"APPROVED FOR RELEASE: 07/13/2001 CIA-RDP86-00513R001447120010-1

129-58-8-12/16

Investigation of the Low Temperature Stability of Certain Steel Compositions

15G - 0.12-0.17% C, 0.4-0.6% Si, 1-1.2% Mn, < 0.03% S, < 0.015% P.

For welded structures the Steel 12KhGS is preferable to the Steel 15G.

There are 3 figures and 3 tables.

ASSOCIATION: TsNIITMASh

1. Steel--Properties 2. Steel--Temperature factors 3. Steel --Arctic regions

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APPROVED FOR RELEASE: 07/13/2001 CIA-RDP86-00513R001447120010-1"

"APPROVED FOR RELEASE: 07/13/2001 CIA-RDP86-00513R001447120010-1

L 07168-67 EWP(j)/EWT(m) RM/FDN/JW

ACC NR: AP6028170 SOURCE CODE: UR/0079/66/036/006/1154/1155

AUTHOR: Vyazankin, N. S.; Bochkarev, M. N.; Sanina, L. P.

ORG: Polymer Stabilization Laboratory, Academy of Sciences, SSSR, Gor'kiy (Laboratoriya stabilizatsii polimerov Akademii nauk SSSR)

TITLE: Unsymmetrical bi- and trimetal-organic compounds

SOURCE: Zhurnal obshchey khimii, v. 36, no. 6, 1966, 1154-1155

TOPIC TAGS: organotellurium compound, organotin compound, organogermanium compound, organosilicon compound

ABSTRACT: New ways of synthesizing unsymmetrical organometallic compounds with Si-Te-C-, Si-Te-Sn- and similar groups have been developed. When triethylsilane or triethylgermane is heated with diethyltellurium, a gradual replacement of ethyl groups takes place:

$$(C_2H_5)_2Te \xrightarrow[(M=Si,\ Ge)]{(C_2H_5)_3MH} \underset{(I)}{(C_2H_5)_3MTeC_2H_5} \xrightarrow[(M'=Si,\ Ge,\ Sn)]{(C_2H_5)_3M'H} \underset{(II)}{(C_2H_5)_3MTeM'(C_2H_5)_3}$$

In addition to the symmetrical compounds (II) (M=M'=Si or Ge), compounds (I)(M=Si) and (II) (M=Ge) are formed in 11.5 and 28% yield respectively. When compounds (I) are reacted with triethyltin hydride, the compounds (II) (M=Si, M'=Sn) and (II) (M=Ge,M'=Sn) are formed in 91% and 62% yield respectively. Diethyltellurium reacts with triethyl-

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L 07168-67

ACC NR: AP6028170

tin hydride to give ethane and (II) (M=M'=Sn) in 91% yield; the unsymmetrical product (I) (M=Sn) is not observed. Unsymmetrical compounds are also formed by the reactions

$$(C_2H_5)_3GeH + X \longrightarrow \underset{(III)}{(C_2H_5)_3GeXH}$$

$$(C_2H_5)_3GeXH + (C_2H_5)_3SnH \longrightarrow H_2 + \underset{(IV)}{(C_2H_5)_3GeXSn(C_2H_5)_3}$$

X = S or Se.

SUB CODE: 07/ SUBM DATE: 25Dec65

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APPROVED FOR RELEASE: 07/13/2001 CIA-RDP86-00513R001447120010-1"

"APPROVED FOR RELEASE: 07/13/2001 CIA-RDP86-00513R001447120010-1

S/064/61/000/011/003/007
B110/B101

AUTHORS: Sanina, N. L., Kogan, P. S., Kazarnovskiy, S. N.

TITLE: Selective hydrogenation of acetylene compounds in the butylene - divinyl fraction of pyrolysis gases from petroleum products

PERIODICAL: Khimicheskaya promyshlennost', no. 11, 1961, 60 - 62

TEXT: The conditions for a continuous selective hydrogenation of acetylene hydrocarbons contained in the industrial butylene - divinyl fraction (C_4) of pyrolysis gases from petroleum products on a stable Ni catalyst were studied. The authors used electrolytic hydrogen and gas containing 43 - 83 mg/m^3 of H_2S and 130 - 200 mg/m^3 of CO_2 (% by volume) which consisted of: n-butylene 32 - 42, isobutylene 29 - 35, divinyl 10 - 17, propylene 0.5 - 5, C_5 and higher hydrocarbons 8 - 11, acetylene compounds 0.04 - 0.14, and a Ni - kieselguhr catalyst (3.5·3.5 mm tablets). The temperature in the 200-ml hydrogenation column, a steel tube 700 mm long, 20 mm wide, was -15 to -10°C, that in the collecting vessel was -30 to -20°C.

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"APPROVED FOR RELEASE: 07/13/2001 CIA-RDP86-00513R001447120010-1

S/064/61/000/011/003/007
B110/B101

Selective hydrogenation of...

The H_2 pressure was 70 - 100 mm Hg. Before and after hydrogenation, unsaturated compounds in the fraction were determined by 1% Br_2 dissolved in KBr, acetylenes were determined according to C. K. Chavastelon (Compt. rend., 125, 245 (1897)), and divinyl was volume-chromatographically determined. A maximum degree of hydrogenation occurs in the first four reaction hours with a regenerated catalyst since the latter still contains hydrogen absorbed during the reduction. In the second period, the hydrogenation degree remains constant. Then, it decreases since the catalyst is gradually poisoned. With an 83 mg/m^3 content of H_2S in C_4, acetylenes with increased H_2 concentrations were hydrogenated more intensively than divinyl; butylenes, however, were not hydrogenated. With a fraction containing 0.077 - 0.082% by volume of acetylene derivatives, highest selectivity is reached with a C_4 rate of 0.5 hr^{-1} and a hydrogen - acetylene ratio of 10 - 13 : 1. Hydrogenation of acetylenes reaches ~90%, that of divinyl ~8% which meets requirements of the synthetic rubber industry. With a hydrogen - acetylene ratio of 10 : 1, the degree of

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APPROVED FOR RELEASE: 07/13/2001 CIA-RDP86-00513R001447120010-1"

"APPROVED FOR RELEASE: 07/13/2001 CIA-RDP86-00513R001447120010-1

hydrogenation drops from 89 to 26.5% as the rate of C_4 supply increases from 0.5 to 1.5 hr^{-1}. The H_2S sensitivity of the Ni catalyst depends on temperature, pressure, H_2 concentration, and the formation and dispersion degree of the catalyst. The butylene fraction contained 43 - 83 mg/m^3 of H_2S. Hydrogenation was conducted at -10 to -15°C, atmospheric pressure, C_4 supply of 2.0 hr^{-1}, and a hydrogen - acetylene compounds ratio of 10 : 1. The authors used fractions with (a) 83.0 mg/m^3 of H_2S (unpurified), (b) 10.1 mg/m^3 of H_2S (purified in 5% NaOH solution), and (c) 1.7 mg/m^3 of H_2S (purified in 0.5% NaOH and 5% lead acetate solution). With (c), the catalyst activity first remained constant at 98 - 83% for 20 hr, then dropped to 67.8% within the next 5 hr. With (a), the activity dropped to ~68.0% after the first 4 hr. Since catalyst poisoning is reversible, its original activity can be restored. With a 0.5 hr^{-1} rate of supply, optimum for selectivity, acetylene hydrogenation remained constant at ~90% for 39 hr with an H_2S content of 83 mg/m^3. Thus, an H_2S content of the C_4

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Selective hydrogenation of... S/064/61/000/011/003/007
B110/B101

fraction $\leqslant$ 83 mg/m^3 is admissible under these conditions. There are 4 figures, 1 table, and 17 references: 12 Soviet and 5 non-Soviet. The three references to English-language publications read as follows: G. Hebbard, W. Hunt, US Patent 2359759, 1944; Ch. Welling, H. Hepp, US Patent 2379670, 1945; T. Beuer, US Patent 2391004, 1945.

Card 4/4

APPROVED FOR RELEASE: 07/13/2001 CIA-RDP86-00513R001447120010-1"

"APPROVED FOR RELEASE: 07/13/2001 CIA-RDP86-00513R001447120010-1

SANINA, N.L.; KOGAN, P.S.; KAZARNOVSKIY, S.N.

Selective hydrogenation of acetylenic compounds in the butylene-bivinyl fraction of gases from the pyrolysis of petroleum products. Khim. prom. no.11:802-804 N '61. (MIRA 15:1)
(Butadiene). (Hydrogenation)
(Petroleum products)

APPROVED FOR RELEASE: 07/13/2001 CIA-RDP86-00513R001447120010-1"

"APPROVED FOR RELEASE: 07/13/2001 CIA-RDP86-00513R001447120010-1

KOGAN, P.S.; ~~SANINA, N.L.;~~ KAZARNOVSKIY, S.N.; Prinimali uchastiye: SEDOV, M.P.; KVASOV, A.A.

Removal of acetylenic compounds from the butylene-bivinyl fraction of gases of petroleum product pyrolysis by the methode of selective hydrogenation. Khim.prom. no.10:717-719 O '62. (MIRA 15:12)

(Olefins)
(Acetylene compounds)
(Petroleum—Refining)

APPROVED FOR RELEASE: 07/13/2001 CIA-RDP86-00513R001447120010-1"

"APPROVED FOR RELEASE: 07/13/2001 CIA-RDP86-00513R001447120010-1

ACCESSION NR: AT4010610 S/3051/63/000/000/0054/0060

AUTHOR: Sanina, N. L.; Kogan, P. S.; Kazarnovskiy, S. N.

