"APPROVED FOR RELEASE: 03/20/2001 CIA-RDP86-00513R000411830008-6

MATSEYKO, Yuriy Mikhaylovich [Matseiko, IU.M.], kand.istor.nauk; DZHEDZHULYA, A.O., kand.istor.nauk, red.; GANUSETS, O.I. [Hanusets', O.I.], red.

[Present stage of economic cooperation among socialist countries] Ekonomichna spivdruzhnist' sotsialistychnykh krain na suchasnomu etapi. Kyiv, 1957. 43 p. (Tovarystvo dlia poshyrennia politychnykh i naukovykh znan' Ukrains'koi RSR. Ser.7, no.9) (MIRA 12:3)
(Economics)

APPROVED FOR RELEASE: 03/20/2001 CIA-RDP86-00513R000411830008-6"

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AKHTYRTSEV, B.P.; DZHEGERIS, B.T.

Evolution of Soloth soils. Pochvovedenie no.6:71-78 Je '59.
(MIRA 12:9)

1. Voronezhskiy gosudarstvennyy universitet.
(Soloth soils)

APPROVED FOR RELEASE: 03/20/2001 CIA-RDP86-00513R000411830008-6"

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GOLOVINA, A.; DZHEGUTANOVA, G.

Business decisions. Mast. ugl. 7 no. 5:10 My '58. (MIRA 11:7)
(Mine management)

APPROVED FOR RELEASE: 03/20/2001 CIA-RDP86-00513R000411830008-6"

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DZHEKBATYROV, N.

Future development of public self-government in the activities of local soviets. Vest. AN Kazakh. SSR 17 no.10:32-40 O '61. (MIRA 14:10)

(Russia--Politics and government)

APPROVED FOR RELEASE: 03/20/2001 CIA-RDP86-00513R000411830008-6"

"APPROVED FOR RELEASE: 03/20/2001 CIA-RDP86-00513R000411830008-6

TSIPARIS, I.N. [Ciparis, I.]; DZHEKCHIORYUS, L.M. [Dzerkciorius, L.]; KAPITAL'NYY, V.G.; RYBNIKOV, A.N.

Extractive rectification of raw acetic acid using sodium acetate. Gidroliz. i lesokhim. prom. 17 no.4:16-19 '64 (MIRA 17:7)

1. Litovskaya sel'skokhozyaystvennaya akademiya (for TSiparis, Dzhekzhioryus). 2. Dmitriyevskiy lesokhimicheskiy zavod (for Kapital'nyy, Rybnikov).

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DZHEKSENBAYEV, O.Sh.

Effect of antibiotics and bacterial growth during slight deviations from the optimal temperature. Antibiotiki 3 no.4:82-85 Jl-Ag '58 (MIRA 11:10)

1. Otdel infektsionnoy patologii i eksperimental'noy terapii (zav. - chlen-korrespondent AMN SSSR prof. Kh. Kh. Planel'yes) Instituta epidemiologii i mikrobiologii imeni N.F. Gamalei AMN SSSR.
(ANTIBIOTICS)
(BACTERIA)
(TEMPERATURE--PHYSIOLOGICAL EFFECT)

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"APPROVED FOR RELEASE: 03/20/2001 CIA-RDP86-00513R000411830008-6

DZHEKSENBAYEV, O.Sh. (Moskva)

Effect of higher atmospheric and body temperatures on the course of experimental pneumococcal infection and the effectiveness of penicillin therapy in rats. Pat.fiziol. i eksp.terap. 3 no.1:76 Ja-F '59. (MIRA 12:2)

1. Iz otdela infektsionnoy patologii i eksperimental'noy terapii (zav. - chlen-korrespondent AMN SSST prof. Kh.Kh. Planel'yes) Instituta epidemiologii i mikrobiologii im. Gamalei AMN SSSR.
(PNEUMOCOCCAL INFECTIONS)
(HEAT--PHYSIOLOGICAL EFFECT)
(PENICILLIN)

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"APPROVED FOR RELEASE: 03/20/2001 CIA-RDP86-00513R000411830008-6

DZHEKSENBAYEV, O.Sh. (Moskva)

Mechanism of action of pyrogenal. Pat.fiziol. i eksp.terap. 3 no.4: 49-51 Jl-Ag '59. (MIRA 12:12)

1. Iz otdela infektsionnoy patologii i eksperimental'noy terapii (zav. - chlen-korrespondent AMN SSSR prof. Kh.Kh. Planel'yes) Instituta epidemiologii i mikrobiologii imeni Gamalei AMN SSSR.
(PYROGENS pharmacology)

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"APPROVED FOR RELEASE: 03/20/2001 CIA-RDP86-00513R000411830008-6

DZHEKSENBAYEV, O.Sh. (Moskva)

Seasonal changes in the basal metabolism of rabbits during the use of pyrogenic stimulants. Pat. fiziol. i eksp. terap. 4 no. 5:66-67 S-O '60. (MIRA 13:12)

1. Iz otdela infektsionnoy patologii i eksperimental'noy terapii infektsiy (zav. - chlen-korrespondent AMN SSSR prof. Kh.Kh. Planel'yes) Instituta epidemiologii i mikrobiologii imeni N.F. Gamalei AMN SSSR.

(PYROGENS) (BASAL METABOLISM)

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"APPROVED FOR RELEASE: 03/20/2001 CIA-RDP86-00513R000411830008-6

DZHEKSENBAYEV, O.Sh.

Effect of a series of antibiotics on febrile reactions to pyrogenal in rabbits. Antibiotiki 6 no.5:417-418 My '61. (MIRA 14:7)

1. Otdel infektsionnoy patologii i eksperimental'noy terapii (zav. - chlen-korrespondent AMN SSSR prof. Kh.Kh. Planel'yes) Instituta epidemiologii i mikrobiologii imeni N.F.Gamalei AMN SSSR.
(ANTIBIOTICS) (PYROGENS)

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"APPROVED FOR RELEASE: 03/20/2001 CIA-RDP86-00513R000411830008-6

DZHEKSENBAYEV, O.Sh.; OZERETSKOVSKIY, N.A.

Pharmacological properties of the antibiotic aurantin. Antibiotiki 6 no.12:1070-1073 D '61. (MIRA 15:2)

1. Otdel infektsionnoy patologii i eksperimental'noy terapii infektsiy (zav. - chlen-korrespondent AMN SSSR prof. Kh.Kh.Planel'yes) Instituta epidemiologii i mikrobiologii imeni N.F.Gamalei AMN SSSR.
(ANTIBIOTICS)

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"APPROVED FOR RELEASE: 03/20/2001 CIA-RDP86-00513R000411830008-6

DZHEKSENBAYEV, O.Sh.; OZERETSKOVSKIY, N.A.

Pharmacological properties of the antibiotic sekazin.
Antibiotiki 7 no.4:352-355 Ap '62. (MIRA 15:3)

1. Otdel infektsionnoy patologii i eksperimental'noy terapii infektsiy (zav. - chlen-korrespondent AMN SSSR prof. Kh.Kh. Planel'yes) Instituta epidemiologii i mikrobiologii imeni N.F. Gamalei AMN SSSR.
(ANTIBIOTICS)

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"APPROVED FOR RELEASE: 03/20/2001 CIA-RDP86-00513R000411830008-6

OZERETSKOVSKIY, N.A.; DZHEKSEMBAYEV, O.Sh.; PETROPAVLOVSKAYA, I.S.

Distribution of sekazin in the bodies of experimental animals. Antibiotiki 7 no.4:356-358 Ap '62. (MIRA 15:3)

1. Otdel infektsionnoy patologii i eksperimental'noy terapii infektsiy (zav. - chlen-korrespondent AMN SSSR prof. Kh.Kh. Planel'yes) Instituta epidemiologii i mikrobiologii imeni N.F. Gamalei AMN SSSR.

(ANTIBIOTICS)

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"APPROVED FOR RELEASE: 03/20/2001 CIA-RDP86-00513R000411830008-6

OZERETSKOVSKIY, N.A.; DZHEKSENBAYEV, O.Sh.

Effect of the antitumor antibiotic, aurantin, on adrenal cortex function. Antibiotiki 7 no.7:627-630 Jl'62. (MIRA 16:10)

1. Otdel infektsionnoy patologii i eksperimental'noy terapii infektsiy (zav. - chlen-korrespondent AMN SSSR prof. Kh.Kh. Planel'yes) Instituta epidemiologii i mikrobiologii imeni N.F.Gamalei AMN SSSR.
(ANTIBIOTICS) ADRENAL CORTEX)
(CYTOTOXIC DRUGS)

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"APPROVED FOR RELEASE: 03/20/2001 CIA-RDP86-00513R000411830008-6

DZHEKSENBAYEV, O.Sh.; OZERETSKOVSKIY, N.A.

Effect of pyrogenal on the function of adrenal cortex. Biul.eksp. biol.i med. 57 no.5:31-33 My '64. (MIRA 18:2)

1. Otdel infektsionnoy patologii i eksperimental'noy terapii infektsiy (zav. - chlen-korrespondent AMN SSSR prof. Kh.Kh. Planel'yes) Instituta epidemiologii i mikrobiologii imeni N.F. Gamalei (dir. - prof. P.A.Vershilova) AMN SSSR, Moskva. Submitted July 9, 1962.

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DZHERKINBAYEV, O.Sh.

Formation of endogenous pyrogen in normal and tyroidectomized rabbits. Biul. eksp. biol. i med. 57 no.4:49-53 Ap '64.
(MIRA 18:3)

1. Otdel infektsionnoy patologii i eksperimental'noy terapii infektsiy (zav. - chlen-korrespondent AMN SSSR prof. Kh.K. Shamel'yes) Instituta epidemiologii i mikrobiologii imeni Gamaleya (dir. - prof. P.A. Vershilova) AMN SSSR, Moskva. Submitted April 2, 1963.

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DZHEKSENBAYEV, O.Sh.

Some aspects of the activity of blood serum in animals with pyrexia. Biul. eksp. biol. i med. 57 no.6:34-37 Je '64.
(MIRA 18:4)

1. Otdel infektsionnoy patologii i eksperimental'noy terapii infektsiy (zav. - chlen-korrespondent AMN SSSR prof. Kh.Kh. Planel'yes) Instituta epidemiologii i mikrobiologii imeni Gamalei (dir. - prof. P.A.Vershilova) AMN SSSR, Moskva.

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"APPROVED FOR RELEASE: 03/20/2001 CIA-RDP86-00513R000411830008-6

[illegible], O.Ch.

Dynamics of the disappearance of bacterial lipopolysaccharide from the blood and formation of endogenic serum pyrogen in normal and thyroidectomized rabbits. Biul. eksp. biol. i med. 59 no.6:40-42 Je '65. (MIRA 18:6)

1. Otdel infektsionnoy patologii i eksperimental'noy terapii infektsiy (zav. - chlen-korrespondent AMN SSSR prof. Kh.Kh. Khanolyan) Instituta epidemiologii i mikrobiologii imeni Gamaleya (dir. - chlen-korrespondent AMN SSSR prof. P.A. Vershilova) AMN SSSR, Moskva.

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DORDZHIYEV, B.S.; KIRBASOVA, M.B.; MUSHANOV, S.P.; MANZHIKOVA, R.M.; CHERNOUSOV, I.P.; KIYEVSKAYA, V.I.; DZHELACHINOV, E.B., red. GAYDASH, Ya., tekhn. red.

[Economy of the Kalmyk A.S.S.R.; statistical collection] Narodnoe khoziaistvo Kalmytskoi ASSR; statisticheskii sbornik. Elista, Kalmytskoe knizhnoe izd-vo, 1960. 107 p. (MIRA 14:8)

1. Kalmuck A.S.S.R. Statisticheskoye upravleniye. 2. Kollektiv rabotnikov Statisticheskogo upravleniya Kalmytskoy ASSR (for all except Gaydash). 3. Nachal'nik Statisticheskogo upravleniya Kalmytskoy ASSR (for Dzhelachinov)
(Kalmyk A.S.S.R.—Statistics)

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ACC NR: AP6010463 (A,N) SOURCE CODE: UR/0375/66/000/003/0014/0022

AUTHOR: Dzhelaukhov, Kh. M. (Major general)

ORG: none

TITLE: Economic potential in a modern war

SOURCE: Morskoy sbornik, no. 3, 1966, 14-22

TOPIC TAGS: economic warfare, economics, military strategy

ABSTRACT: Defining economic potential as the totality of the potentiality of a country to extract and produce some quantity of material goods to meet the diverse demands of a state, the author declares that the main index of the economic potential of any country is the per capita production of the basic types of goods. The economic potential also includes the existing financial system with gold and currency reserves, various material reserves including those of strategic raw materials, the organization of the economic structure which permits its reorganization in the case of war, the supply (distribution) system, economic relations with friendly countries, etc. However, the meaning of economic potential in a modern war cannot be fully understood without defining the concept of military economic potential. The author defines military economic potential as the aggregate of the potentialities of all basic branches of the national economy to meet the needs of the armed forces during peace and es-

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Card 1/2

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pecially during war until its completion. The military economic potential includes branches of the economy that are directly engaged in the production of military goods and material and technical means intended for meeting the requirements of armed forces. Having defined these concepts the author proceeds to analyze these various factors and states that the military economic potential and its intimate relation with the moral and political factor play a decisive role in achieving victory. With equal or commensurable economic potentialities of the warring sides (coalitions) superiority is achieved by that side which has a progressive social and economic structure and is waging a justifiable war. Political goals have a substantial effect on the mobilization of the military economic potentialities of a given country and ultimately on the course and outcome of the war. In conclusion the author emphasizes that the creation of the material and technical base of communism, the rapid growth in the rate of production of material goods in the Soviet Union and in other socialist countries, the advancing development of energetics, machine construction and metalworking, the chemical industry, i.e., branches determining technical progress in the national economy, improvement in modern means of transportation and communication, and an increase of agricultural products are extraordinarily expanding the Soviet Union's economic potentialities and are a reliable guarantee of providing the armed forces with material means for waging a modern war if, contrary to common sense, aggressors wage an attack. Orig. art. has: 4 tables.

