOV, B.P.

Conditions for the appearance of pitting due to friction. Dokl. AN SSSR 153 no. 5:1065-1066 D '63. (MIRA 17:1)

1. Predstavleno akademikom P. A. Rebinderom.

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MITROFANOV, B.P., aspirant

Preliminary elastic shift. Izv. vyr. ucheb. zav.; mashinostr. no.5:13-17 '65. (MIRA 18:11)

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Shear stresses under pressure

S/126/62/013/005/022/031
E073/E435

stopped on reaching a maximum. A graph is included showing shear force, kg vs shear strain μ, for the following normal loads: 5, 15, 25, 35, 45 kg. For a number of metals (steel, copper and bronze) a linear relation exists between the shear force and the applied normal pressure which remained conserved at any time during the deformation provided the values of the ratio S_{oi}/S_i remain equal. Assuming that the area of the real contact of two solids is proportional to the normal load, the relation between the tangential stresses along the area of contact and the normal pressure will be linear. The obtained results indicate that strengthening takes place with increasing normal pressure. There is 1 figure.

[Abstractor's note: Slightly abridged translation.]

ASSOCIATION: Tomskiy politekhnicheskiy institut (Tomsk Polytechnical Institute)

SUBMITTED: September 29, 1961

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S/126/62/013/005/022/031
E073/E435

AUTHORS: Konyakhin, I.R., Mitrofanov, B.P.

TITLE: Shear stresses under pressure

PERIODICAL: Fizika metallov i metallovedeniye, v.13, no.5, 1962, 771-772

TEXT: In an earlier paper the first of the authors described a technique based on studying the mechanical properties of discrete contact areas of two solid bodies. The micro-nonuniformities of the contacting surfaces determine the application of the contact load and thus the deformation of the loaded micro-nonuniformities proceeds under combined stress conditions. Under such conditions even such brittle materials as quenched steel and glass show plastic deformation. For the experiments a special, earlier described, instrument was used in which the strains can be amplified up to 250000 times. The specimen is in the form of a disc with a ring-shaped protrusion 2 mm wide, 0.5 mm high, 20 mm average diameter. The rough surface of this protrusion was deformed by means of a carefully polished carbide plate. Shear stresses were produced at various values of normal pressure and

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ANDREYEV, V.Ye., inzh.; MITROFANOV, B.M., inzh.; STOLOV, M.A., inzh.; RYKOV, N.M., inzh.; KHZMALYAN, D.M., kand. tekhn. nauk

Burning of natural gas in thin jets in boilers with impact mills. Teploenergetika 10 no.11:28-32 N '63.

(MIRA 17:1)

1. Upravleniye energeticheskoy promyshlennosti Soveta narodnogo khozyaystva BSSR i Moskovskiy energeticheskiy institut.

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APPROVED FOR RELEASE: 06/23/11: CIA-RDP86-00513R001134700020-6

VILENSKIY, Teodor Vladimirovich; MITROFANOV, B.M., red.

[Design and construction of ash removal systems in electric power plants] Proektirovanie i raschet sistem zoloudaleniia elektrostantsiiakh. Moskva, Mosk. energ.in-t, 1961. 110 p. (MIRA 16:10)

(Electric power plants) (Boilers)

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APPROVED FOR RELEASE: 06/23/11: CIA-RDP86-00513R001134700020-6

MITROFANOV, B.M., assistent; [illegible], A.I., prof., red.

[Calculation and design of high-speed mills; transl. for a design course] Raschet i konstruirovanie bystrokhodnobil'nykh mel'nits; uchebnoe posobie po kursovomu proektirovaniiu. Moskva, Energ. izd., 1963. 51 p. (MIRA 18:1)

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MITROFANOV, B.M.; DRACHUK, I.N., red.

[Testing of a steam generator and its components in the Thermal Electric Power Plant of the V.I.Lenin Power Engineering Institute in Moscow] Ispytaniia parogeneratora i ego elementov na TETs MEI. Moskva, Vysshaia shkola, 1964. 68 p. (MIRA 17:12)

1. Moscow. Energeticheskiy institut.

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ANDREYEV, V.Ye., inzh.; MITROFANOV, B.M., inzh.; RYKOV, N.M., inzh.; STOLOV, M.A., inzh.; KHZMALYAN, D.M., kand. tekhn. nauk

Joint burning of milled peat and natural gas in thin jets in boilers with hammer mills. Elek. sta. 35 no.9:17-22 S '64.

(MIRA 18:2)

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ACCESSION NR AR4045085

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OTHER: 013

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[illegible] calculation of servomechanisms (Proyektirovaniye i raschet sledyashchikh sistem), Leningrad, Izdevo "Sudostroyeniye", 1964, 606 p. illus., biblio. 10,000 copies printed.