TITLE: Hydrogenation of acetylenic compounds and divinyl in the butylene-divinyl fraction of the pyrolytic gases from petroleum products

SOURCE: Kataliticheskiye reaktsii v zhidkoy faze. Trudy* Vsesoyuznoy konferentsii. Alma-Ata, 1963, 54-60

TOPIC TAGS: hydrogenation, catalytic hydrogenation, acetylene, divinyl, pyrolysis, pyrolytic gas, petroleum pyrolysis, hydrogen sulfide, nickel kieselguhr hydrogenation catalyst

ABSTRACT: Using a Ni-kieselguhr catalyst, the authors studied the hydrogenation of the liquid C_4 fraction of the gases from the pyrolysis of petroleum products, containing 61-77% butylene, 10-17% divinyl, 8-16% C_3-C_5 and higher hydrocarbons and 0.14% acetylenic compounds by volume, in order to determine the effect of the flow rate, hydrogen concentration, duration of service of the catalyst, and admixtures of H_2S (43-83 mg/m^3) and CO_2 (130-200 mg/m^3) on the selectivity and vigor of the hydrogenation of acetylenic compounds and divinyl. Hydrogenation was carried out by the flow method, either under laboratory conditions or on a pilot plant scale. The results showed that the degree of hydrogenation of acetylenic compounds

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"APPROVED FOR RELEASE: 07/13/2001 CIA-RDP86-00513R001447120010-1

ACCESSION NR: AT4010610

increased with the relative volumes of hydrogen and substrate, while the hydrogenation of divinyl remained unchanged; depending on the flow rate, up to 90% of the acetylenes and 8% of the divinyl present in the C_4 fraction underwent hydrogenation. The presence of 83 mg/m^3 of H_2S was found to reduce the percentage of the acetylenic compounds hydrogenated to 38% after 11.5 hours of operation, but the percentage was increased rapidly by rejuvenation of the catalyst with hydrogen. The yield of hydrogenated acetylenes was not affected when hydrogen was replaced by a methane-hydrogen mixture. In a more detailed study of the mechanism of hydrogenation of mixtures of divinyl and vinylacetylene, the authors studied the hydrogenation of 88% divinyl and 12% n-butylenes in the presence of nickel-kieselguhr and determined the potential of the catalyst along with the kinetics and selectivity of hydrogenation. The catalyst potential was found to vary markedly, but analysis of the products showed preferential hydrogenation of vinylacetylene in the presence of a large excess of divinyl. Orig. art. has: 4 figures.

ASSOCIATION: Gor'kovskiy politekhnicheskiy institut (Gor'kiy Polytechnic Institute)

SUBMITTED: 00 DATE ACQ: 25Jan64 ENCL: 00

SUB CODE: CH NO REF SOV: 008 OTHER: 005

Card 2/2

APPROVED FOR RELEASE: 07/13/2001 CIA-RDP86-00513R001447120010-1"

"APPROVED FOR RELEASE: 07/13/2001 CIA-RDP86-00513R001447120010-1

SANINA, S.I.

Effectiveness of herbicides. Zemledelie 26 no.12:49-51 D '64.
(MIRA 18:4)

APPROVED FOR RELEASE: 07/13/2001 CIA-RDP86-00513R001447120010-1"

"APPROVED FOR RELEASE: 07/13/2001 CIA-RDP86-00513R001447120010-1

USSR/Physics - X-Ray Tube Anode Heating 11 Sep 51

"Heat Regime of the Anode of Powerful Impulse Tubes," T. A. Sanina, A. A. Sanin, A. M. Titov

"Dok Ak Nauk SSSR" Vol LXXX, No 2, pp 209-211

Problem concerning the heat balance of the anode for the stationary case was studied by many, especially by V. Rakov and A. Bliznyuk (cf. "Zhur Tekh Fiz" 10, 11 1940). Similar problem for the nonstationary case was solved by G. A. Grinberg, N. N. Lebedev, E. D. Pergamentseva, I. P. Skal'skaya and Ya. S. Uflyand (cf. "Zhur Tekh Fiz" 20, 12, 1950), for rather large intervals (1 sec) of exposure. Authors study the case

221T88

for very small exposure times (10^{-6} to 10^{-7} sec) and 100-1,000 amp. Set up the eqs of heat conduction in wolfram target and analyze temp behavior. Submitted by Acad D. V. Skobel'tsyn 17 Jul 51.

221T88

SANINA, T. A.

APPROVED FOR RELEASE: 07/13/2001 CIA-RDP86-00513R001447120010-1"

"APPROVED FOR RELEASE: 07/13/2001 CIA-RDP86-00513R001447120010-1

SANINA, T.A.

USSR.

400. On the problem of the temperature of an object in corpuscular radiation flow. T. A. SANINA, A. A. SANIN AND A. M. TITOV. Zh. Tekhn. Fiz. 23, No. 6 (12) 703-8 (1952) In Russian.

This problem is considered for pulsed corpuscular radiation. The assumption that the flow of electrons liberates heat not only on the surface of the object, [illegible] is taken as the basis for the [illegible]

APPROVED FOR RELEASE: 07/13/2001 CIA-RDP86-00513R001447120010-1"

"APPROVED FOR RELEASE: 07/13/2001 CIA-RDP86-00513R001447120010-1

SOV-120-58-1-27/43

AUTHORS: Sanina, T. A., Sanin, A. A., Fedorenkova, N. R.

TITLE: The Triggering of Gas Discharge Devices (Zazhiganiye gazorazryadnykh priborov)

PERIODICAL: Pribory i Tekhnika Eksperimenta, 1958, Nr 1, pp 116-119 (USSR)

ABSTRACT: An investigation is made of the dependence of discharge delay on a number of factors such as overvoltage, the magnitude of the starting current, frequency of repeat discharges, etc. The following were studied: MN-3, MN-5, MN-6, MTKh-90. A special generator of rectangular pulses which delivers pulses whose duration is 5 - 200 μ/sec was used. The amplitude of these pulses was within the range 0 - 200 V and the repetition frequency from a few 10ths of c/s to 10 Kc/s. The circuit used to apply the pulses to the gas discharge tube is shown in Fig.1. The pulses are delivered to the tube through the capacitor C and then to a parallel circuit one arm of which consists of the gas discharge tube in series with a resistance R_1 while the other arm contains a resistance R_2. Fig.2 shows current pulses through the

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APPROVED FOR RELEASE: 07/13/2001 CIA-RDP86-00513R001447120010-1"

"APPROVED FOR RELEASE: 07/13/2001 CIA-RDP86-00513R001447120010-1

The Triggering of Gas Discharge Devices.

valve taken across the resistance R_1 for different frequencies of the potential applied to the tube. At lower frequencies the current pulses take longer to develop. As can be seen from this figure, the time taken for the discharge to develop at constant frequency is constant from pulse to pulse, and only after a certain interval of time a statistical scatter sets in (Curve 4). Thus the initial electron current decreases with time and finally becomes sufficiently small so that the statistical delay becomes commensurable with the time taken by the discharge to develop. Fig.3 shows the delay in the discharge of a neon valve (MN-5) as a function of the repetition frequency of the applied potential and the amplitude of this potential. Fig.3 shows that the mean statistical delay time depends more strongly on the frequency of a repeat discharge than on the time of formation of the discharge. Fig.4 shows the delay time of the discharge on the voltage across the valve. The form of this curve can be represented by a curve of the form:

$$\tau = \frac{a}{V - V_3} \exp(- b/V)$$

Card 2/4 in which a and b are constants independent of the voltage

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"APPROVED FOR RELEASE: 07/13/2001 CIA-RDP86-00513R001447120010-1

SOV-120-58-1-27/43

The Triggering of Gas Discharge Devices.

V and V_3 is the voltage at which spark-over occurs. Fig. 5 shows the effect of a constant potential on the time of formation of the discharge as a function of the interval of time between discharges. The continuous curve was taken with zero voltage between discharges while the dotted curve was taken with a DC voltage of 10 volts between the discharges. It is clear that the DC voltage has an effect on the time of formation of the discharge but only for very small intervals between discharges. Finally, the concentration of ions as a function time was determined. This was done by the method suggested by Dandurand (Ref.3). It was found that the electron concentration depends linearly

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"APPROVED FOR RELEASE: 07/13/2001 CIA-RDP86-00513R001447120010-1

SOV-120-58-1-27/43

The Triggering of Gas Discharge Devices.

on time. There are 7 figures, 1 Soviet, 1 German and 1 English reference.

ASSOCIATION: Nauchno-issledovatel'skiy institut yadernoy fiziki MGU, Moskovskiy aviatsionnyy institut (Scientific Research Institute for Nuclear Physics of the Moscow State University, Moscow Aviation Institute)

SUBMITTED: June 25, 1957.

1. Gas discharges--Equipment 2. Gas discharges--Control systems
3. Gas discharges--Electrical factors

Card 4/4

APPROVED FOR RELEASE: 07/13/2001 CIA-RDP86-00513R001447120010-1"

"APPROVED FOR RELEASE: 07/13/2001 CIA-RDP86-00513R001447120010-1

21613
S/188/61/000/002/008/010
B108/B209

9.3150 (1049, 1140, 1532)

AUTHORS: Sanina, T. A., Zaytsev, A. A., Sanin, A. A.

TITLE: A study of the development of a discharge and determination of the plasma parameters in low-pressure tubes

PERIODICAL: Vestnik Moskovskogo universiteta. Seriya 3, fizika, astronomiya, no. 2, 1961, 54-59

TEXT: The authors of the present paper studied the formation of various regions in a gaseous-discharge tube by way of optical observation. The probe method, which usually is employed, is a little too insensitive in the transition process from ignition to normal operation. The experimental setup is shown in Figs. 1 and 2. The discharge tube was fed with up to +700 v from a high-voltage rectifier, and by rectangular pulses of a length of between 0.5 and 60 μsec and a frequency of 50-100 cps. The intensity variation was studied by means of a ФЭУ-19 (FEU-19) multiplier. An optical system was placed before the photomultiplier and both were movable along the discharge tube. After amplification, the signal from the multiplier was fed into a cathode-ray tube. The discharge tube was ignited through a high-impedance

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"APPROVED FOR RELEASE: 07/13/2001 CIA-RDP86-00513R001447120010-1

21613

S/188/61/000/002/008/010
B106/B209

A study of ...