SUB CODE: 15,05/ SUBM DATE: none

Card 2/2

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VENGRENOVSKIY, Sergey Iosifovich, nauchnyy sotr., kand. sel'khoz. nauk ; DZHELALI, Nadezhda Ivanovna, nauchnyy sotr.; LUZHETSKAYA, Lyudmila Grigor'yevna, nauchnyy sotr., agronom; SHIBKO, Vladimir Andreyevich, nauchnyy sotr., agronom; ZLENKO, G., red.; MOLCHANOVA, T., tekhn. red.

[Peas in Odessa Province] Gorokh na Odesshchine. Odessa, Odesskoe knizhnoe izd-vo, 1962. 78 p. (MIRA 15:6)

1. Vsesoyuznyy selektsionno-geneticheskiy institut imeni T.D.Lysenko (for Vengrenovskiy, Dzhelali). 2. Kolkhoz "Zarya kommunizma" Kodymskogo rayona (for Luzhetskaya). 3. Sel'skokhozyaystvennaya artel' "Ukraina" Kiliyskogo rayona (for Shibko).

(Odessa Province--Peas)

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DZHELEPOV B.S.

DZELEPOV, B.S., ALIKHANOV, A.I., and ALICHANIAN, A.I.

"β-Spectra of Some Radioactive Elements," Nature, Vol. 135, p. 393, 1935.

Physical-Technical Instiutute, Leningrad

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DZHELEPOV B.S.

DZELEPOV, B.S., ALIKHANOV, A.I., and ALICHANIAN, A.I.

"Beta Ray Spectra of Artificially Produced Radioactive Elements," Nature, Vol. 136, pp. 257-258, 1935,

Phyical-Technical Institute, Leningrad.

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"APPROVED FOR RELEASE: 03/20/2001 CIA-RDP86-00513R000411830008-6

DZHELEPOV B.S.

DVELEPOV, B.S., ALICHANIAN, A.I., and ALIKHANOV, A.I.

"The Continuous Spectra of RaE and Rap^{30}," Nature, Vol. 137, pp. 314-315, 1936.

Physical-Technical Institute, Leningrad.

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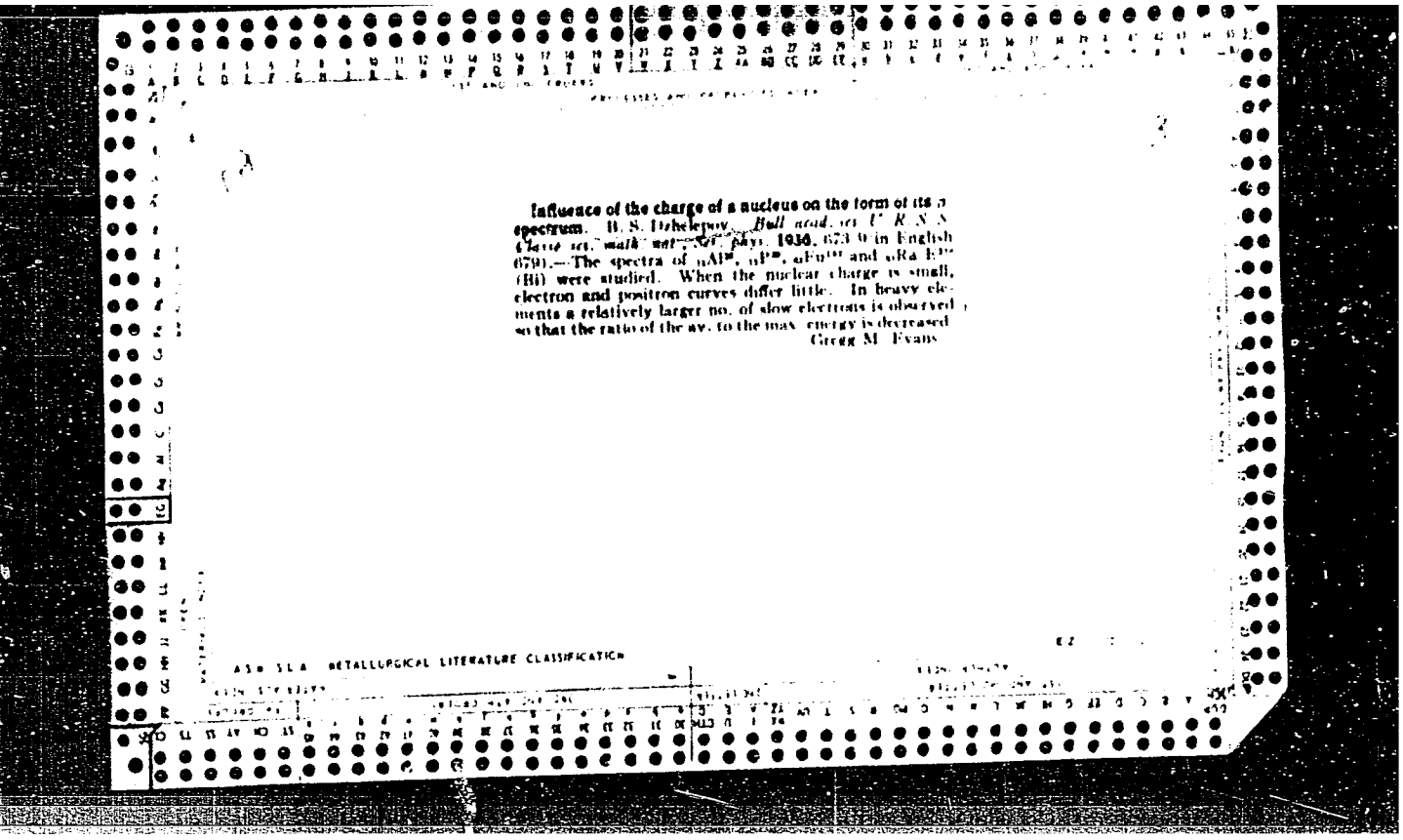

Influence of the charge of a nucleus on the form of its β spectrum. B. S. Dzhelepov. *Bull. acad. sci. U.R.S.S. (Classe sci. math. nat.), Sér. phys.* **1938**, 673-9 in English 679).—The spectra of $_{13}Al^{28}$, $_{15}P^{32}$, $_{29}Cu^{61}$ and $_{83}Ra\ E^{210}$ (Bi) were studied. When the nuclear charge is small, electron and positron curves differ little. In heavy elements a relatively larger no. of slow electrons is observed, so that the ratio of the av. to the max. energy is decreased.

Gregg M. Evans

ASM SLA METALLURGICAL LITERATURE CLASSIFICATION

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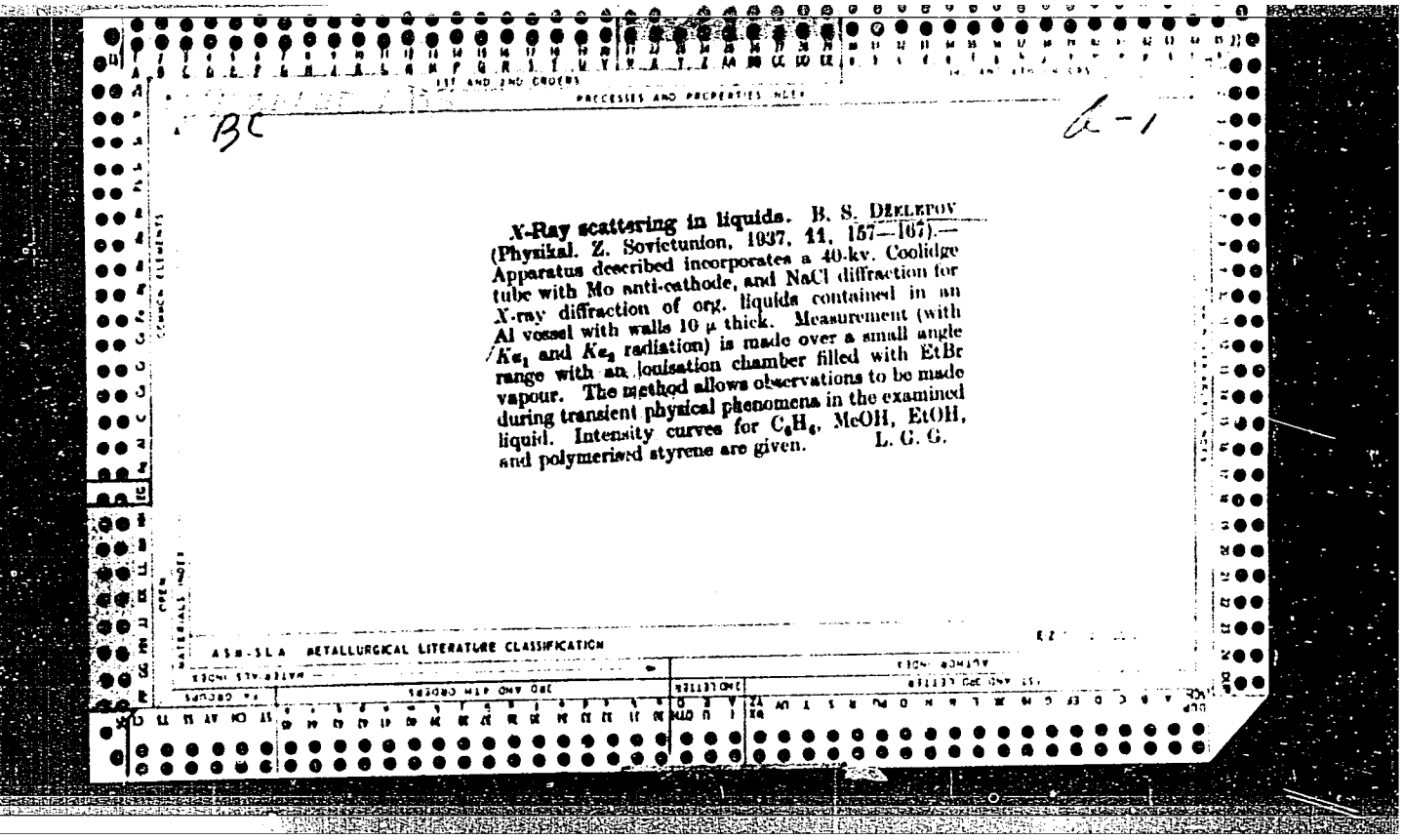

BC

4-1

X-Ray scattering in liquids. B. S. DEKLEPOV (Physikal. Z. Sovietunion, 1937, 11, 157—167).—Apparatus described incorporates a 40-kv. Coolidge tube with Mo anti-cathode, and NaCl diffraction for X-ray diffraction of org. liquids contained in an Al vessel with walls 10 μ thick. Measurement (with $K\alpha_1$ and $K\alpha_2$ radiation) is made over a small angle range with an ionisation chamber filled with EtBr vapour. The method allows observations to be made during transient physical phenomena in the examined liquid. Intensity curves for C_6H_6, MeOH, EtOH, and polymerised styrene are given. L. G. G.