TOPIC TAGS: servomechanism, electronic amplifier, magnetic amplifier, semiconductor amplifier

PURPOSE AND COVERAGE: The book examines in detail the problems of designing and calculating ship servomechanisms with electronic, magnetic, and semiconductor amplifiers and the selection and calculation of correcting components. The methods of selecting the power of the executing motor and the experimentally determined transmission functions of individual links of the servomechanism are included. Detailed examples of calculating servomechanisms are also given. The book is intended for researchers and engineers and also for students of higher educational institutions.

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nie," 1964. 606 p. [illegible] Leningrad, Izd-vo "Sudostroe-
(MIRA 17:4)

[illegible]

[illegible] BOOK EXPLOITATION

S/

[illegible] Rabkin, G. L.; Samokhvalov, G. N.; [illegible] Fateyev, A. V.; Chicherin, M. I.

B+1

Design and calculation of servomechanisms (Proyektirovaniye i raschet sledyashchikh [illegible]

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AVAILABLE: Library of Congress

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thank I. A. Petrusenko, I. S. Rayner, N. M. Korovalova, L. A. Agarkova, and Yu. A. Yereneyev for their aid in preparing the book. There are 51 references: 47 Soviet, 1 German, and 3 English.

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MITROFANOV, B A

8(2) PHASE I BOOK EXPLOITATION SOV/2030

Vasil'yev, Dmitriy Vasil'yevich, Boris Afanas'yevich Mitrofanov, Grigoriy L'vovich Rabkin, Georgiy Nikanorovich Samokhvalov, Aleksandr Aleksandrovich Semenkovich, Aleksandr Vasil'yevich Fateyev, and Nikolay Ivankovich Chicherin

Raschet sledyashchego privoda (Servodrive Design) Leningrad, Sudpromgiz, 1958. 370 p. 8,000 copies printed. Errata slip inserted.

Resp. Ed.: S. Ya. Berezin; Ed.: Ye. N. Shaurak; Tech. Ed.: P. S. Frumkin.

PURPOSE: This book is intended for scientists, engineers, and students of vuzes.

COVERAGE: This book discusses the problems of designing electromechanical servodrives and gives examples of design from the point of view of the overall system and of the individual basic elements. The design of servodrive amplifiers, the selection and design of error-sensing devices, and the experimental determination of the transfer functions of the discrete links of a servodrive are given considerable attention in the book. Materials on the design of electromechanical servodrives are systematized and the design of servodrives with electronic and magnetic amplifiers and of servodrives with rotating amplifiers is discussed. These designs reflect the practical experiences of the authors in the development of servosystems. The authors

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ibid., 14, No 2, 1953; A. V. Mikhaylov, "Method of harmonic analysis in regulation theory," ibid., No 3, 1938; V. V. Solodovnikov, Vvedeniye v statisticheskuyu dinamiku sistem avtomaticheskogo upravleniya [Introduction to dynamics of automatic control systems], State Tech Press, 52.

Institution : -

Submitted : February 16, 1954

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USSR/Automatics and telemechanics-transfer functions FD-2764

Card 1/2 Pub. 10 - 9/11

Author : Rabkin, G. L.; Mitrofanov, B. A.; Shterenberg, Yu. O. (Leningrad)

Title : Determining the numerical values of the coefficients of the transfer functions of linearized circuits and systems according to experimental frequency characteristics

Periodical : Avtom. i telem., 16, Sep-Oct 1955, 488-494

Abstract : The authors' work is devoted to a procedure for determining the transfer functions of certain types of linearized circuits and systems with the help of experimental frequency characteristics. They present a composite diagram of phase and amplitude frequency characteristics and give formulas for determining the coefficients of transfer functions of circuits and systems under consideration. They present an example of the application of the proposed procedure. Eight references: e.g. I. M. Krassov; Tagayevskaya, A. A.; M. A. Vasil'yeva, "Determining the amplitude-phase characteristics of a regulator by method of rectangular wave," ibid., 14, No 3, 1953; A. A. Tagayevskaya, "Determining the amplitude-phase characteristics of a linear system from its curve of transient process,"

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RYBACHOK, I.N.; MITROFANOV, A.Z.; SOKOLOV, A.I.; [illegible], G.V.

Increasing the output of demulsification units in connection with the use of new demulsifiers. Neftepromyshlennost. [illegible]

1. Volgogradskiy nauchno-issledovatel'skiy institut neftyanoy i gazovoy promyshlennosti.

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RYBACHOK, I.N.; NITROFANOV, A.Z.

Reducing metal used in heat-exchanging apparatus for primary oil refining units. Mash. i neft. obor. no.6:35-37 '65. (MIRA 18:7)

1. Volgogradskiy nauchno-issledovatel'skiy institut neftyanoy i gazovoy promyshlennosti.

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BAZICHENKO, Leonid Prokof'yevich; MITROFANOV, A.Ye., red.; SLUTSKER, M.Z., red. izd-va; POPOVA, V.V., tekhn. red.