Г-807 (G-807) tetrode as soon as a pulse reached the latter. The authors examined tubes with oxide cathodes, 30-70 cm long, 2 and 4 cm in diameter, filled with pure neon of 0.8 mm Hg and a neon-mercury mixture of 1 mm Hg. Fig. 6 shows the development of the intensity distribution along a neon tube. Curve 1 was taken 2.5 μsec after ignition; for curve 2, t = 3 μsec; curve 3, t = 4 μsec, [Abstracter's note: t for curve 4 is omitted], curve 5, t = 8 μsec (normal conditions). The authors found a maximum of radiative intensity, due to higher electron mean energy, which appears soon after applying the electric tension. Faraday's dark space and the anode fall can be seen to develop gradually. There are 6 figures and 6 references: 4 Soviet-bloc and 2 non-Soviet-bloc.

ASSOCIATION: HIIYaF, MAI (Scientific Research Institute of Nuclear Physics)

SUBMITTED: October 16, 1960

Card 2/5

APPROVED FOR RELEASE: 07/13/2001 CIA-RDP86-00513R001447120010-1"

"APPROVED FOR RELEASE: 07/13/2001 CIA-RDP86-00513R001447120010-1

L 26123-66 EWT(1)/EWT(m)/T/EWP(t) IJP(c) GG/WW/JD/HW/JG

ACC NR: AP6015805 SOURCE CODE: UR/0386/66/003/010/0408/0410

59
54
B

AUTHOR: Golovenchits, Ye. I.; Gurevich, A. G.; Sanina, V. A.

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

TITLE: Magnetic resonance in $RbNiF_3$ single crystals

SOURCE: Zhurnal eksperimental'noy i teoreticheskoy fiziki. Pis'ma v redaktsiyu. Prilozheniye, v. 3, no. 10, 1966, 408-410

TOPIC TAGS: rubidium compound, single crystal, magnetic structure, magnetic anisotropy, antiferromagnetic material, magnetic resonance

ABSTRACT: The authors present results of measurements of electron magnetic resonance in single-crystal $RbNiF_3$ below the point of transition into the magnetically ordered state (145K). The measurements were made in the frequency range 7.7--43.2 Gcs at 77K in constant and pulsed magnetic fields. The samples were spheres of 0.5--0.9 mm diameter. Although the magnetic structure of $RbNiF_3$ has not yet been fully explained, the results are in agreement with the simple model of a uniaxial ferromagnet with negative easy-plane anisotropy. This is deduced from an analysis of plots of the resonance frequency against the magnetic field and the resonance field against the angle between the field and the [0001] axis. Although the value of the magnetic moment of $RbNiF_3$ shows it to be an uncompensated antiferromagnet, it is pointed out that ferromagnetic ordering is realized in this substance in the presence of magnetic

Card 1/2

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"APPROVED FOR RELEASE: 07/13/2001 CIA-RDP86-00513R001447120010-1

L 26123-66

ACC NR: AP6015805

Ni^{+2} ions only. The authors thank G. A. Smolenskiy, at whose initiative this work was performed, and P. P. Syrnikov, who supplied the single crystals, M. F. Bryzhin for consultations concerning the sample orientation, and N. M. Solin and V. A. Berenberg for help with the measurements. Orig. art. has: 2 figures and 2 formulas.

SUB CODE: 20/ SUBM DATE: 25Mar66/ ORIG REF: 001

Card 2/2

APPROVED FOR RELEASE: 07/13/2001 CIA-RDP86-00513R001447120010-1"

"APPROVED FOR RELEASE: 07/13/2001 CIA-RDP86-00513R001447120010-1

L 43052-66 EWT(1) IJP(c) GG

ACC NR: AP6015462 SOURCE CODE: UR/0181/66/008/005/1449/1454

48
B.

AUTHOR: Bar'yakhtar, V. G.; Sanina, V. A.

ORG: none

TITLE: The scattering of spin waves on paramagnetic impurities in antiferromagnetics

SOURCE: Fizika tverdogo tela, v. 8, no. 5, 1966, 1449-1454

TOPIC TAGS: spin wave, electromagnetic wave scattering, antiferromagnetic material, weak magnetic field, impurity scattering, magnetic anisotropy

ABSTRACT: The scattering of spin waves in impurities in antiferromagnetics with a "light axis" magnetic anisotropy in weak magnetic fields has been studied by R. London and P. Pincus (Phys. Rev., 132, 673, 1963). The present authors study the scattering of spin waves in impurities in antiferromagnetics with a "light plane" magnetic anisotropy, as well as in antiferromagnetics with a "light axis" magnetic anisotropy in magnetic fields the intensity of which is greater than the "upsetting" field. Assuming k = 0 and integrating by k2, in the case of antiferromagnetics with a "light plane" magnetic anisotropy, the authors obtain

$$\frac{1}{\tau_{10}} = \frac{c}{128}\left(\frac{4\pi}{\delta}\right)^{1/2}\left(\frac{\delta'}{\delta}\right)^{2}\left(\frac{\varepsilon_2}{\varepsilon_0}\right)^{3}\frac{\varepsilon_2}{\hbar}, \quad c \equiv \frac{N_0}{N}, \tag{1}$$

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"APPROVED FOR RELEASE: 07/13/2001 CIA-RDP86-00513R001447120010-1

ZALESSKIY, B.V.; SANINA, Ye. A.

Study of differential porosity of carbonate rocks in the Samara Bend. Trudy IGEM no. 13:15-23 '58. (MIRA 11:7)
(Samara Bend--Carbonates(Mineralogy))

APPROVED FOR RELEASE: 07/13/2001 CIA-RDP86-00513R001447120010-1"

"APPROVED FOR RELEASE: 07/13/2001 CIA-RDP86-00513R001447120010-1

ZALESSKIY, B.V.; SANINA, Ye.A.

Effect of various aggressive factors on the distribution in carbonate rocks of pores according to their size. Trudy IGEM no.43:18-24 '61. (MIRA 14:10)
(Rocks, Carbonate) (Porosity)

APPROVED FOR RELEASE: 07/13/2001 CIA-RDP86-00513R001447120010-1"

"APPROVED FOR RELEASE: 07/13/2001 CIA-RDP86-00513R001447120010-1

ZALESSKIY, B.V.; SANINA, E.A.

Determination of the permeability of massive rocks. Trudy IGEM no.43:111-119 '61. (MIRA 14:10)
(Rocks--Permeability)

APPROVED FOR RELEASE: 07/13/2001 CIA-RDP86-00513R001447120010-1"

"APPROVED FOR RELEASE: 07/13/2001 CIA-RDP86-00513R001447120010-1

SANINA, Yu.P.

Study on the toxicity of terephthalic acid. Toks. nov. prom. khim. veshch. no.7:91-101 '65. (MIRA 18:9)

APPROVED FOR RELEASE: 07/13/2001 CIA-RDP86-00513R001447120010-1"

"APPROVED FOR RELEASE: 07/13/2001 CIA-RDP86-00513R001447120010-1

SANIN, Yu.P.; KOCHETKOVA, T.A.

Toxicity of ethylene glycol. Toks. nov. prom. khim. veshch. no.7:102-122 '65. (MIRA 18:9)

APPROVED FOR RELEASE: 07/13/2001 CIA-RDP86-00513R001447120010-1"

"APPROVED FOR RELEASE: 07/13/2001 CIA-RDP86-00513R001447120010-1

SANINA, Yu P.

LETAVET, A.A.; RYAZANOV, V.A.; KHOTSYANOV, L.K.; MOROZOV, A.L.; MARTSINKOVSKIY, B.I.; MITEREV, G.A.; IVANOV, V.A.; IZRAEL'SON, Z.I.; ORLOV, N.I.; CHERKINSKIY, S.N.; BERYUSHOV, K.G.; KIBAL'CHICH, I.A.; TARASENKO, N.Yu.; DRAGICHINA, Ye.A.; VORONTSOVA, Ye.I.; SANINA, Yu.P.; KREMNEVA, S.N.; KULAGINA, N.K.; SHAFRANOVA, A.S.; TIKHAYA, M.G.; MOLOKANOV, K.P.; RAZUMOV, N.P.; KURLYANDSKAYA, E.B.; KHALIZOVA, O.D.

In memory of Professor N.S.Pravdin. Gig.i san. no.4:61 Ap '54. (MLRA 7:4)

(Pravdin, Nikolai Sergeevich,)

APPROVED FOR RELEASE: 07/13/2001 CIA-RDP86-00513R001447120010-1"

"APPROVED FOR RELEASE: 07/13/2001 CIA-RDP86-00513R001447120010-1

IVANOVA, N.I.; SANINA, Yu.P.

Scientific Session dedicated to the 30th anniversary of the Institute of Industrial Hygiene and Occupational Diseases of the Academy of Medical Sciences of the U.S.S.R. Gig.i san. no.5:54-58 My '54. (MLRA 7:5)
(Industrial hygiene) (Occupations--Diseases and hygiene)

APPROVED FOR RELEASE: 07/13/2001 CIA-RDP86-00513R001447120010-1"

"APPROVED FOR RELEASE: 07/13/2001 CIA-RDP86-00513R001447120010-1

VASIL'YEVA, O.G.; ZORINA, L.A.; SANINA, Yu.P. (Moskva)

Treatment of benzene intoxication with vitamin B_{12} and folic acid; experimental and clinical data. Gig. truda i prof.zab. 5 no.6:30-33 Je '61. (MIRA 15:3)

1. Institut gigiyeny truda i profzabolevaniy AMN SSSR TSentral'nyy institut usovershenstvovaniya vr shey.
(BENZENE—TOXICOLOGY)
(CYANOCOBALAMIN)
(FOLIC ACID)

APPROVED FOR RELEASE: 07/13/2001 CIA-RDP86-00513R001447120010-1"

"APPROVED FOR RELEASE: 07/13/2001 CIA-RDP86-00513R001447120010-1

KREMNEVA, S.N.; SANINA, Yu.P.