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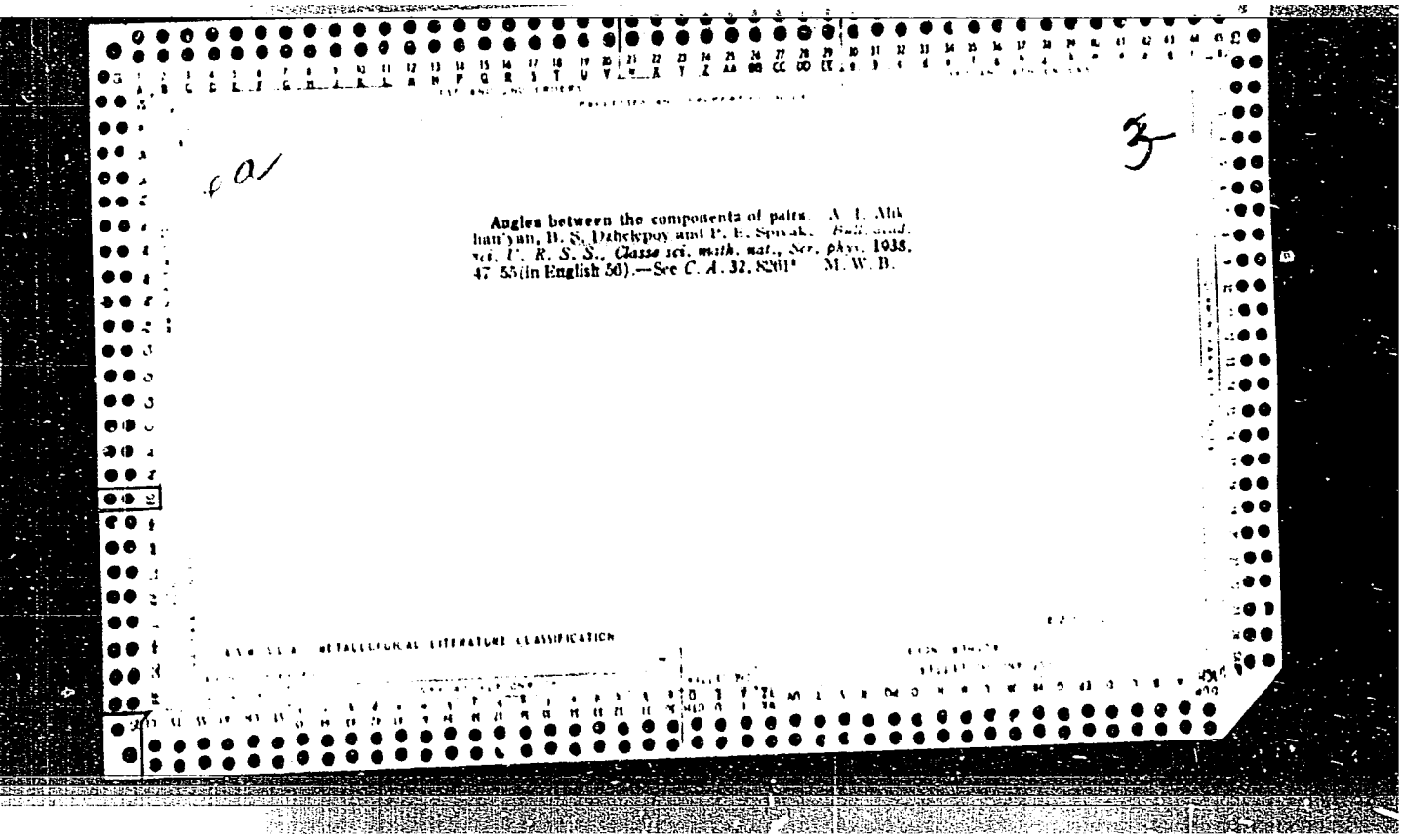

Angles between the components of pairs. A. I. Alikhanyan, B. S. Dzhelepov and P. E. Spivak. *Bull. Acad. sci. U. R. S. S., Classe sci. math. nat., Sér. phys.* 1938, 47–55 (in English 56).—See *C. A.* 32, 8201[9]. M. W. B.

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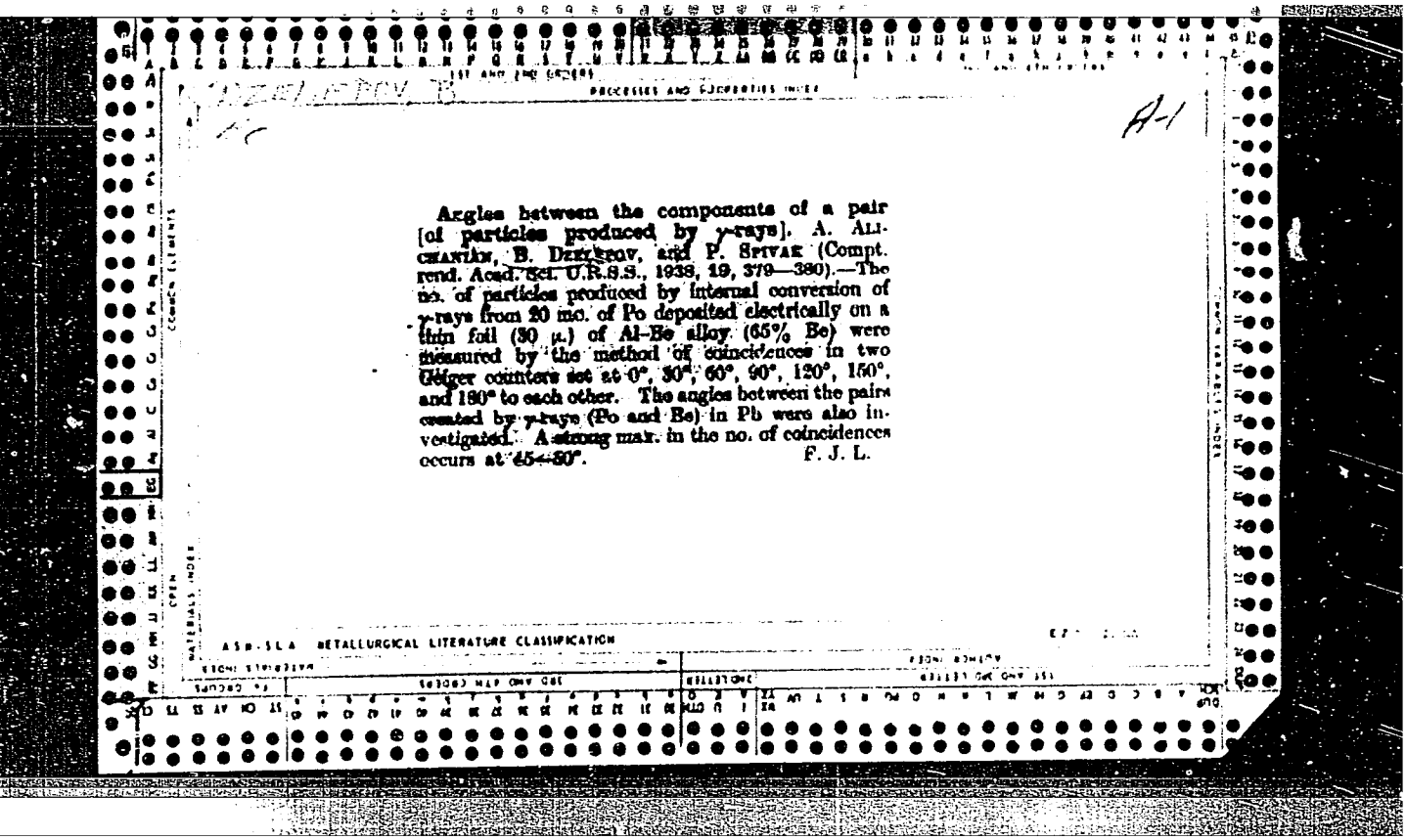

Angles between the components of a pair [of particles produced by γ-rays]. A. Alichanian, B. Dzelepov, and P. Sevar (Compt. rend. Acad. Sci. U.R.S.S., 1938, 19, 379—380).—The no. of particles produced by internal conversion of γ-rays from 20 mc. of Po deposited electrically on a thin foil (30 μ.) of Al–Be alloy (65% Be) were measured by the method of coincidences in two Geiger counters set at 0°, 30°, 60°, 90°, 120°, 150°, and 180° to each other. The angles between the pairs created by γ-rays (Po and Be) in Pb were also investigated. A strong max. in the no. of coincidences occurs at 45—60°. F. J. L.

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DZHELEPOV B.S

DVELEPOV, B.S., ALIKHANOV, A.I., and ALICHANIAN, A.I.

"On the Form of the β-Spectrum of Ra E in the Vicinity of the Upper Limit and the Mass of the Neutrino," The Physical Review, Vol. 53, pp. 766-767, 1938.

Physical-Technical Institute, Leningrad, U.S.S.R.

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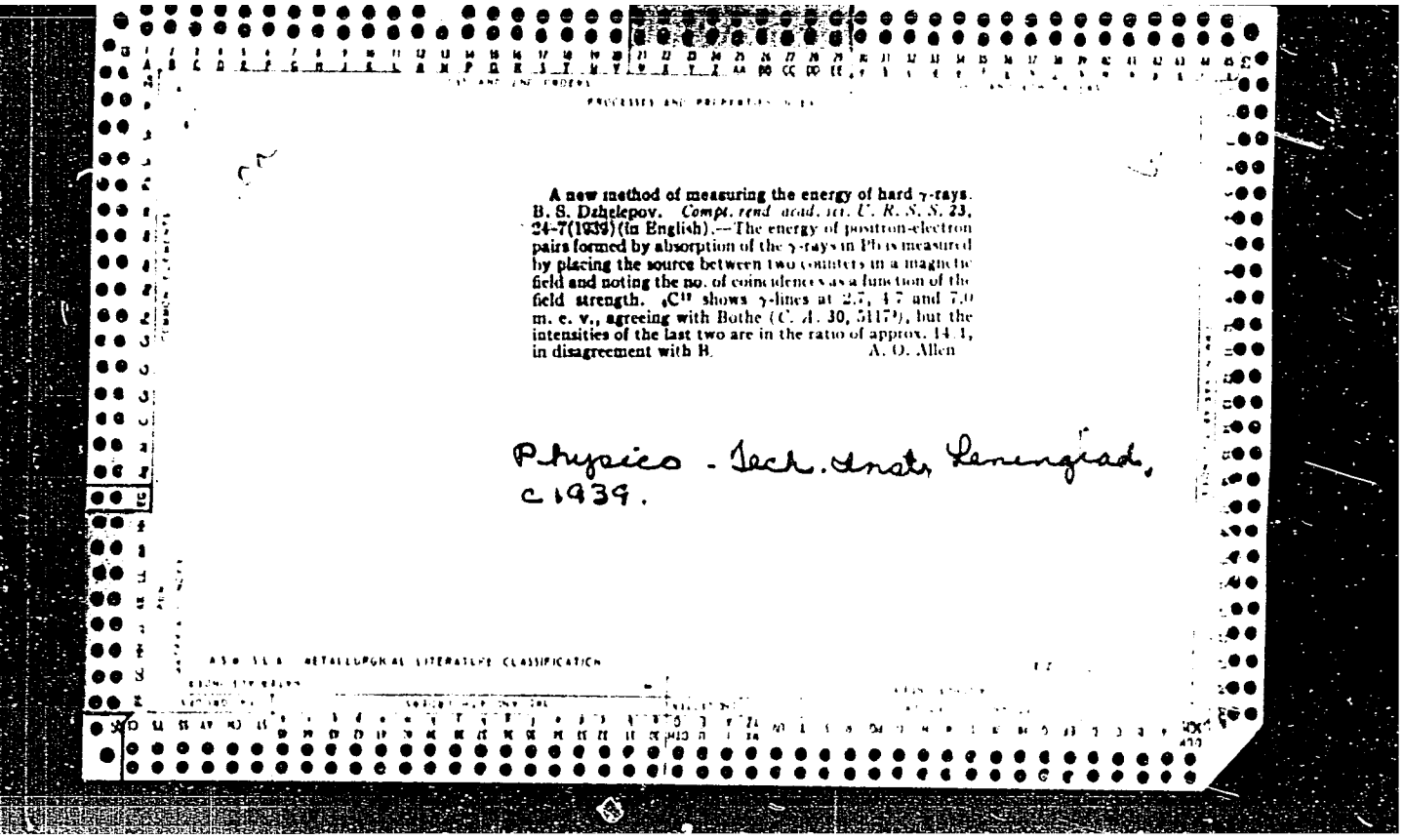

A new method of measuring the energy of hard γ-rays. B. S. Dzhelepov. *Compt. rend acad. sci. U. R. S. S.* 23, 24-7(1939)(in English).—The energy of positron-electron pairs formed by absorption of the γ-rays in Pb is measured by placing the source between two counters in a magnetic field and noting the no. of coincidences as a function of the field strength. $_6C^{11}$ shows γ-lines at 2.7, 4.7 and 7.0 m. e. v., agreeing with Bothe (*C. A.* 30, 5117⁹), but the intensities of the last two are in the ratio of approx. 14:1, in disagreement with B. A. O. Allen

Physics - Tech. Instr. Leningrad, c 1939.

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DZELEPOW, B.S.