[Manual for the bulldozer operator] Posobie bul'dozerista. Izd.2., perer. i dop. Moskva, Goslesbumizdat, 1963. 210 p. (MIRA 17:3)

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MITROFANOV, A. YE.

PA 30/49T66

USSR/Engineering
Bulldozers
Tractors

May 48

"Bulldozers Manufactured by the Krasnoyarsk Factory," A. Ye. Mitrofanov, Engr, Cen Sci Res Inst of Mech and Power Eng of Lumbering, 2 pp

"Mekh Trud i Tyazh Rabot" No 5

Describes subject bulldozer with sketch. It is mounted on a Stalinets-80 tractor.

30/49T66

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SBITNEV, V.S.; MITROFANOV, A.V.; BRODOV, G.S.

Radio line in a drilling hole. Biul. tekh.-[illegible] Inform. [illegible] nauch.-issl. inst. nauch. i tekh. inform. [illegible] (MIRA [illegible])

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NECHIPORENKO, Ye.P.; KRIVORUCHKO, V.M.; VERKHOROBIN, L.F.; MITROFANOV, A.S.; POLTAVTSEV, N.S.

Effect of impurities on the kinetics of vacuum siliconizing of molybdenum. Izv. AN SSSR. Neorg. mat. 1 no.12:2212-2218 D '65. (MIRA 18:12)

1. Fiziko-tekhnicheskiy institut AN UkSSR, Khar'kov.

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L 27458-66 EWT(m)/EWP(t) IJP(c) JD/JG/WB

ACC NR: AP6017689 SOURCE CODE: UR/0363/65/001/008/1364/1367

AUTHOR: Ivanov, V. Ye.; Nechiporenko, Ye. P.; Krivoruchko, V. M.; Zmiy, V. I.; Mitrofanov, A. S.; Aleksandrov, O. M. 36 B

ORG: Physicotechnical Institute AN UkrSSR (Fiziko-tekhnicheskiy institut AN UkrSSR)

TITLE: Oxidation of tantalum disilicide at 1400-1600°C temperatures

SOURCE: AN SSSR. Izvestiya. Neorganicheskiye materialy, v. 1, no. 8, 1965, 1364-1367

TOPIC TAGS: tantalum compound, silicide, oxidation kinetics, silicon

ABSTRACT: Up to the present day there are no systematic investigations on the oxidation kinetics of tantalum disilicide at high temperatures. The purpose of the present study was an examination of the oxidation kinetics of tantalum disilicide at 1400-1600°C temperatures. Tantalum of 99.95% purity and 99.99% pure silicon were used for the investigation. The effects of specimen preparation temperature and extent of their homogenization on the oxidation rate were established. The oxidation of $TaSi_2$ specimens in the initial stage conforms to a straight-line relationship. After some specific period of time a sharp rise in the specimen oxidation rate sets in, which leads to their failure. The fundamental feasibility of raising the tantalum disilicide's heat resistance up to 1600°C was demonstrated. Orig. art. has: 3 figures. [JPRS]

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L 17562-66 EWT(m)/EWP(t) IJP(c) JD/JG/WB

ACC NR: AP6017688 SOURCE CODE: UR/0363/65/001/008/1360/1363

AUTHOR: Ivanov, V. Ye.; Nechiporenko, Ye. P.; Krivoruchko, V. M.; Zmiy, V. I.; Mitrofanov, A. S.; Aleksandrov, O. M.

ORG: Physicotechnical Institute AN UkrSSR (Fiziko-tekhnicheskiy institut AN UkrSSR)

TITLE: Oxidation of tungsten disilicide at 1500-1800°C temperatures

SOURCE: AN SSSR. Izvestiya. Neorganicheskiye materialy, v. 1, no. 8, 1965, 1360-1363

TOPIC TAGS: tungsten compound, silicide, oxidation kinetics, silicon, molybdenum compound

ABSTRACT: The authors carried out an investigation of the oxidation kinetics of tungsten disilicide over the temperature range 1500-1800°C. Tungsten of 99.95% purity and 99.999% pure silicon were used for the investigation. The oxidation kinetics curves are parabolas. The effects of preparation temperature and homogenization time of tungsten disilicide specimens on their oxidation rate was studied. It was shown that the oxidation rate of WSi_2 at 1500-1700°C is approximately the same as that for $MoSi_2$. It is even somewhat lower than that for $MoSi_2$ at 1800°C. Orig. art. has: 2 figures and 2 formulas. [JPRS]

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ACC NR: AT5027941

did not change. The points of inflection on the curves indicated the formation of a subsequent, new, higher phase. The Mo_3Si and Mo_5Si_3 phases grew according to the parabolic law. The rate of siliconizing was thus controlled by diffusion, even during the initial stages of the process. Orig. art. has: 2 figures.

SUB CODE: /11/ SUBM DATE: 20Jul65/ ORIG REF: 009/ OTH REF: 001

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