Toxicology of dimethylamine, Toks. nov.prom.khim.veshch. no.1:41-53'61 (MIRA 16:8)
(DIMETHYLAMINE—TOXICOLOGY)

APPROVED FOR RELEASE: 07/13/2001 CIA-RDP86-00513R001447120010-1"

"APPROVED FOR RELEASE: 07/13/2001 CIA-RDP86-00513R001447120010-1

SANINA, Yu.P.; KOCHETKOVA, T.A.

Toxicity of dimethylterephthalate. Toks. nov. prom. khim. veshch. no.5:107-123 '63. (MIRA 17:9)

APPROVED FOR RELEASE: 07/13/2001 CIA-RDP86-00513R001447120010-1"

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SANINA, Z. M.

28331

Miniruyushchiye nasyekomyye dryevyesnykh porod v zapovyednikye "lyes. Na Vorsklye". Uchyen. Zapiski (Lyeningr: Ros. UN-T. Im. Zhdanova) Syeriya biol. Nauk, Byp. 17, 1949, S. 116-33-Bibliogr: S. Nazv

So: Letopis No. 34

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"APPROVED FOR RELEASE: 07/13/2001 CIA-RDP86-00513R001447120010-1

SAMINSKIY, E. M., BRESLER, and KUSHNER, V.P.

"Free radicals in chemical reaction," a paper presented at the 9th Congress on the Chemistry and Physics of High Polymers, 28 Jan2 Feb 57, Moscow, Polymer Research Inst.

B-3,084,395

APPROVED FOR RELEASE: 07/13/2001 CIA-RDP86-00513R001447120010-1"

"APPROVED FOR RELEASE: 07/13/2001 CIA-RDP86-00513R001447120010-1

SANINSKIY, I.G., inzh.

Improve quality of vegetable oils. Masl.-zhir.prom. 25 no.1:18-19 '59. (MIRA 12:1)

(Oils and fats, Edible)

APPROVED FOR RELEASE: 07/13/2001 CIA-RDP86-00513R001447120010-1"

"APPROVED FOR RELEASE: 07/13/2001 CIA-RDP86-00513R001447120010-1

KOCSIS, Maria; CSAKI, Laszlo; SANKA, Janos; DOZSA, Istvan; UJFALUSI, Sandor

Remarks about the article "Trade Union County Councils". Munka 4 no.8:40-43 Ag'54

1. Tisza Cipogyar uzemi bizottsagi elnoke (for Kocsis). 2. Postasok Szakszervezete Szervezesi Osztalya vezetoje (for Csaki). 3. Szakszervezetek Gyor-Sopron megyei Tanacsa (for Sanka and Dozsa). 4. Kozalkalmazottak Szakszervezete Gyor-Sopron megyei Bizottsaga elnoke (for Ujfalusi).

APPROVED FOR RELEASE: 07/13/2001 CIA-RDP86-00513R001447120010-1"

"APPROVED FOR RELEASE: 07/13/2001 CIA-RDP86-00513R001447120010-1

SANKA, Jar., inz.

Some practical experiences with the Hamr method of profile grinding. Stroj vyr 11 no.9:457 S '63.

1. PAL - Magneton, n.p., Kromeriz.

APPROVED FOR RELEASE: 07/13/2001 CIA-RDP86-00513R001447120010-1"

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NIKOLOV, A., inzh.; SANKEVA, K., inzh.; DZHENDOVA, Sht., inzh.

Substituting the high-grade agglomerate for the limestone in blast furnaces. Min delo 17 no.4:39-41 Ap '62.

1. Metalurgicheski zavod "Lenin".

APPROVED FOR RELEASE: 07/13/2001 CIA-RDP86-00513R001447120010-1"

"APPROVED FOR RELEASE: 07/13/2001 CIA-RDP86-00513R001447120010-1

SANKIEWICZ, M.

Broadcasting systems on exclusive and shared waves over a frequency range of 150 to 1600 kc with a modulating amplitude. p.223. (WIADOMOSCI TELEKOMUNIKACYJNE, Warszawa, Vol. 23, No. 9/10, Sept/Oct. 1954)

SO: Monthly List of East European Accessions, (EEAL), LC, Vol. 4, No. 6, June 1955, Uncl.

APPROVED FOR RELEASE: 07/13/2001 CIA-RDP86-00513R001447120010-1"

"APPROVED FOR RELEASE: 07/13/2001 CIA-RDP86-00513R001447120010-1

SANKIEWICZ, Marianna ; BUDZYNSKI, Gustaw

A method for the uniform linear analysis of transistor oscillators. Lacznosc Gdansk no. 4:167-183 '62.

1. Katedra Radiotechniki Nadawczej, Politechnika, Gdansk

APPROVED FOR RELEASE: 07/13/2001 CIA-RDP86-00513R001447120010-1"

"APPROVED FOR RELEASE: 07/13/2001 CIA-RDP86-00513R001447120010-1

SANKIEWICZ, Marianna

Detrimental influences of the high-frequency electromagnetic field on living organisms. Lacznosc Gdansk no.12:103-130 '64.

1. Department of Radio Transmission Engineering of the Gdansk Technical University. Submitted May 16, 1964.

APPROVED FOR RELEASE: 07/13/2001 CIA-RDP86-00513R001447120010-1"

"APPROVED FOR RELEASE: 07/13/2001 CIA-RDP86-00513R001447120010-1

ANTONOV, Nikolay Petrovich; VYGODSKIY, Mark Yakovlevich; NIKITIN, Vladimir Vasil'yevich; SANKIN, Aleksandr Iosifovich; RYVKIN, A.Z., redaktor; AKHLAMOV, S.N., tekhnicheskiy redaktor

[A collection of problems in elementary mathematics; a manual for home study] Sbornik zadach po elementarnoi matematike; posobie dlia samoobrazovaniia. Izd. 3-e. Moskva, Gos. izd-vo tekhniko-teoret. lit-ry, 1956. 532 p. (MLRA 10:1)

(Mathematics--Problems, exercises, etc.)

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"APPROVED FOR RELEASE: 07/13/2001 CIA-RDP86-00513R001447120010-1

ANTONOV, Nikolay Petrovich; VYGODSKIY, Mark Yakovlevich; NIKITIN, Vladimir Vasil'yevich; SANKIN, Aleksandr Iosifovich; POLOVINKIN, S.M., red.; BRUDNO, K.F., tekhn.red.

[Collection of problems on elementary mathematics; aid for self-study] Sbornik zadach po elementarnoi matematike; posobie dlia samoobrazovaniia. Izd.6. Moskva, Gos.izd-vo fiziko-matem. lit-ry, 1960. 532 p. (MIRA 13:6)

(Mathematics--Problems, exercises, etc.)

APPROVED FOR RELEASE: 07/13/2001 CIA-RDP86-00513R001447120010-1"

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ANTONOV, Nikolay Petrovich; VYGODSKIY, Mark Yakovlevich; NIKITIN, Vladimir Vasil'yevich; SANKIN, Aleksandr Iosifovich; POLOVINKIN, S.M., red.; AKSEL'ROD, I.Sh., tekhn. red.

[Collection of problems in elementary mathematics; a textbook for self-education] Sbornik zadach po elementarnoi matematike; posobie dlia samoobrazovaniia. Izd.8., stereotipnoe. Moskva, Fizmatgiz, 1962. 528 p. (MIRA 15:7)
(Mathematics—Problems, exercises, etc.)

APPROVED FOR RELEASE: 07/13/2001 CIA-RDP86-00513R001447120010-1"

"APPROVED FOR RELEASE: 07/13/2001 CIA-RDP86-00513R001447120010-1

PHASE I BOOK EXPLOITATION 818

Sankin, David Iosifovich, Candidate of Economical Sciences

Vnutrizavodskoye planirovaniye i tekhpromfinplan promyshlennogo predpriyatiya (Intrafactory Planning and the Technical, Industrial and Financial Plan of an Industrial Establishment) Moscow, Izd-vo "Znaniye," 1958. 48 p. (Series: Vsesoyuznoye obshchestvo po rasprotraneniyu politicheskikh i nauchnykh znaniy. Seriya III, 1958, no. 3) 63,500 copies printed.

Sponsoring Agency: Vsesoyuznoye obshchestvo po rasprostraneniyu politicheskikh i nauchnykh znaniy.

Ed.: Falaleyeva, T.F.; Tech. Ed.: Streletskiy, I.A.

PURPOSE: This pamphlet is intended to acquaint the general reader with various aspects of intraplant production planning.

COVERAGE: The pamphlet briefly reviews preparatory and developmental work leading to the formation of a technical, industrial, and financial plan for an industrial establishment. No personalities are mentioned. There are no references.

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Intrafactory Planning and the Technical, Industrial (Cont.) 818

TABLE OF CONTENTS:

The Scope and Objectives of Intraplant Planning 3

The Technical, Industrial, and Financial Plan of an Industrial Establishment and its Structure 9

1. Progressive standards are the base on which a technical, industrial, and financial plan is built 10
2. Analysis of an industrial establishment's activities is the first step in drawing up a technical, industrial and financial plan 12
3. Drawing up individual sections of the technical, industrial, and financial plan 15

The Procedure for Drawing up the Technical, Industrial, and Financial Plan of an Industrial Establishment and the Organization of the Work Leading to its Fulfilment 45

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"APPROVED FOR RELEASE: 07/13/2001 CIA-RDP86-00513R001447120010-1

SANKIN, David Iosifovich; KANTER, A.I., red.; NAZAROVA, A.S., tekhn. red.