"On the B-Ray Spectra of Mn^{56}, Dy^{165}, and Au^{198}," Dok. An, 30, No. 7, 1941.

Phys-Tech. Inst. State Univ. Leningrad. c1941.

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1ST AND 2ND ORDERS

PROCESSES AND PROPERTIES INDEX

The angular distribution of pairs produced by γ-rays from Th C''. B. Dzhelepov and S. Mamy... (Leningrad Physico-Technical Inst., U.S.S.R.). *J. Expt. Theoret. Phys. (U.S.S.R.)* 15, 685-91 (1945) (English summary). The apparent dependence of the divergence angle of positron-electron pairs on the target's Z (L. V. Groshev and I. M. Frank, C.A. 32, 6841[?]) could be due to the variation of scattering power among the gases used simultaneously as targets and cloud chamber gases. D. and M. irradiated Al foil with H... and 3... Pb foil and 1.8... 2... and ... Al foil with γ-rays from Th C'' observing the no. of coincidences per hr. as a function of the angle formed by the axes of the G.M. tubes, which converged on the target. The resolving time of the coincidence circuit was 2.5 × 10 ... sec. The exptl. coincidence rate was 50-200% of background rate. The curves for positron-electron path angle vs. no. of pairs per hr. coincided almost exactly for the H..., Pb and 2... Al targets; thus the rate of pair-formation in the region measured (5-30 per hr.) was not a function of Z.

Cyrus Feldman

Phys.-Tech. Inst., AS, USSR, -1945-.

ASM-SLA METALLURGICAL LITERATURE CLASSIFICATION

APPROVED FOR RELEASE: 03/20/2001 CIA-RDP86-00513R000411830008-6"

"APPROVED FOR RELEASE: 03/20/2001 CIA-RDP86-00513R000411830008-6

1527. The Mass of the Neutrino, by B. S. Dzhelepov and N. M. Anton'eva. *Vestnik Leningradskogo Universiteta*, No. 1, p. 19-54, 1946. (In Russian).

Critical review (45 references), arriving at the conclusion that it cannot be decided as yet whether the mass of the neutrino is rigorously zero or between 0 and 0.15 times the mass of the electron. (CA)

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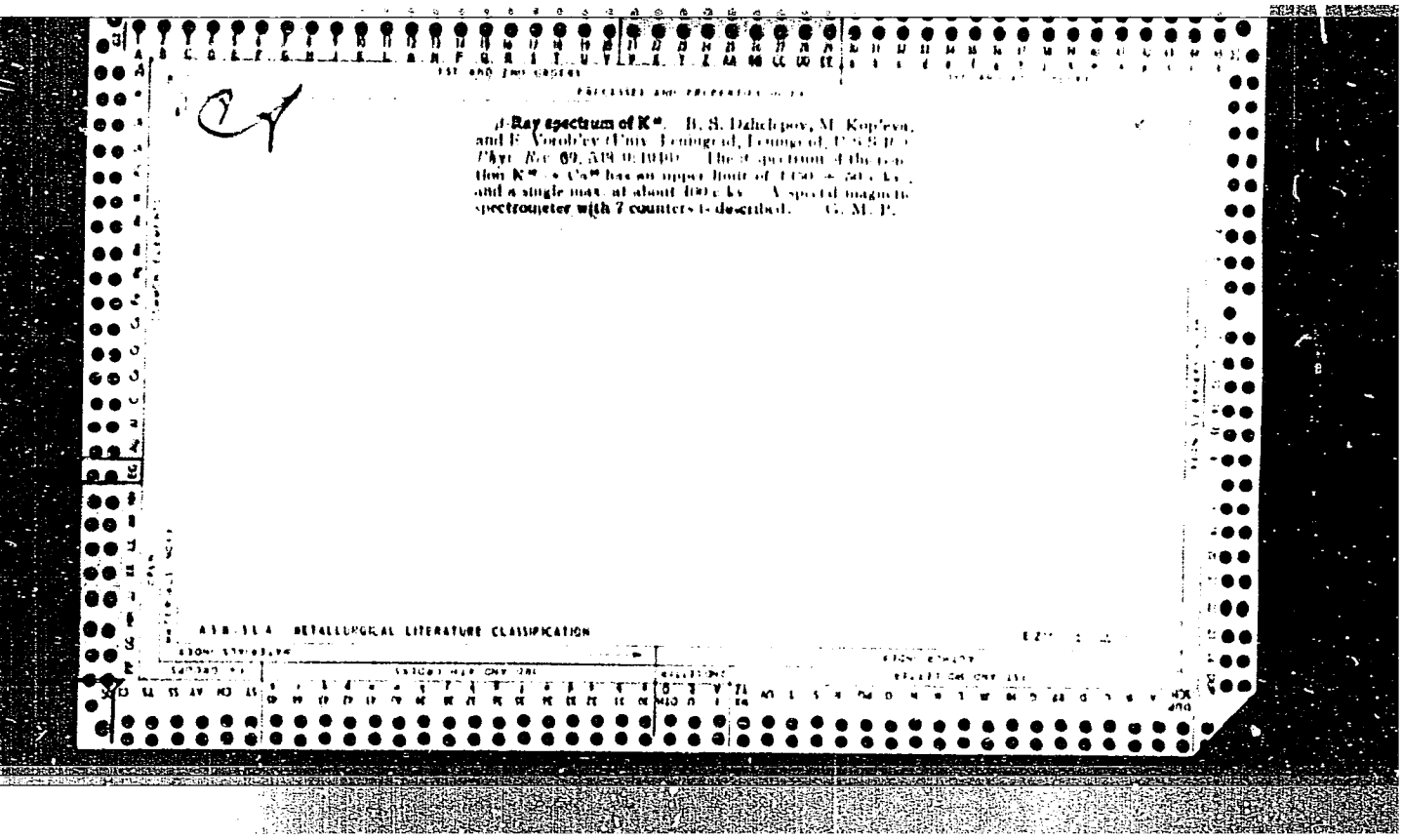

γ-Ray spectrum of K^{40}. B. S. Dzhelepov, M. Kop'eva, and E. Vorob'ev (Inst. Leningrad, Leningrad, U.S.S.R.). *Zhur. Eksp. Teor. Fiz.* 29, 519–9 (1955). The γ spectrum of the reaction $K^{40} + Cs^{40}$ has an upper limit of 1.50 ± 50 kv, and a single max. at about 800 kv. A special magnetic spectrometer with 7 counters is described. G. M. P.

A58-11-4 METALLURGICAL LITERATURE CLASSIFICATION

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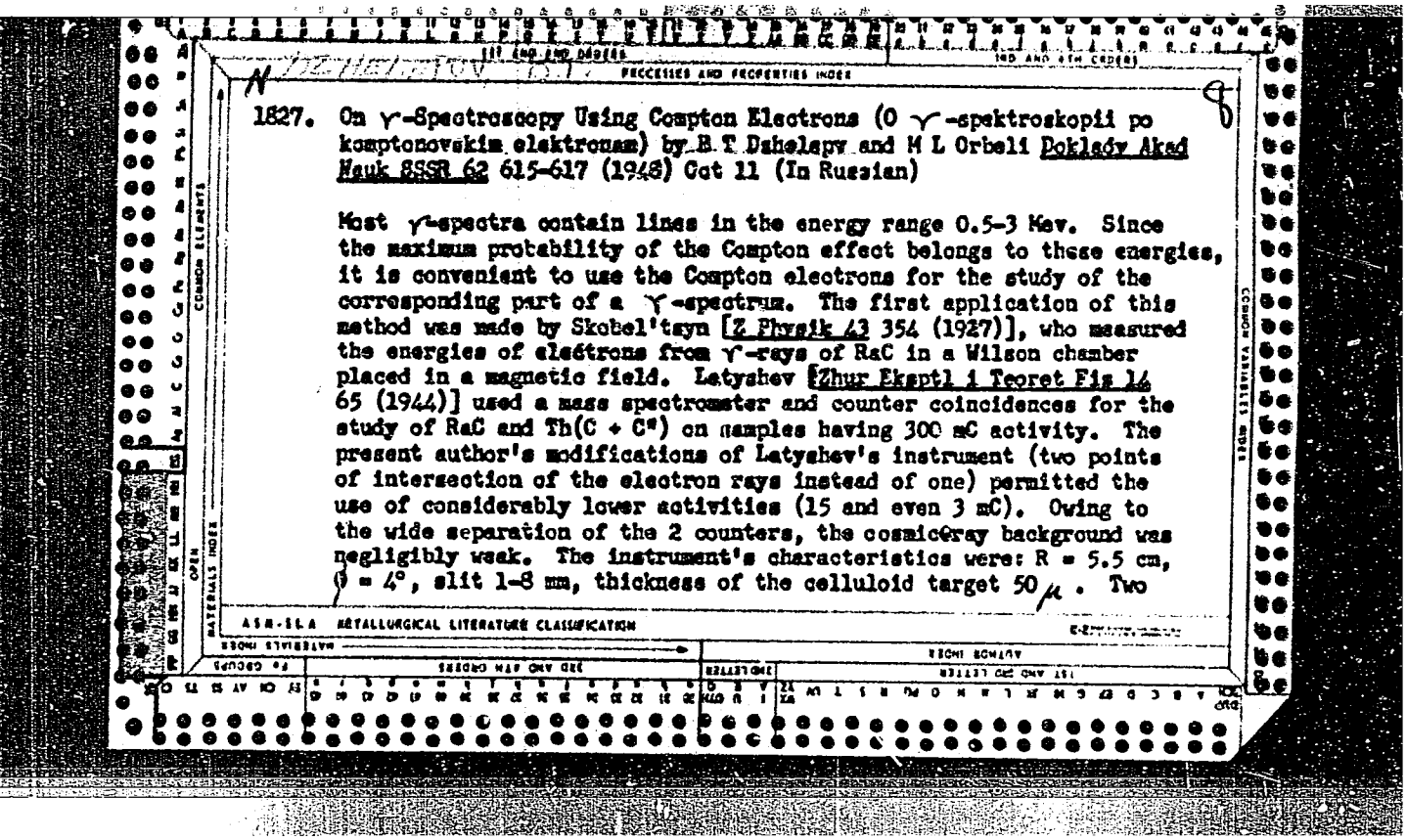

1827. On γ-Spectroscopy Using Compton Electrons (O γ-spektroskopii po komptonovskim elektronam) by B T Dzhelepov and M L Orbeli Doklady Akad Nauk SSSR 62 615-617 (1948) Oct 11 (In Russian)

Most γ-spectra contain lines in the energy range 0.5-3 Mev. Since the maximum probability of the Compton effect belongs to these energies, it is convenient to use the Compton electrons for the study of the corresponding part of a γ-spectrum. The first application of this method was made by Skobel'tsyn [Z Physik 43 354 (1927)], who measured the energies of electrons from γ-rays of RaC in a Wilson chamber placed in a magnetic field. Latyshev [Zhur Eksptl i Teoret Fiz 14 65 (1944)] used a mass spectrometer and counter coincidences for the study of RaC and Th(C + C'') on samples having 300 mC activity. The present author's modifications of Latyshev's instrument (two points of intersection of the electron rays instead of one) permitted the use of considerably lower activities (15 and even 3 mC). Owing to the wide separation of the 2 counters, the cosmic-ray background was negligibly weak. The instrument's characteristics were: R = 5.5 cm, θ = 4°, slit 1-8 mm, thickness of the celluloid target 50 μ. Two

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examples of γ-lines determined by this method are shown: the line 2620 Kev of ThC" and the line 1706 Kev of Sb^{124}.

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DZHELEPOV, E. S.

PA 35/49T87

USSR/Nuclear Physics - Atomic Nuclei - Sep 48
Disintegration of
Nuclear Physics - Radioactivity

"Type M_E^{2E-1} Radioactive Nuclei," V. S. Dzhelepov, Radium Inst, Acad Sci USSR, 4 pp

"Dok Ak Nauk SSSR" Vol LXIII, No 1

Attempts to apply Fermi's formula for the relation between decay constant and decay energy for M_m^{2E-1} nuclei. In these nuclei, during beta-decay a proton is replaced by a neutron, and remainder of the nucleus contains same number of protons and neutrons. Submitted by Acad P. I. Lukirskiy, 29 Jun 48.

35/49T87

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"APPROVED FOR RELEASE: 03/20/2001 CIA-RDP86-00513R000411830008-6

C. a.
1951

3 a.

The β-decay of tritium. M. R. Volkhanskiĭ, B. S. Dzhelepov, and L. A. Sliv (A. A. Zhdanov State Univ., Leningrad). *Doklady Akad. Nauk S.S.S.R. (N.S.)* 73, 455-8 (1949)(in English). See C. A. 43, 8961e.
R. J. C.