[Technical, industrial and financial plan of an industrial enterprise] Tekhpromfinplan promyshlennogo predpriiatiia. Moskva, Izd-vo "Znanie," 1961. 39 p. (Vsesoiuznoe obshchestvo po rasprostraneniiu politicheskikh i nauchnykh znanii, no.2) (MIRA 14:5)

(Industrial management)

APPROVED FOR RELEASE: 07/13/2001 CIA-RDP86-00513R001447120010-1"

"APPROVED FOR RELEASE: 07/13/2001 CIA-RDP86-00513R001447120010-1

SANKIN, David Iosifovich; KUZNETSOV, P.V., red.; PONOMAREVA, A.A., tekhn.red.

[Planning production and economic operations of industrial enterprises] Planirovanie proizvodstvenno-khoziaistvennoi deiatel'nosti promyshlennykh predpriiatii. Moskva, Gosplanizdat, 1961. 156 p. (MIRA 14:6)
(Industrial management)

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"APPROVED FOR RELEASE: 07/13/2001 CIA-RDP86-00513R001447120010-1

SANKIN, David Iosifovich, kand. ekon. nauk; YUZBASHEV, V.G., red.; RAKITIN, I.T., tekhn. red.

[Plan, rhythm and potentials] Plan, ritm, rezervy. Moskva, Izd-vo "Znanie," 1963. 46 p. (Novoe v zhizni, nauke, tekhnike. III Seriia: Ekonomika, no.12) (MIRA 16:7)
(Industrial management)

APPROVED FOR RELEASE: 07/13/2001 CIA-RDP86-00513R001447120010-1"

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SANKIN, D.I., kand. ekon. nauk; SEMINOY, S.I., kand. ekon. nauk; BEREZNOY, N.I., kand. ekon. nauk; ZHDANOV, A.I., kand. ekon. nauk; GORCHAKOV, A.A., inzh.; ZAKHAROV, V.V., inzh.; YUNOVICH, I.M., inzh.; RYVKIN, A.S., inzh.; KOVRIGIN, V.V., ekonomist; DIDENKO, S.I., kand. ekon. nauk; SANDOMIRSKIY, A.T., ekonomist; GONCHARENKO, B.L., kand. ekon. nauk; KOTOV, V.F., inzh.; EYDEL'MAN, B.I., red.

[Handbook for the economist and planner in an industrial enterprise] Spravochnik ekonomista i planovika promyshlennogo predpriiatiia. Moskva, Ekonomika, 1964. 698 p. (MIRA 17:6)

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AUTHOR: Stroganov, N. V.; Ovchinnikov, V. A.; Sankin, G. M.

TITLE: A method for coating leather. Class 22, No. 171951

SOURCE: Byulleten' izobreteniy i tovarnykh znakov, no. 12, 1965, 46

TOPIC TAGS: leather varnish

ABSTRACT: This Author's Certificate introduces a method for coating leather with aqueous acrylic concentrates with subsequent application of a lacquer based on cellulose, e. g. KB lacquer. The elasticity of the leather is improved by adding silane derivatives in an organic solvent, e.g. tetraethoxysilane, or phenyltricresoxysilane.

ASSOCIATION: none

SUBMITTED: 30Mar64 ENCL: 00 SUB CODE: MT

NO REF SOV: 000 OTHER: 000

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"APPROVED FOR RELEASE: 07/13/2001 CIA-RDP86-00513R001447120010-1

SANKIN, L.B.

USSR / Chemical Technology. Chemical Products and their Application. Leather. Fur. Gelatin. Tanning Agents. Technical Proteins. I-31

Abs Jour : Ref Zhur - Khimiya, No 3, 1957, No 10512

Author : Sankin, L.B., and Strakhov, I.P.
Inst : Not given
Title : The Combined Chrome and Alum Tanning of Skins.

Orig Pub : Legkaya prom-st, 1956, No 6, 19-21

Abstract : Stable compounds al Al and Cr can be prepared by the combination of tanning liquors containing Al and Cr compounds. The strength of the adhesion of tanning substances containing Al and Cr in the ratio of 1 : 1, calculated as the oxides, to the collagen has been investigated. The greatest degree of fixation of Al and Cr compounds has been observed in specimens tanned in the presence of additions of sodium formate. The prolonged tumbling in water of hides which

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USSR / Chemical Technology. Chemical Products and Their Application. Leather. Fur. Gelatin. Tanning Agents. Technical Proteins. I-31

Abs Jour : Ref Zhur - Khimiya, No 3, 1957, No 10512

Abstract : have been combination tanned with Cr and Al salts has shown that the washing resistance of Al salts is increased compared to that of pure Al tanning, the loss being reduced from 85.5% to 10-20%; these results indicate that mixed polynuclear complexes are formed in which a stable combination of Al and Cr takes place. A method is proposed for the preparation of chrome-alum tanning liquors by the addition of Al salts to a solution of potassium dichromate in acid medium, followed by reduction of the Cr. The method permits the utilization of Al salts on a large scale for tanning purposes and a realization of savings in the consumption of Cr salts for such purposes.

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"APPROVED FOR RELEASE: 07/13/2001 CIA-RDP86-00513R001447120010-1

STRAKHOV, I.P., prof., doktor tekhn.nauk; SAMKIN, L.B., inzh.

Nature of the interaction between basic chromium compounds and polyvinyl alcohol. Izv.vys.ucheb.zav.; tekh.leg.prom. no.2: 62-68 '59. (MIRA 12:10)

1. Moskovskiy tekhnologicheskiy institut legkoy promyshlennosti.
(Chromium compounds) (Tanning) (Vinyl alcohol)

APPROVED FOR RELEASE: 07/13/2001 CIA-RDP86-00513R001447120010-1"

"APPROVED FOR RELEASE: 07/13/2001 CIA-RDP86-00513R001447120010-1

ASHKENAZI, A.I.; GOLOVTEYEVA, A.A.; SANKIN, L.B.; CHERNOV, N.V., doktor tekhn.nauk, prof.

Collagen pins for internal fixation in fractures. Izv.vys.ucheb.zav.; tekh.leg.prom. no.5:57-63 '60. (MIRA 13:11)

1. Moskovskiy tekhnologicheskiy institut legkoy promyshlennosti i TSentral'nyy institut travmatologii i ortopedii. Rekomendovana kafedroy tekhnologii kozhi i mekha.
(COLLAGEN) (INTERNAL FIXATION IN FRACTURES)

APPROVED FOR RELEASE: 07/13/2001 CIA-RDP86-00513R001447120010-1"

"APPROVED FOR RELEASE: 07/13/2001 CIA-RDP86-00513R001447120010-1

SANKIN, L.B., aspirant; STRAKHOV, I.P., doktor tekhn.nauk, prof.

Use of synthetic polymers in leather manufacture. Nauch. trudy MTILP no.23:3-28 '61. (MIRA 15:9)

1. Kafedra tekhnologii koshi i mekha Moskovskogo tekhnologicheskogo instituta legkoy promyshlennosti.
(Leather industry--Equipment and supplies) (Polymers)

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"APPROVED FOR RELEASE: 07/13/2001 CIA-RDP86-00513R001447120010-1

SANKIN, L.B., inzh.; STRAKHOV, I.P., doktor tekhn.nauk, prof.

Use of chromium compounds for structure development in polymers containing carboxyl groups. Izv.vys.ucheb.zav.; tekh.leg.prom. 3:28-33 '62. (MIRA 15:6)

1. Moskovskiy tekhnologicheskiy institut legkoy promyshlennosti. Rekomendovana kafedroy tekhnologii kozhi i mekha.
(Polymers)
(Chromium organic compounds)

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"APPROVED FOR RELEASE: 07/13/2001 CIA-RDP86-00513R001447120010-1

SANKIN, L.B., assistent

Reaction of synthetic polymers with gelatin. Nauch. trudy MTILP 25:118-128 '62. (MIRA 16:8)

1. Kafedra tekhnologii kozhi i mekha Moskovskogo tekhnologicheskogo instituta legkoy promyshlennosti.

APPROVED FOR RELEASE: 07/13/2001 CIA-RDP86-00513R001447120010-1"

"APPROVED FOR RELEASE: 07/13/2001 CIA-RDP86-00513R001447120010-1

PETROV, D.F.; SANKIN, L.S.; KRYLOVA, G.V.

Polyploid forms of Fragaria vesca and F. orientalis. Trudy TSSBS no. 2:65-68 '64. (MIRA 17:9)

APPROVED FOR RELEASE: 07/13/2001 CIA-RDP86-00513R001447120010-1"

"APPROVED FOR RELEASE: 07/13/2001 CIA-RDP86-00513R001447120010-1

SANKIN, L.S.

Obtaining polyploids in melons. Trudy TSSBS no. 2:69-73 '64.

New promising specimens of melons for Novosibirsk Province. Ibid.:74-76

Growth and development of melons and cucumbers on their own roots and grafted on pumpkins. Ibid.:77-83 (MIRA 17:9)

APPROVED FOR RELEASE: 07/13/2001 CIA-RDP86-00513R001447120010-1"

"APPROVED FOR RELEASE: 07/13/2001 CIA-RDP86-00513R001447120010-1

SANKIN, L.S.; SUKHAREVA, N.B.

Anatomic and morphologic study of naturally and artificially obtained polyploids of the genus Fragaria L. Trudy Tsabs no. 2:113-133 '64. (MIRA 17:9)

APPROVED FOR RELEASE: 07/13/2001 CIA-RDP86-00513R001447120010-1"

"APPROVED FOR RELEASE: 07/13/2001 CIA-RDP86-00513R001447120010-1

SANKIN, N.A.

Creative activity of innovators of the gas distribution system. Bezop. truda v prom. 6 no.8:35-36 Ag '62. (MIRA 16:4)

1. Nachal'nik slushby promyshlennykh predpriyatiy tresta Ufagorgaz. (Ufa--Gas companies)

APPROVED FOR RELEASE: 07/13/2001 CIA-RDP86-00513R001447120010-1"

"APPROVED FOR RELEASE: 07/13/2001 CIA-RDP86-00513R001447120010-1

VINOKUROVA, K. K.; SANKIN, N. I.

Bee Culture - Moscow Province

Work of the leading agronomists of Moscow province in bee culture.
Pchelovodstvo 29, No. 8, 1952.

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

APPROVED FOR RELEASE: 07/13/2001 CIA-RDP86-00513R001447120010-1"

"APPROVED FOR RELEASE: 07/13/2001 CIA-RDP86-00513R001447120010-1

SANKIN, N. M., ed.

Modern means of stepping up the efficiency coefficient in broadcasting transmitters; collection of translated articles from foreign periodicals. Moskva, Gos. izd-vo lit-ry po voprosam sviazi i radio, 1940. 125 p. (52-54206)

TK6561.S34

APPROVED FOR RELEASE: 07/13/2001 CIA-RDP86-00513R001447120010-1"

"APPROVED FOR RELEASE: 07/13/2001 CIA-RDP86-00513R001447120010-1

SANKIN, N. M.; TIMOFEYEVA, G.

Radio communication on one side band. Radio no.11:40-43 N '53. (MLRA 6:11)

(Telephone, Wireless)

APPROVED FOR RELEASE: 07/13/2001 CIA-RDP86-00513R001447120010-1"

"APPROVED FOR RELEASE: 07/13/2001 CIA-RDP86-00513R001447120010-1

SAKKIN, N.M.

TERENT'YEV, B.P.; ROZENTSVEYG, I.Ye.; SHTEYN, B.B.; SANKIN, N.M., otv.red.; NOVIKOVA, Ye.S., red.; MAZEL', Ye.I., tekh[redacted]

[Laboratory work with radio transmitting equipment] Laboratornyi praktikum po radioperedaiushchim ustroistvam. Moskva, Gos.izd-vo lit-ry po voprosam sviazi i radio, 1957. 253 p. (MIRA 11:2)
(Radio--Transmitters and transmission)

APPROVED FOR RELEASE: 07/13/2001 CIA-RDP86-00513R001447120010-1"

"APPROVED FOR RELEASE: 07/13/2001 CIA-RDP86-00513R001447120010-1

SANKIN, Nikolay Mikhaylovich; TRUNOV, Vadim Ivanovich. Prinimali uchastiye: TIMOFEYEVA, G.Ya.; KHANOV, B.A.; SAVITSKIY, B.I.. BORISOV, G.B., otv.red.; VORONOVA, A.I., red.; MARKOCH, K.G., tekhn.red.

[Principles of technical planning of transmitting networks for television and shortwave F.M.broadcasting; information manual] Printsipy tekhnicheskogo planirovaniia peredaiushchikh setei televizionnogo i UKV ChM veshchaniia; informatsionnyi sbornik. Moskva, Gos.izd-vo lit-ry po voprosam sviazi i radio, 1960. 93 p. (MIRA 13:5)

1. Nauchno-issledovatel'skiy institut svyazi Ministerstva svyazi SSSR (for Sankin, Trunov).
(Radio, Shortwave--Transmitters and transmission)
(Television broadcasting)

APPROVED FOR RELEASE: 07/13/2001 CIA-RDP86-00513R001447120010-1"

"APPROVED FOR RELEASE: 07/13/2001 CIA-RDP86-00513R001447120010-1

SANKIN, P.M., inzhener; SINEV, O.V., inzhener.

The P-1 and P-2 shovel loader. Mekh.stroi. 13 no.2:20-22 F '56. (MLRA 9:5)

(Shoveling machines) (Loading and unloading)

APPROVED FOR RELEASE: 07/13/2001 CIA-RDP86-00513R001447120010-1"

"APPROVED FOR RELEASE: 07/13/2001 CIA-RDP86-00513R001447120010-1

SANKIN, P.M.

Mechanized loading, transportation, and unloading of cement abroad. Mekh.stroi. 13 no.10:29-32 O '56. (MLRA 9:11)
(Cement--Transportation)
(Loading and unloading)

APPROVED FOR RELEASE: 07/13/2001 CIA-RDP86-00513R001447120010-1"

"APPROVED FOR RELEASE: 07/13/2001 CIA-RDP86-00513R001447120010-1

PIMKIN, A.K.; SENKIN, S.D.; SHEMYATKIN, N.A.; ARTAMONOV, A.M., redaktor; CHICHERIN, A.N., tekhnicheskiy redaktor

[Adjusting forms and printing on DPI and DPP machines] Pripravka form i pechatanie na mashinakh DPI i DPP. Moskva, Gos.izd-vo "Iskusstvo," 1957. 29 p. (MLRA 10:10)

1. Russia (1923- U.S.S.R.) Glavnoye upravleniye poligraficheskoy promyshlennosti. 2. 1-ya Ograztsovaya tipografiya Glavpoligrafproma imeni A.A.Zhdanova (for Pimkin, Senkin, Shemyatkin)
(Printing)

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L 28888-66 EWT(1)/EWT(m)/EWP(w) IJP(c) EM/WW

ACC NR: AT6019155 SOURCE CODE: UR/2563/65/000/252/0068/0078

23

B+1

AUTHOR: Sankin, Yu. N.

ORG: none

TITLE: Influence function for calculation of oscillations of a large cross section rod on an elastic base

SOURCE: Leningrad. Politekhnicheskiy institut. Trudy, no. 252, 1965, 68-78

TOPIC TAGS: elastic oscillation, mechanical engineering

ABSTRACT: After briefly describing the single set of formulas used for calculating the oscillations of a rod with large cross-section on an elastic base and subjected to longitudinal compression force, plus the equations for all particular cases of thin rods, the author presents a set of expressions for the function of one coordinate, the rotation angle of a section, the perturbation moment causing the rotation and the sectional force perpendicular to the initial undistorted axis of the rod, plus tables of the nine possible influence function groups for the nine possible cases. Orig. art. has: 8 formulas and 9 tables. [JPRS]

SUB CODE: 13, 20 / SUBM DATE: none / ORIG REF: 002

Card 1/1

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"APPROVED FOR RELEASE: 07/13/2001 CIA-RDP86-00513R001447120010-1

SHNEYDER, V.Ye., kand. ekon. nauk, dots.; TUROVSKIY, I.G., prof.; ZAK, M.A., kand. ekon. nauk; BOGUSLAVSKIY, A.I., inzh.-ekon.; SANKISKIY, D.I., kand. ekon. nauk, dots.; ASTANSKIY, L.Yu., kand. tekhn. nauk; GUSEV, S.G., inzh.-ekon.; GORSKOV, V.A., inzh.-ekon.[deceased]; IL'IN, S.I., inzh.-ekon.; BALDIN, S.A., inzh.-ekon.; NAUMOVA, L.N., kand. ekon. nauk

[Economics, organization and planning for the building materials industry] Ekonomika, organizatsiia i planirovanie promyshlennosti stroitel'nykh materialov. Moskva, Stroiizdat, 1965. 425 p. (MIRA 18:10)

APPROVED FOR RELEASE: 07/13/2001 CIA-RDP86-00513R001447120010-1"

"APPROVED FOR RELEASE: 07/13/2001 CIA-RDP86-00513R001447120010-1

A. A. SANKO, Zh. S. TAKIBAYEV, P. A. USIK

Investigation of the Jets above 10^{11}ev

report submitted for the 8th Intl. Conf. on Cosmic Rays (IUPAP), Jaipur, India, 2-14 Dec 1963

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"APPROVED FOR RELEASE: 07/13/2001 CIA-RDP86-00513R001447120010-1

ORLOVA, D.; SAN'KO, G.

Nationwide matter. Zdorov'e 6 no.10:25 O '60. (MIRA 13:9)
(CHILDREN—CARE AND HYGIENE)

APPROVED FOR RELEASE: 07/13/2001 CIA-RDP86-00513R001447120010-1"

"APPROVED FOR RELEASE: 07/13/2001 CIA-RDP86-00513R001447120010-1

GARANIN, A.; ZEL'MA, G.; OZERSKIY, M.; IOFIS, Ye., laureat Stalinskoy premii, kand. tekhn. nauk, dots.; SAN'KO, Galina.

Sharing our experience with youth. Sov. foto 19 no.12:19-20 D '59. (MIRA 13:3)

1.Fotokorrespondent zhurnala "Sovetskiy Soyuz" (for Garanin). 2.Fotokorrespondent zhurnala "Sovetskaya zhenshchina" (for Zel'ma). 3.Fotokorrespondent Sovinformbyuro (for Ozerskiy). 4.Vsesoyuznyy gosudarstvennyy institut kinematorgrafii (for Iofis). 5.Fotokorrespondent zhurnala "Ogonek" (for San'ko).
(Photographers)

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"APPROVED FOR RELEASE: 07/13/2001 CIA-RDP86-00513R001447120010-1

SAN'KO, I., general-leytenant artillerii

Fundamentals of training artillerymen. Tekh. i vooruzh. no.4: 32-35 Ap '64. (MIRA 17:9)

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"APPROVED FOR RELEASE: 07/13/2001 CIA-RDP86-00513R001447120010-1

24(0)

AUTHORS: ~~Sanlko, L. A.,~~ Takibayev, Zh. S., Shakhova, Ts. I.