APPROVED FOR RELEASE: 03/20/2001 CIA-RDP86-00513R000411830008-6"

"APPROVED FOR RELEASE: 03/20/2001 CIA-RDP86-00513R000411830008-6

DZHELEPOV, B.S., KUDRYAVTSEVA, A.V.

26912. DZHELEPOV, B.S., KUDRYAVTSEVA, A.V.- Tablitsy po raspada. Proizvedeniya Zhurnal eksperim. Teoret, Fiziki, 1949, VYP. 9, s. 761-83-Bibliogr: 320 nazb.

SO: Letopis'Zhurnal'nykh Statey, Vol. 36, 1949.

APPROVED FOR RELEASE: 03/20/2001 CIA-RDP86-00513R000411830008-6"

"APPROVED FOR RELEASE: 03/20/2001 CIA-RDP86-00513R000411830008-6

DZHELEPOV, B.S.

26911. DZHELEPOV, B.S.-O proizvedeniyakh v teorii b raspada. Zhurnal eksperim. i teoret. Fiziki, 1949 VYP 9 s. 784-95--Bibliogr: 15 nazb.

SO: Letopis'Zhurnal'nykh Statey, Vol. 36, 1949.

APPROVED FOR RELEASE: 03/20/2001 CIA-RDP86-00513R000411830008-6"

"APPROVED FOR RELEASE: 03/20/2001 CIA-RDP86-00513R000411830008-6

PA 46/49T87

DZHELEPOV, B. S.

USSR/Nuclear Physics - Nuclei May 49
Nuclear Physics - Radioactivity

"Radioactive Nuclei of the Type M^{2Z-1}_{Z}," B. S. Dzhelepov, Radium Inst, Acad Sci USSR, 21 pp

"Zhur Eksper i Teoret Fiz" Vol XIX, No 5

All nuclei of type M^{2Z-1}_{Z}, beginning with C^{11}_{6}, disintegrate with release of positrons. Beta-decay of these nuclei is a permissible transition to ground state of nuclear product. Beta-decay at primary level is not accompanied by gamma radiation. Derives formulas for energy of beta-decay, constant of beta-decay, half-life, and

46/49T87

USSR/Nuclear Physics - Nuclei (Cont'd) May 49

ratio of probability of K-capture to positron emission for this type. Thus, almost all basic characteristics of beta-decay for this type may be predetermined. Submitted 23 Nov 48.

46/49T87

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62/39T96

DZHELEPOV, B. S.

USSR/Nuclear Physics - Beta Decay Sep 49

"Tables on Beta-Decay: I, the tf Products," B. S. Dzhelepov, A. V. Kudryavtseva, Leningrad State U, 23 pp

"Zhur Eksper i Teoret Fiz" Vol XIX, No 9, pp 761-83.

Selected most reliable data available on decay periods, boundaries of spectra, and type of decay for 313 beta-active substances. Used this data to calculate the tf products. Submitted 4 May 49.

62/49T96

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"APPROVED FOR RELEASE: 03/20/2001 CIA-RDP86-00513R000411830008-6

DZHELEPOV, B. S.

62/49T97

USSR/Nuclear Physics - Beta Decay Sep 49

"The tf Products in the Theory of Beta-Decay," B. S. Dzhelepov, Leningrad State U, 11 pp

"Zhur Eksper i Teoret Fiz" Vol XIX, No 9, pp 784-95.

Having calculated the tf products (Eg, Z) for all beta-active substances from available data, analyzes the distribution of tf values according to magnitude. Concludes that the number of regularities observed, i.e, the constancy of tf for mirror (isomeric) nuclei, the distinct division into A and B groups, the form of the beta-spectra of members of these groups, etc., all confirm

62/49T97

USSR/Nuclear Physics - Beta Decay (Contd) Sep 49

the correctness of Fermi's theory. Submitted 4 May 49.

62/49T97

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"APPROVED FOR RELEASE: 03/20/2001 CIA-RDP86-00513R000411830008-6

DZHELEPOV, B. S.

PA 27/49T85

USSR/Nuclear Physics - Electrons Jan 49
Nuclear Physics - Elementary Particles

"β^+ and β^- Dissociation in Br^{80}," B. S. Dzhelepov, N. M. Anton'yeva, S. A. Shestopalova, 4 pp

"Dok Ak Nauk SSSR" Vol LXIV, No 3, pp 309-12.

To study beta-plus and beta-minus disintegration, small quantity of electrons or positrons must be observed in presence of large quantity of particles of opposite sign. This presents special requirement for the spectrometer separating the particles: diffusion must be almost completely eliminated,

27/49T85

USSR/Nuclear Physics - Electrons (Contd) Jan 49

and at same time wide electron rays must be used. Solution of this problem is detailed. Submitted 4 Sep 48.

27/49T85

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"APPROVED FOR RELEASE: 03/20/2001 CIA-RDP86-00513R000411830008-6

DZHELEPOV, B. S.

USSR/Physics
Spectrum Analysis
Gold

Feb 49

"β -Spectrum of Au^{198}," B. S. Dzhelepov, A. A. Bashilov, A. V. Zolotavin, E. M. Anton'yeva, Sci Res Phys Inst, Leningrad State U, 3 pp

"Dok Ak Nauk SSSR" Vol LXIV, No 6, pp 803-5.

Studied the β-spectrum of Au^{198}, using a new magnetic spectrometer with improved focus ($\phi = 30°$, $P = 3$ $\Delta p/p = 1$ %). Results correlated well with those of du Mond and Watson. Submitted by Acad P. L. Lukirskiy, 10 Oct 48.

PA 29/49T99

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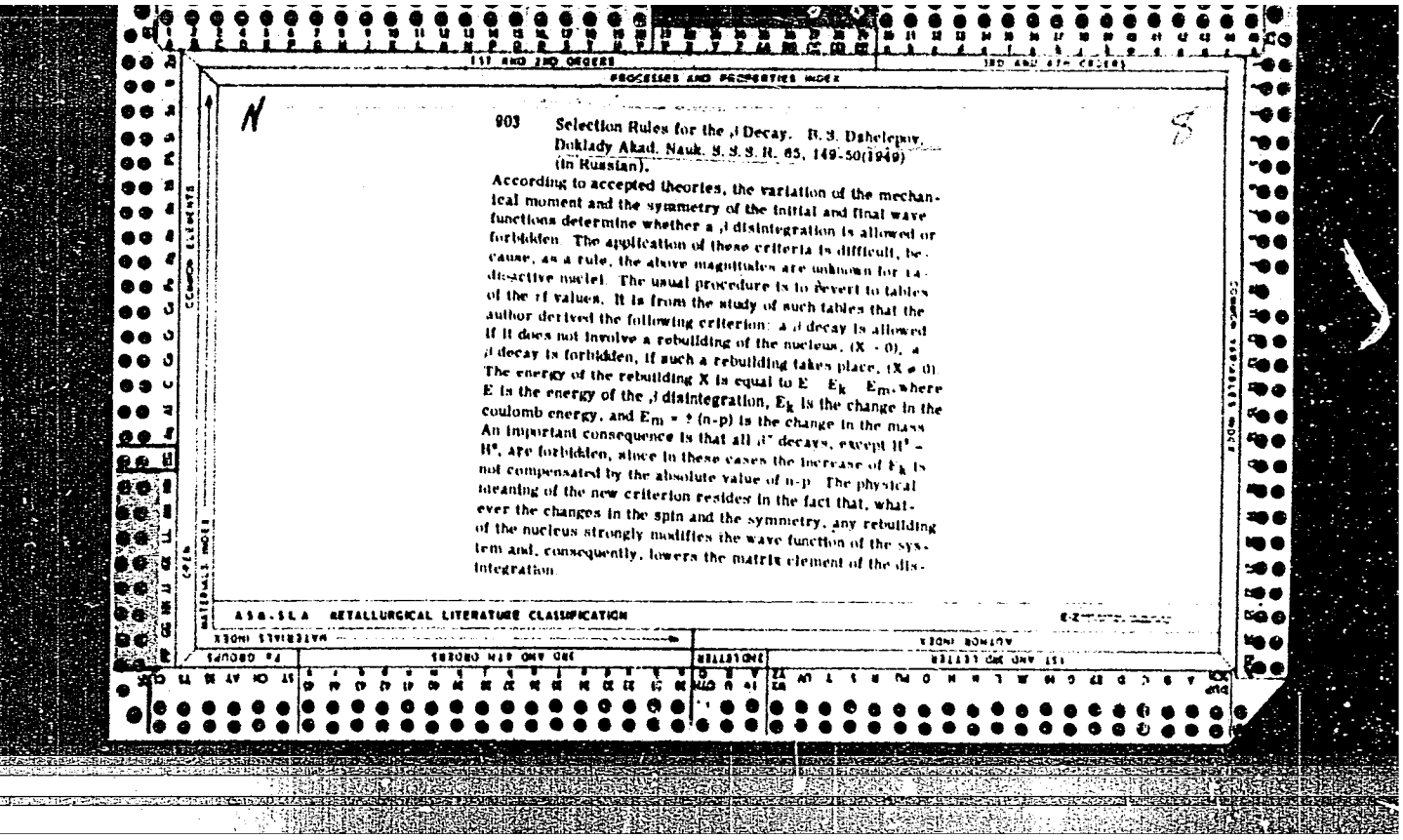

903 Selection Rules for the β Decay. B. S. Dzhelepov. Doklady Akad. Nauk. S. S. S. R. 65, 149-50(1949) (In Russian).

According to accepted theories, the variation of the mechanical moment and the symmetry of the initial and final wave functions determine whether a β disintegration is allowed or forbidden. The application of these criteria is difficult, because, as a rule, the above magnitudes are unknown for radioactive nuclei. The usual procedure is to revert to tables of the ft values. It is from the study of such tables that the author derived the following criterion: a β decay is allowed if it does not involve a rebuilding of the nucleus, ($X = 0$), a β decay is forbidden, if such a rebuilding takes place, ($X \neq 0$). The energy of the rebuilding X is equal to $E - E_k - E_m$, where E is the energy of the β disintegration, E_k is the change in the coulomb energy, and $E_m = \frac{1}{2}(n-p)$ is the change in the mass. An important consequence is that all β^+ decays, except $H^2 - H^0$, are forbidden, since in these cases the increase of E_k is not compensated by the absolute value of $n-p$. The physical meaning of the new criterion resides in the fact that, whatever the changes in the spin and the symmetry, any rebuilding of the nucleus strongly modifies the wave function of the system and, consequently, lowers the matrix element of the disintegration.

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DZHELEPOV, B. S.

USSR/Nuclear Physics - Beta-Decay Jun 49
Nuclear Physics - Hydrogen Isotope

"The Problem of Beta-Disintegration of H^3," N. Ye. Voyhanskiy, B. S. Dzhelepov, L. A. Sliv, Leningrad State U imeni A. A. Zhdanov, 3 pp

"Dok Ak Nauk SSSR" Vol LXVI, No 5, pp 829-32.

All "mirror" nuclei, type $M^{2z\ 1}$, form a cascade group of permissible beta-emitters; their theory concerns properties of type $M_z^{2z\ 1}$ beta-emitters, upper limits of which change from 18 keV to 5,[illegible] keV and the period from one second to 4.10^8 seconds.

Submitted by Acad P. I. Lukirskiy, 18 Apr 49.

PA 50/49T87

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"APPROVED FOR RELEASE: 03/20/2001 CIA-RDP86-00513R000411830008-6

USSR/Nuclear Physics - Gamma Rays 21 Dec 49

"Polarization of Annihilation Gamma-Quanta,"
N. A. Vlasov, B. S. Dzhelepov

"Dok Ak Nauk SSSR" Vol LXIX, No 6, pp 777-780

PA 173T89

From Dirac's theory of 2-quantum annihilation, it follows that during pair-annihilation (electron and positron) in s-state 2 quantum must be polarized in perpendicular planes, as discussed by I. Ya. Pomeranchuk in "Dok Ak Nauk SSSR" Vol LX, 1948 Theory and experience both testify that 2-quantum annihilation under ordinary conditions dominates.

173T89

USSR/Nuclear Physics - Gamma Rays (Contd) 21 Dec 49

Problem of polarization of 2-annihilation quanta can be proved by exptl tests, as described here, with lead block, C_1 and C_2 counters, radiating source, and aluminum cones. Submitted by Acad Lukirskiy 2 Jul 49.

173T89

DZHELEPOV, B. S.

APPROVED FOR RELEASE: 03/20/2001 CIA-RDP86-00513R000411830008-6"

"APPROVED FOR RELEASE: 03/20/2001 CIA-RDP86-00513R000411830008-6

DZHELEPOV, B. S.