SOV/56-35-3-3/

TITLE: Angular Distribution of Secondary Particles in Showers Produced by High Energy Nucleons (Issledovaniye uglovogo raspredeleniya vtorichnykh chastits v livnyakh, obrazovannykh nuklonami bol'shoy energii)

PERIODICAL: Zhurnal eksperimental'noy i teoreticheskoy fiziki, 1958, Vol 35, Nr 3, pp 574 - 583 (USSR)

ABSTRACT: In the present paper a formula is given - theoretically for the time being - for the integral and differential angular distributions of shower particles in stars at primary energies of from 5.10^{10} to 10^{12} eV. Whereas in the c.m.s. $N(\theta^*)$=const.$d\Omega$, the formulae for $N(\theta)= g(N,\gamma_c,\alpha,\theta,m)$ for $m \gg 1$ and $m \leq 1$ respectively are considerably more complicated. (θ^* = solid angle in the center of mass system, θ = in the laboratory system)

$\alpha= \gamma_c tg\theta = \sin \theta^*/(m+\cos \theta^*)$; $m = \beta_c/\beta^*_\pi$.

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γ_c is the primary energy of the particles and β_c the velocity of the c.m.s. For the percentage of shower particles f within θ_f it holds that

$$f = \frac{1}{N}\int_0^{\theta_f} N(\theta)d\theta$$, where N denotes the total number of particles. The differential angular distribution in the laboratory system for the case of isotropy in the c.m.s. and m= 1 the formula

$$\frac{df}{dy} = \frac{df}{d\alpha}\frac{d\alpha}{dy} = \frac{2.10^{2y}}{(10^{2y}+1)^2}\ln 10 \quad y = \lg\alpha$$ applies

in the anisotropic case, e.g. for $N(\theta^*) \sim \cos^2\theta^*$ it holds that $df/dy = 4.10^{2y}(10^{2y}-1)(10^{2y}+1)^{-3}\ln 10$. A formula is further given also for the total number of the particles N. The authors then describe the analysis of the distribution of a shower on the basis

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Angular Distribution of Secondary Particles in Showers Produced by High Energy Nucleons SOV/56-35-3-3/

of the theory of multiple production of mesons in nucleon-nucleon collisions and discuss the connection between $\theta_{\frac{1}{2}}$ and n_s (Figs 4,5,8). For the theory of multiple productions it differs considerably from that observed by experiment. The experimental n_s and $\theta_{\frac{1}{2}}$ - values can be brought into line with theory by assuming a meson production in secondary process (40%) in altitudes of from 30-33 km. There are 9 figures and 8 references, 3 of which are Soviet.

SUBMITTED: March 15, 1958

Card 3/3

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"APPROVED FOR RELEASE: 07/13/2001 CIA-RDP86-00513R001447120010-1

SANKO, L. A.

Sanko, L. A.

AN ANALYSIS OF THE ANGULAR DISTRIBUTION OF THIN TRACKS OF SHOWERS PRODUCED BY 7/ 10" ev PARTICLES

Zh. S. Takibayev, A. A. Loktionov, L. A. Sanko, Ta. I. Shakhova

An analysis is made of the angular distribution of tin tracks of showers produced by cosmic-ray particles with energy exceeding 10" ev. To determine the energy dependence of the shower-producing particles, all analyzed showers are divided into two energy intervals. The first interval includes all showers produced by particles (protons, neutrons, pi-mesons) with energy of the order of 10" ev (at least >1010 ev): the second interval includes particles with energy exceeding 1012 ev. For comparison a study is made of showers taken from published material.

The experimental data obtained are compared with the model of "two centres" that independently emit mesons (Takagi, Feinberg and Chernavsky, Kokkoni et al.). The comparison reveals the limitations of this model. The observed angular distribution of thin tracks of a number of showers may be explained on the assumption that:

a) there is a power energy spectrum in the centre-of-mass system ($\sim AdE/E^{ddi}$), which agrees with the Heisenberg theory:

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b) there is a sharply anisotropic angular distribution in the centre-if-mass system ($\sim \cos^4 \theta$), although such a high degree of anisotropy of generated particles does not follow from the Heisenberg theory.

Report presented at the International Cosmic Ray Conference, Moscow, 6-11 July 1959.

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"APPROVED FOR RELEASE: 07/13/2001 CIA-RDP86-00513R001447120010-1

21(7) SOV/56-37-1-1/64

AUTHORS: San'ko, I. A., Takibayev, Zh. S., Shakhova, Ts. I., Balata, L. Ya.

TITLE: On the Angular Distribution of Shower Particles in Stars Formed by Particles of High Energy (Ob uglovom raspredelenii livnevykh chastits v zvezdakh, obrazovannykh chastitsami bol'shoy energii)

PERIODICAL: Zhurnal eksperimental'noy i teoreticheskoy fiziki, 1959, Vol 37, Nr 1, pp 3-10 (USSR)

ABSTRACT: In the course of the evaluation of emulsion piles exposed in the geographical latitude of Moscow at a height of 30 km, a star (20 + 15 + 59p) was recorded, which had been produced by an interaction between a cosmic radiation proton and an emulsion nucleus (Fig 1). In the present paper the authors report about an analysis of the angular distribution of charged particles in this star. The energy of the primary particle was determined as amounting to $E = (19^{+50.7}_{-14.0}).10^3$ Bev. According to Heitler and Terreaux (Ref 4) the star ought, at such high energies, to consist only of 3-4 highly ionizing particles; the star investigated by

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the authors (N_h = 35) cannot be explained by the Heitler-Terreaux theory. Figure 2 shows the differential angular distribution of the shower particles in this star. The histogram has two different maxima. For comparison, the curves for isotropic distribution (in the cms), for Heisenberg distribution, and for distribution according to Landau are plotted. It was found that, if it is assumed that in a nucleon-nucleus collision the angular distribution does not deviate considerably from that of the mesons formed in a nucleon-nucleon collision, the angular distribution observed can be explained neither by Heisenberg's (Ref 6) nor by Landau's theory (Ref 7). Figure 3 again shows a histogram of the angular distribution of shower particles in the laboratory system. The curves 1,2,3,4 (in the cms) successively show Gaussian, isotropic, and anisotropic distribution for each of the two maxima separately (in consideration of the energy spectrum of the produced particles and on the assumption that they are monoenergetic). It may be assumed that the two maxima observed in the differential angular distribution originate from a meson

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emission of two unconnected centers, which move in different directions in the cms: 30 particles in the narrow and 29 in the diffuse cone. Figure 4 shows the integral angular distribution of such a star. The authors then give a report on an investigation of further 11 stars with $E_{prim} > 100$ Bev, which have the same characteristic anisotropy. Figure 5 shows the total histogram of these 11 showers with the two maxima. Table 2 shows the results of an analysis of all investigated showers (Nr 10 gives the data of the first star described in detail). In conclusion, the angular distribution of the gray and black traces of the (35 + 59p) star is discussed on the basis of figure 6. There are 6 figures, 2 tables, and 12 references, 8 of which are Soviet.

ASSOCIATION: Institut yadernoy fiziki Akademii nauk Kazakhskoy SSR (Institute of Nuclear Physics of the Academy of Sciences, Kazakhskaya SSR)

SUBMITTED: November 14, 1958

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"APPROVED FOR RELEASE: 07/13/2001 CIA-RDP86-00513R001447120010-1

S/058/61/000/010/009/100
A001/A101

3,2410

AUTHORS: Takibayev, Zh. S., Loktionov, A. A., San'ko, Shakhova, Ts. I.

TITLE: Analysis of angular distribution of thin tracks of showers produced by particles with energies of $> 10^{11}$ ev

PERIODICAL: Referativnyy zhurnal. Fizika, no. 10, 1961, 95, abstract 10B490 ("Tr. Mezhdunar. konferentsii po kosmich. lucham, 1959, v. 1", Moscow, AN SSSR, 1960, 51-60)

TEXT: The authors investigated the angular distribution of thin tracks of showers produced by cosmic ray particles with energies exceeding 10^{11} ev in the stratosphere. Characteristics of showers in the energy ranges 10^{11} ev $< E < 10^{12}$ ev and $E > 10^{12}$ev are compared with various theoretical concepts. To explain a number of peculiarities in angular distribution (e.g., occurrence in some showers of distribution with two peaks), it is proposed to take into consideration the role of produced particles (antinucleons, π-mesons) in generation of additional particles at secondary collisions inside the target-nucleus. The angular distribution of shower particles produced by multi-charged particles is also analyzed.

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S/058/61/000/010/009/100
A001/A101

Analysis of angular distribution ...

A case is described, 15 + 515 Z, produced by a silicon nucleus with energy of ~ 600 Bev/nucleon.

L. Dorman

[Abstracter's note: Complete translation]

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26415
S/056/61/041/001/010/021
B102/B214

3.2410 also 2412
24.6700

AUTHORS: San'ko, L. A., Takibayev, Zh. S., Usik, P. A.