PA 187T82

USSR/Physics - Electron Micro-scope May/Jun 50

"Ketron, the Magnetic Spectrometer With Improved Focusing," B. S. Dzhelepov, A. A. Bashilov; Sci Res Phys Inst, Leningrad State U imeni Zhdanov

"Iz Ak Nauk SSSR, Ser Fiz" Vol XIV, No. 3, pp 264-298

Authors describe the ketron, an instr constructed by them, which uses inhomogeneous transverse magnetic fld decreasing in one direction. Give results of controlled measurements of std electron lines for resolving power 0.5% and for

187T82

USSR/Physics - Electron Microscope (Contd) May/Jun 50

solid angle of capture $\varphi = 30°$ and $\varepsilon = \pm 3°$. Lines of conversion electrons of familiar gamma-rays of Th(B+C+C'+C"), RaC and Au^{198} are taken as the std. Submitted 24 Apr 50 at session of the Dept of Physicomath Sci, Acad Sci USSR.

187T82

APPROVED FOR RELEASE: 03/20/2001 CIA-RDP86-00513R000411830008-6"

"APPROVED FOR RELEASE: 03/20/2001 CIA-RDP86-00513R000411830008-6

DZHELEPOV, B. S.
USSR/Nuclear Physics - Gamma Rays May/Jun 50

"Radiation of Au^{198}, Ho^{166} and Lu^{177}, "N. M. Anton'yeva, A. A. Bashilov, B. S. Dzhelepov, A. V. Zolotavin, Sci Res Phys. Inst, Leningrad State Univ.

"Iz Ak Nauk SSSR, Ser Fiz" Vol XIV , No 3, Pp 299-318

Describes results of studying conversion rasiation of Au^{198}, Ho^{166} and Lu^{177} as measured by the "ketron," a spectrometer with improved focusing (cf. Per Abs 187T82). Beta-spectrum of Au^{198} was found to be simple; spectra of Ho^{166} and Lu^{177}, complex. Computes assumed half life of Ho^{166}. Submitted 24 Apr 50 at session of the Dept of Physicomath Sci, Acad Sci USSR.

Pa 187T68

APPROVED FOR RELEASE: 03/20/2001 CIA-RDP86-00513R000411830008-6"

"APPROVED FOR RELEASE: 03/20/2001 CIA-RDP86-00513R000411830008-6

DZHELEPOV, B.

Zhurnal Eksperimental Teoreticheskoi Fiziki, 1950, Vol. 20, Nol 2, 1950

"On the Question of the Fine Structure of The γ-Lines of BaC:" by G.D. Latyshev. Correction to the article by B. Dzhelepov and A.V. Kudryavtseva (Zh. Eskp. Teor. Fiz., 1949, 19,). Z.Zavelskmi.

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"APPROVED FOR RELEASE: 03/20/2001 CIA-RDP86-00513R000411830008-6

DZHELEPOV, B.

PA 161T112

USSR/Nuclear Physics - Nuclei, Atomic Apr 50

"Table of Atomic Nuclei," B. Dzhelepov, S. Petrovich, 95 pp.

"Uspekh Fiz Nauk" Vol XL, No 4

Includes 85-page table of atomic nuclei, giving: atomic number (1 to 97), stable nuclei, prevalence, half life, conversion types (alpha, beta, gamma, neutron, K-conversion), energy of alpha and beta in Mev, energy of gamma rays in Mev, and nuclear reactions. Bibliography lists sources of information, mainly non-Russian.

[redacted] 161T112

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168T62

DZHELEPOV, B.

USSR/Nuclear Physics - Helium Jun 50

"Radioactive Helium Isotopes," K. Artemov, B. Dzhelepov

"Uspekh Fiz Nauk" Vol XLI, No 2, pp 189-210

Comprehensive survey of available literature on He^5 and He^6. Discusses reactions $Li^7 + H^2 = Be^4 + He^5$, $He^4 + H^2 = He^5 + H^1$, $He^4 + n = He^5$, and $He^4 + H^2 = He^5 + H^1$. In section on He^6, discusses threshold and cross section of the reactions $Be^9(n,\alpha)He^6$, $Li^6(n,p)He^6$, and $Li^6(d,p)He^7$. Also discusses use of He^6 to check neutrino hypothesis. Only eight of the 65 sources listed are Soviet.

168T62

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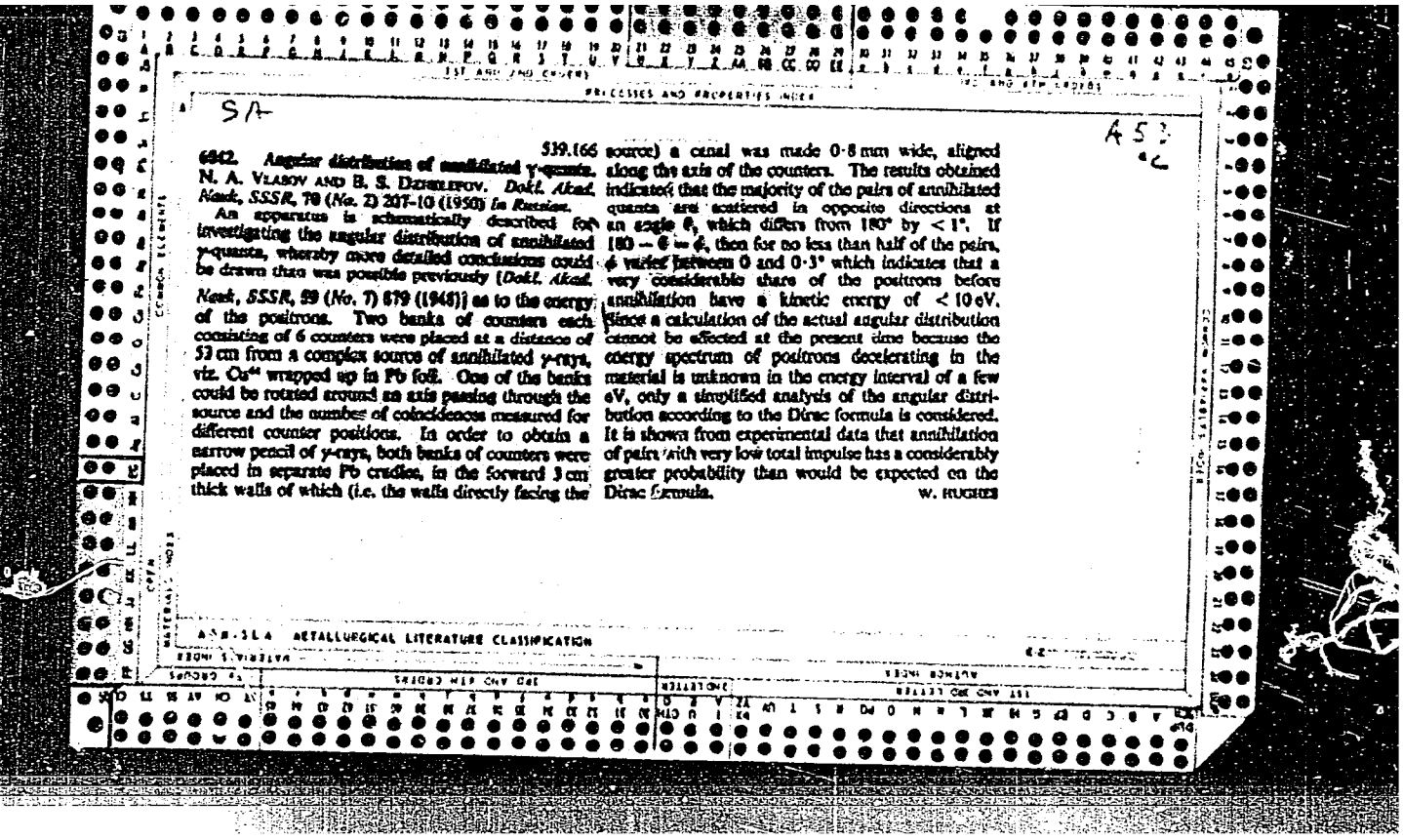

539.166

6842. *Angular distribution of annihilated γ-quanta.* N. A. VLASOV AND B. S. DZHELEPOV. *Dokl. Akad. Nauk, SSSR*, 70 (*No.* 2) 207-10 (1950) *In Russian.*

An apparatus is schematically described for investigating the angular distribution of annihilated γ-quanta, whereby more detailed conclusions could be drawn than was possible previously [*Dokl. Akad. Nauk, SSSR*, 59 (*No.* 7) 679 (1948)] as to the energy of the positrons. Two banks of counters each consisting of 6 counters were placed at a distance of 53 cm from a complex source of annihilated γ-rays, viz. Cs^{134} wrapped up in Pb foil. One of the banks could be rotated around an axis passing through the source and the number of coincidences measured for different counter positions. In order to obtain a narrow pencil of γ-rays, both banks of counters were placed in separate Pb cradles, in the forward 3 cm thick walls of which (i.e. the walls directly facing the source) a canal was made 0·8 mm wide, aligned along the axis of the counters. The results obtained indicated that the majority of the pairs of annihilated quanta are scattered in opposite directions at an angle θ, which differs from 180° by $< 1°$. If $180 - \theta = \phi$, then for no less than half of the pairs, ϕ varies between 0 and 0·3° which indicates that a very considerable share of the positrons before annihilation have a kinetic energy of < 10 eV. Since a calculation of the actual angular distribution cannot be effected at the present time because the energy spectrum of positrons decelerating in the material is unknown in the energy interval of a few eV, only a simplified analysis of the angular distribution according to the Dirac formula is considered. It is shown from experimental data that annihilation of pairs with very low total impulse has a considerably greater probability than would be expected on the Dirac formula.

W. HUGHES

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"APPROVED FOR RELEASE: 03/20/2001 CIA-RDP86-00513R000411830008-6

DZHELIPOV, B. S.

USSR/Nuclear Physics - Beta-Spectrum Jan 50
Isotope

"Beta-Spectrum of Ho^{166}," N. M. Anton'yeva, A. A. Bashilov, B. S. Dzhelipov, A. V. Zolotavin, Phys Inst, Leningrad State U imeni A. A. Zhdanov, 4 pp

"Dok Ak Nauk SSSR" Vol LXX, No 3

Used magnetic spectrometer with improved focusing to study beta-spectrum of Ho^{166}. Thin layer of Ho_2O_3, irradiated by neutrons and deposited on strip of cigarette paper, was electron source. Electron radiation of Ho^{166} consists of continuous beta-spectrum with limit of about 1,840 kev and intense group of slow electrons less than 100 kev. Submitted 21 Sep 49 by Acad P. I. Lukirskiy.

158T80

APPROVED FOR RELEASE: 03/20/2001 CIA-RDP86-00513R000411830008-6"

"APPROVED FOR RELEASE: 03/20/2001 CIA-RDP86-00513R000411830008-6

DZHELEPOV, B.S.

"Beta Spectrum of Lu^{177}," Dok.AN., 70, No. 4, 1950.
Physics Inst., Al.A. Zhdanov Leningrad State U., -c1950-.

APPROVED FOR RELEASE: 03/20/2001 CIA-RDP86-00513R000411830008-6"

"APPROVED FOR RELEASE: 03/20/2001 CIA-RDP86-00513R000411830008-6

SA
Sect. A

Radioactivity

539.166

6827. Gamma radiation of Ag^{110}. B. S. DZHELEPOV, N. N. ZHUKOVSKII AND YU. V. KHOLNOV. *Guide Russ. Period. Lit. Brookhaven*, 4, 369–70 (*Dec.*, 1951).

Full translation of article abstracted in Abstr. 9671 (1951).

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"APPROVED FOR RELEASE: 03/20/2001 CIA-RDP86-00513R000411830008-6

USSR/Nuclear Physics Jul/Aug 51

"Mirror" Nuclei of Higher Order," B. S. Dzhelepov

PA 195T63

"Iz Ak Nauk SSSR, Ser Fiz" Vol XV, No 4, pp 496-504

"Mirror" nuclei are isobars of types N + p, N + n, where N is "residue nucleus" with equal number of protons (p) and neutrons (n). Such nuclear pairs differ in mass according to difference in Coulomb energy and to mass difference (p - n), indicating that binding energy of proton or neutron to residual nucleus is the same. Comparison of nuclear masses

195T63

USSR/Nuclear Physics (Contd) Jul/Aug 51

of types N + 2p and N + 2n is now possible for 5 pairs and measuring methods were reported by author at a seminar of Sci Res Inst of Phys, Leningrad State U, 2 Oct 50.

195T63

DZHELEPOV, B. S.

APPROVED FOR RELEASE: 03/20/2001 CIA-RDP86-00513R000411830008-6"

"APPROVED FOR RELEASE: 03/20/2001 CIA-RDP86-00513R000411830008-6

DZHELEPOV, B. S.

✓Tables on β-decomposition. II. Effect of the Coulomb field on β-spectra. B. S. Dzhelepov and L. N. Zyryanova (Leningrad State Univ.). *Zhur. Eksptl. i Teoret. Fiz.* 21, 923–41(1951).—Excerpts from the tables of values for β-decay are given for the value of $F(E,Z)$, which describes the effect of the Coulomb field on the form of β-spectra. The value of $F(E,Z)$ was calcd. by means of an approx. formula developed earlier (Hulme, *C.A.* 26, 911). 14 pages of tables.

J. Rovtar Leach

APPROVED FOR RELEASE: 03/20/2001 CIA-RDP86-00513R000411830008-6"

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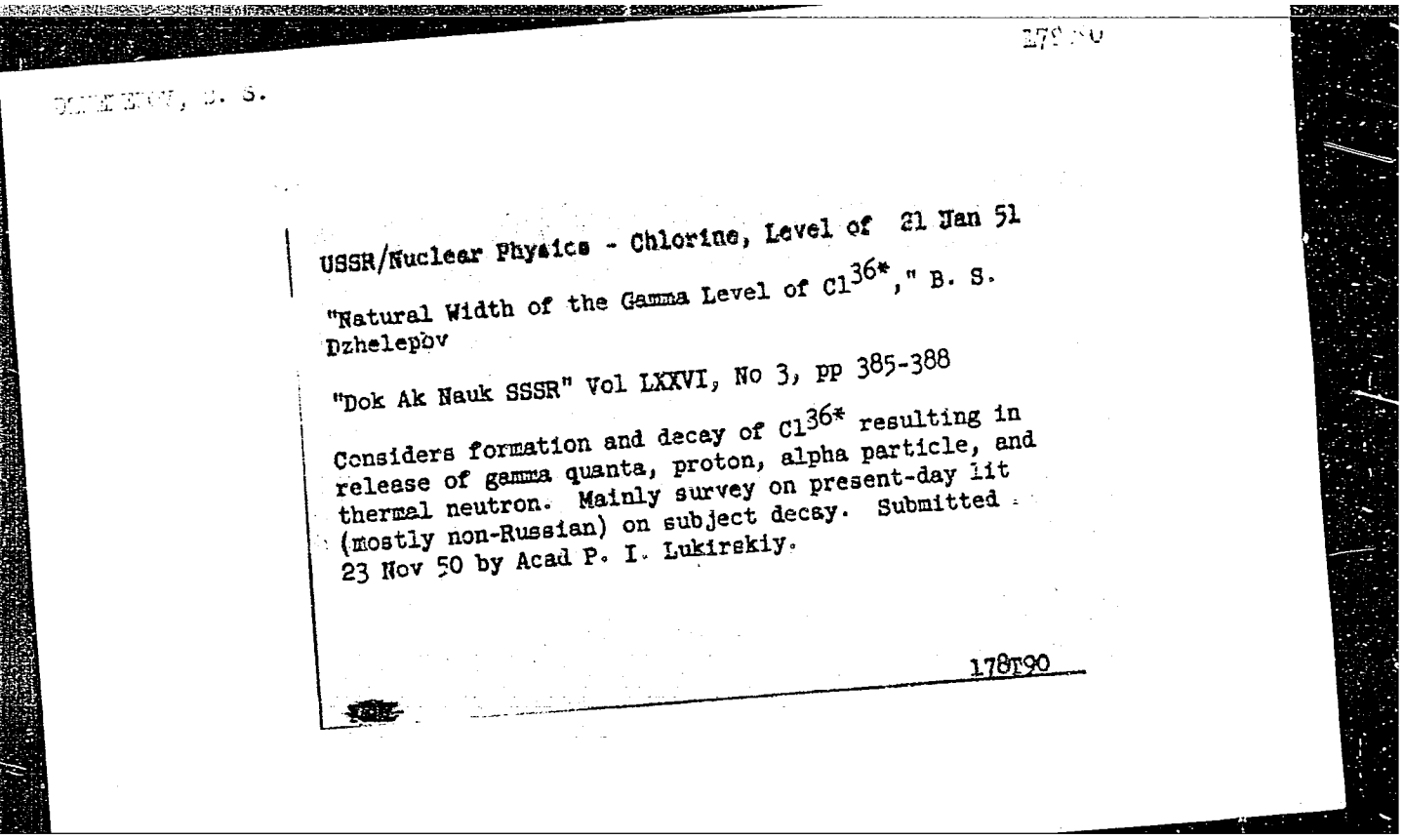


DZHELEPOV, B. S.

USSR/Nuclear Physics - Chlorine, Level of 21 Jan 51

"Natural Width of the Gamma Level of Cl^{36*}," B. S. Dzhelepov

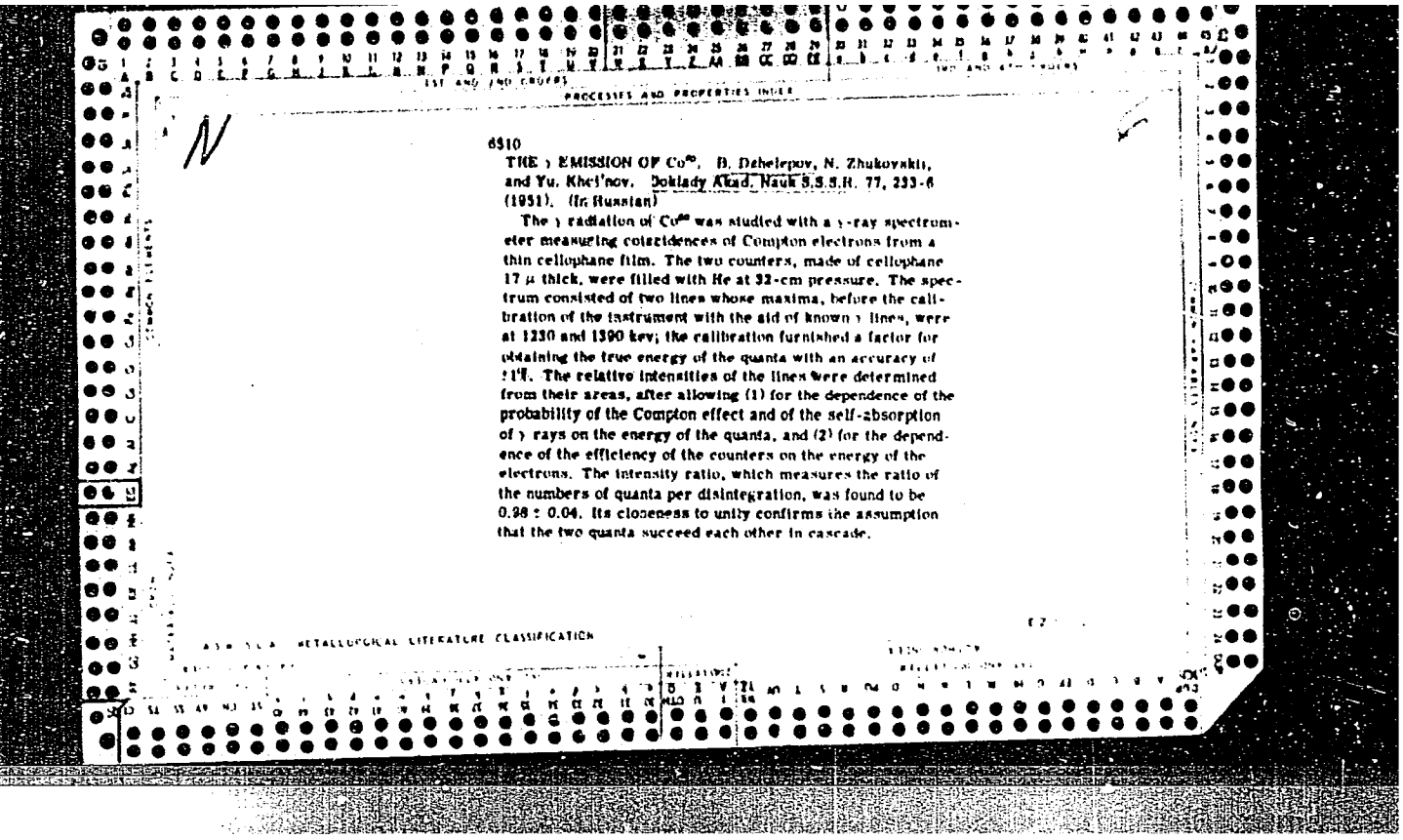
"Dok Ak Nauk SSSR" Vol LXXVI, No 3, pp 385-388

Considers formation and decay of Cl^{36*} resulting in release of gamma quanta, proton, alpha particle, and thermal neutron. Mainly survey on present-day lit (mostly non-Russian) on subject decay. Submitted 23 Nov 50 by Acad P. I. Lukirskiy.

178T90

APPROVED FOR RELEASE: 03/20/2001 CIA-RDP86-00513R000411830008-6"

"APPROVED FOR RELEASE: 03/20/2001 CIA-RDP86-00513R000411830008-6



PROCESSES AND PROPERTIES INDEX

6$10

THE γ EMISSION OF Co^{60}. B. Dzhelepov, N. Zhukovskii, and Yu. Khel'nov. Doklady Akad. Nauk S.S.S.R. 77, 233-6 (1951). (In Russian)

The γ radiation of Co^{60} was studied with a γ-ray spectrometer measuring coincidences of Compton electrons from a thin cellophane film. The two counters, made of cellophane 17 μ thick, were filled with He at 32-cm pressure. The spectrum consisted of two lines whose maxima, before the calibration of the instrument with the aid of known γ lines, were at 1230 and 1390 kev; the calibration furnished a factor for obtaining the true energy of the quanta with an accuracy of ±1%. The relative intensities of the lines were determined from their areas, after allowing (1) for the dependence of the probability of the Compton effect and of the self-absorption of γ rays on the energy of the quanta, and (2) for the dependence of the efficiency of the counters on the energy of the electrons. The intensity ratio, which measures the ratio of the numbers of quanta per disintegration, was found to be 0.98 ± 0.04. Its closeness to unity confirms the assumption that the two quanta succeed each other in cascade.

ASM-SLA METALLURGICAL LITERATURE CLASSIFICATION

APPROVED FOR RELEASE: 03/20/2001 CIA-RDP86-00513R000411830008-6"

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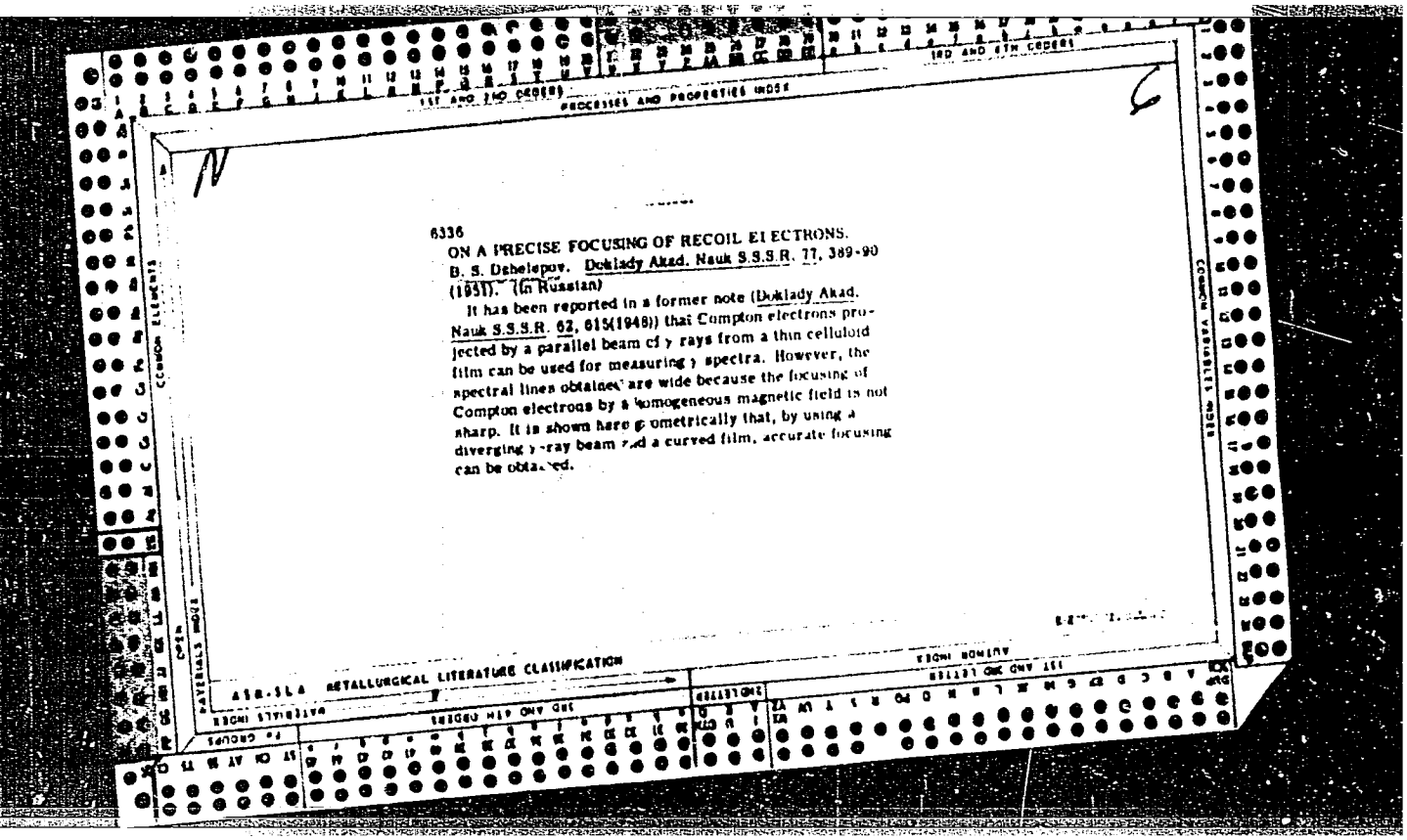

6336
ON A PRECISE FOCUSING OF RECOIL ELECTRONS.
B. S. Dzhelepov. Doklady Akad. Nauk S.S.S.R. 77, 389-90 (1951). (In Russian)
It has been reported in a former note (Doklady Akad. Nauk S.S.S.R. 62, 615(1948)) that Compton electrons projected by a parallel beam of γ rays from a thin celluloid film can be used for measuring γ spectra. However, the spectral lines obtained are wide because the focusing of Compton electrons by a homogeneous magnetic field is not sharp. It is shown here geometrically that, by using a diverging γ-ray beam and a curved film, accurate focusing can be obtained.