TITLE: Analysis of showers formed by high-energy cosmic-ray particles according to the model of excited nucleons

PERIODICAL: Zhurnal eksperimental'noy i teoreticheskoy fiziki, v.41, no. 1(7), 1961, 139-145

TEXT: High-energy interactions ($E > 10^{11}$ ev) of cosmic-ray nucleons in photographic emulsions are analyzed on the basis of the excited-nucleon model. A particular study is made of the angular distribution of the excited nucleons in the c.m.s. and its relationship to the angular distribution of the secondary shower particles in the lab system, as well as their multiplicity in the super-high energy range. Analysis is made of showers with $N_n \leq 2$ and $n_s \geq 6$ produced by single-charged or uncharged cosmic particles (nucleons) with $E > 10^{11}$ ev in the emulsion. 42 such showers were studied in all. The angular distribution of the excited nucleons in the c.m.s. was strongly anisotropic, small angles of emission

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(25-30°) predominating; in many showers of smaller multiplicity, however, angles of emission of 70° were reached. The experimental results are compared with those obtained from the theory of peripheral interaction in single-meson pole approximation. Since the multiplicities were small, it was necessary to take the fluctuation of the particle numbers into account (cf. M. I. Podgoretskiy et al. ZhETF, 29, 296, 1955). Further, the dependence of the form of angular distribution of shower particles on their velocities of emission, and on the angle of emission of the excited nucleons in the c.m.s. is studied. The comparison of experimental and theoretical results has predominantly a qualitative character. The calculations made by other authors according to the theory of peripheric interaction (based on the perturbation theory) in single-meson pole approximation gave for nucleon-nucleon interaction at 9 Bev and 200-300 Bev good agreement with experiments, which shows that peripheric interaction at these energies plays an important role. In this approximation, the square of the four-momentum of the intermediate pion is given by

$$k^2 = -1 - m_1^2 + \frac{4\gamma_c^2 + m_1^2 - m_2^2}{2} - 2\cos\vartheta' \sqrt{\gamma_c^2 - 1} \times \left[\left(\frac{4\gamma_c^2 + m_1^2 - m_2^2}{4\gamma_c}\right)^2 - m_1^2\right]^{1/2}. \quad (5)$$

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from this one obtains for symmetric excitation of the nucleons ($m_1 = m_2 = m$):

$$k^2 = -1 - m^2 + 2\gamma_c^2 - 2\sqrt{(\gamma_c^2 - 1)(\gamma_c^2 - m^2)}\cos\theta', \quad (6)$$

The distribution $k^2(N)$ calculated according to this formula is shown in Fig. 6. This result is compared with the data of I. M. Dremin and D. S. Chernavskiy. These workers had found that the total single-meson interaction cross section $\sigma_{NN}(E)$ at $E \sim 200$ Bev agrees with experimental values only when $\sigma_{\pi N}(k^2)$ is a smooth function of k^2 for $k^2 \leq (7\mu)^2$ and decreases rapidly with further increase of k^2. In the case considered here k^2 is essentially larger than $(7\mu)^2$; so this approximation cannot be used. The results of the investigations described here may be summarized as follows: The mass of the excited nucleons and the multiplicity of the generated mesons depend on the direction of motion of the excited nucleons in the c.m.s. The form of the angular distribution of the shower particles in the laboratory system depends on the velocity and direction of motion of the excited nucleons in the c.m.s. The transfer of four-momentum on nucleon interaction is, in all cases, large compared to $(7\mu)^2$. Therefore,

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B102/B214

Analysis of showers formed by ...

if the really excited nucleons are centers of emission of the shower mesons, and if the direction of their motion coincides with the cone axis, the excitation mechanism of the nucleons must deviate strongly from the single-meson interaction. M. I. Podgoretskiy is mentioned. There are 6 figures and 12 references: 6 Soviet-bloc and 6 non-Soviet-bloc.

ASSOCIATION: Institut yadernoy fiziki Akademii nauk Kazakhskoy SSR (Institute of Nuclear Physics of the Academy of Sciences Kazakhskaya SSR)

SUBMITTED: December 26, 1960

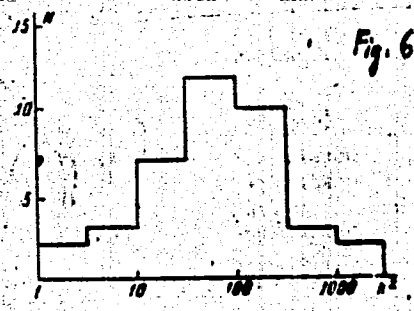

Fig. 6

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37514

S/048/62/026/005/008/022
B108/B104

24.6100

AUTHORS: San'ko, L. A., Takibayev, Zh. S., and Usik, P. A.

TITLE: Study of showers produced by high-energy cosmic-ray particles according to the model of excited nucleons

PERIODICAL: Akademiya nauk SSSR. Izvestiya. Seriya fizicheskaya, v. 26, no. 5, 1962, 604-612

TEXT: The emission of pions takes place, not during, but some time after a nucleon-nucleon collision. This is due to excited nucleons emitting the pion. The angular distribution of such excited nucleons may give information on the nucleon interaction mechanism at very high energies. Experimental results indicate that, the mass of the excited nucleons, and consequently, also the multiplicity of the resulting mesons depend on the direction of motion of the excited nucleons in the cms. The four-momentum transfer during nucleon interaction with consideration of the twist angle is always greater than $(7\mu)^2$. Therefore, if the emission centers of shower mesons are really excited nucleons, and if they move along the axis

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of the shower cones, the nucleon excitation mechanism must be different from single-meson interaction. The longitudinal component of the transferred momentum makes a greater contribution to the excitation of the nucleons than does its transverse component. The latter essentially determines the twist angle of the excited nucleons. There are 8 figures.

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"APPROVED FOR RELEASE: 07/13/2001 CIA-RDP86-00513R001447120010-1

S/707/62/005/000/006/014
D290/D308

AUTHOR: San'ko, L.A.

TITLE: Study of the dependence of the anisotropy of the angular distributions of shower particles on other characteristics of cosmic ray showers

SOURCE: Akademiya nauk Kazakhskoy SSR. Institut yadernoy fiziki. Trudy, v. 5. Alma-Ata, 1962. Fizika chastits vysokikh energiy. Struktura yadra, 88-95

TEXT: The author analyzed the relation between the anisotropy of the angular distributions and the primary particle energy (E), the multiplicity of the shower (n_s), and the number of heavily-ionizing particles per shower (N_h); he used results from many laboratories. The anisotropy was expressed as σ/σ_{is}, in which σ is the standard deviation of log (tan θ) for the distribution and σ_{is} is the standard deviation for an isotropic distribution (θ is the angle in the laboratory system). σ/σ_{is} increases with E for both nucleon-nucleon and nucleon-nucleus showers. σ/σ_{is} depends on n_s:

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it rises for $E > 10^{12}$ ev, but it slowly falls in nucleon-nucleon showers and rises in nucleon-nuclear showers for $E < 10^{12}$ ev. σ/σ_{is} for fast particles depends on the size of the nuclear target; σ/σ_{is} increases with N_h for $\gamma_c > 22$, but it decreases as N_h increases for $\gamma_c < 10$ (γ_c is the Lorentz factor). According to the two-centers model, σ/σ_{is} depends on the velocity of the radiating center in the center-of-mass system. There are 6 figures.

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"APPROVED FOR RELEASE: 07/13/2001 CIA-RDP86-00513R001447120010-1

SAMIKO, L.A.; TAKIBAYEV, Zh.S.; USIK, P.A.

Analysis of showers produced by particles from high energy cosmic rays in agreement with the model of excited nucleons. Izv.AN SSSR.Ser.fiz. 26 no.5:604-612 Ap '62. (MIRA 15:5)
(Cosmic rays) (Nuclear reactions)

APPROVED FOR RELEASE: 07/13/2001 CIA-RDP86-00513R001447120010-1"

"APPROVED FOR RELEASE: 07/13/2001 CIA-RDP86-00513R001447120010-1

. GUSEVA, S. A. DUBROVINA, A. M. LEBEDEV, N. E. MOROZOV, L. A. SANKO,
. V. SOKOLOVSKIY, S. A. SLAVATINSKIY, B. V. TOLKACHEV

Analysis of Experimental Data on Interactions of Nucleions and Atomic Nuclei at High Energies

report submitted for the 8th Intl. Conf. on Cosmic Rays (IUPAP), Jaipur India, 2-14 Dec 1963

APPROVED FOR RELEASE: 07/13/2001 CIA-RDP86-00513R001447120010-1"

"APPROVED FOR RELEASE: 07/13/2001 CIA-RDP86-00513R001447120010-1

SAN'KO, L.A.

Study of the azimuthal angular distribution of particles in cosmic-ray showers. Trudy Inst. iad. fiz. AN Kazakh. SSR 6:64-70 '63. (MIRA 16:10)

APPROVED FOR RELEASE: 07/13/2001 CIA-RDP86-00513R001447120010-1"

"APPROVED FOR RELEASE: 07/13/2001 CIA-RDP86-00513R001447120010-1

SAN'KO, L.A.; USIK, P.A.

Analyzing the asymmetry of the angular distribution of shower particles. Izv. AN Kazakh. SSR. Ser. fiz.-mat.nauk no. 2:82-93 '63. (MIRA 17:6)

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L 34711-65 EWG(j)/EWT(m)/FSC/T/EWA(m)-2 IJP(c)

ACCESSION NR: AP4046587 S/0048/64/028/011/1761/1763 23 18 6

AUTHOR: Gaseva, V.V.; Dubrovina, S.A.; Lebedev, A.M.; Morozov, A.Ye.; San'ko, L.A.; Sokolovskiy, V.V.; Slavatinskiy, S.A.; Tolkachev, B.V.

TITLE: Nucleon-nucleus collisions at high energies /Report, All-Union Conference on the Physics of Cosmic Rays held in Moscow 4 to 10 Oct 1963/ 19

SOURCE: AN SSSR. Izv. Seriya fizicheskaya, v.28, no.11, 1964, 1761-1763

TOPIC TAGS: cosmic ray, high energy interaction, nucleon nucleus interaction, hydrodynamic theory

ABSTRACT: The work presents an attempt to describe the interaction of high-energy ([illegible] to [illegible]2) nucleons with complex nuclei from the standpoint of a succession of statistically independent encounters of the incident particle with the nucleons of the target nucleus. The nucleon interaction cross sections were calculated by the [illegible] method of impact parameters. The H. [illegible] center data on electron scattering [illegible] evaluate the proton densities. Numerical calculations were carried out [illegible] for nuclei w.t. A = [illegible] 12, 14, 24, 56, 122 and 207. The [illegible]

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