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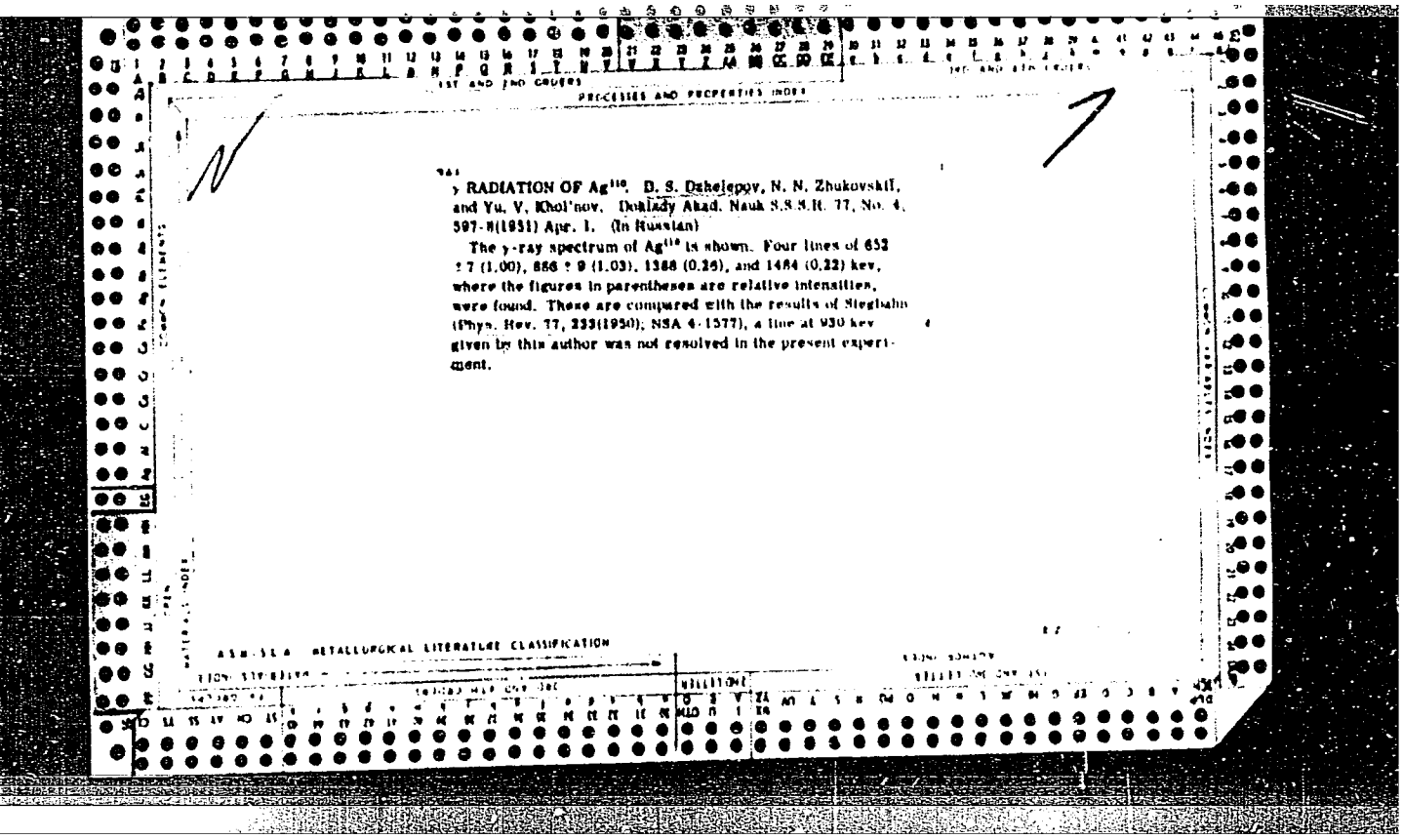

961

γ RADIATION OF Ag^{110}. D. S. Dzhelepov, N. N. Zhukovskiĭ, and Yu. V. Khol'nov. Doklady Akad. Nauk S.S.S.R. 77, No. 4, 597-8(1951) Apr. 1. (In Russian)

The γ-ray spectrum of Ag^{110} is shown. Four lines of 652 ± 7 (1.00), 886 ± 9 (1.03), 1388 (0.26), and 1484 (0.22) kev, where the figures in parentheses are relative intensities, were found. These are compared with the results of Steglahn (Phys. Rev. 77, 233(1950); NSA 4:1577), a line at 930 kev given by this author was not resolved in the present experiment.

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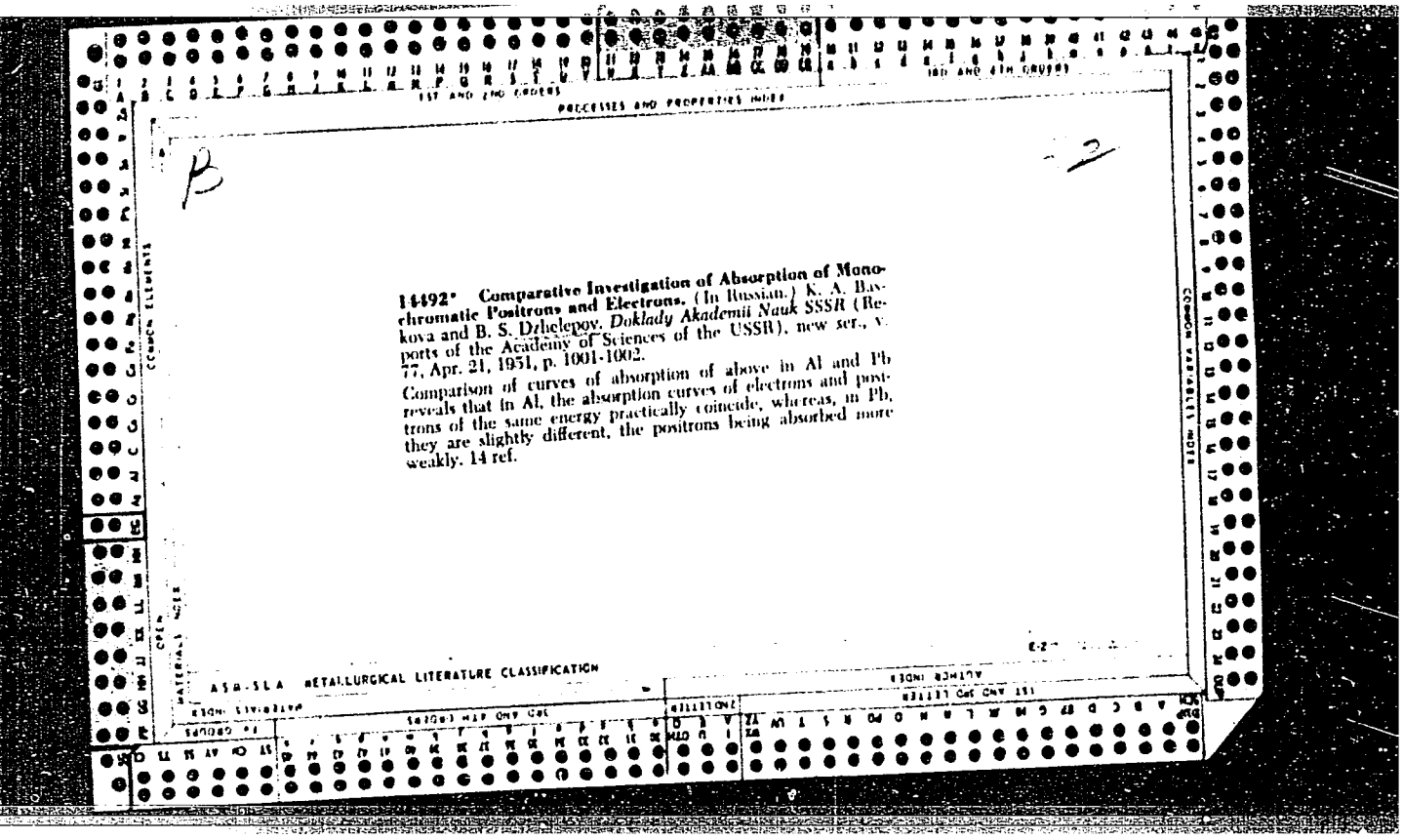

14492* **Comparative Investigation of Absorption of Monochromatic Positrons and Electrons.** (In Russian.) K. A. Baskova and B. S. Dzhelepov. *Doklady Akademii Nauk SSSR* (Reports of the Academy of Sciences of the USSR), new ser., v. 77, Apr. 21, 1951, p. 1001-1002.

Comparison of curves of absorption of above in Al and Pb reveals that in Al, the absorption curves of electrons and positrons of the same energy practically coincide, whereas, in Pb, they are slightly different, the positrons being absorbed more weakly. 14 ref.

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"APPROVED FOR RELEASE: 03/20/2001 CIA-RDP86-00513R000411830008-6

Bashilov, A. A.

May-Jun 52

USSR/Nuclear Physics - Beta -Spectrum of Ir

"The Beta-Spectrum of Ir^{192}," A. A. Bashilov, N. M. Anton'yeva, B. S. Dzhelepov

"Iz Ak Nauk SSSR, Ser Fiz" Vol 16, No 3, pp 264-305

The exptl data in this report was heard 14 Feb 51 in the Acad Sci USSR. Discusses the general knowledge concerning the radioactive isotope Ir^{192}; the spectrometer used and the conditions governing the measurements; general appearance of the beta-spectrum of Ir^{192}; comparison of the results of the measurements of the beta-spectrum of Ir^{192} with the data of various authors mostly foreign; the spectrum of the electrons of internal conversion of Ir^{192} and their conversion lines and energy lines; the spectrum of electrons of conversion of gamma-rays of Ir^{192} according various authors; the gamma-radiation of Ir^{192} according to the data of various authors; positrons and the capture of atomic electrons; the scheme describing the decay of Ir^{192}. Author acknowledges the assistance of Ye. G. [illegible].

[illegible]

APPROVED FOR RELEASE: 03/20/2001 CIA-RDP86-00513R000411830008-6"

"APPROVED FOR RELEASE: 03/20/2001 CIA-RDP86-00513R000411830008-6

DZHELEPOV, B. S. PA 242T96

USSR/Nuclear Physics - Nuclear Masses Dec 52

"Masses of Light Nuclei," B. S. Dzhelepov and L. N. Zyryanova

"Uspekhi Fiz Nauk" Vol 48, No 4, pp 465-530

Reviews the exptl data published up to Mar 1952. Discusses the principles governing processing of data. Presents complete tables of nuclear masses for atomic numbers Z up to 20. 455 references appended, which are all Western.

242T96

APPROVED FOR RELEASE: 03/20/2001 CIA-RDP86-00513R000411830008-6"

"APPROVED FOR RELEASE: 03/20/2001 CIA-RDP86-00513R000411830008-6

DZHELEPOV, B.

235T88

USSR/Physics - Gamma-Spectrum of Br^{82} - 21 Jul 52

"The Gamma-Ray Spectrum of Br^{82}," B. Dzhelepov, A. Silant'yev, Radium Inst, Acad Sci USSR

"Dok Ak Nauk SSSR" Vol 85, No 3, pp 533-535

Investigates the gamma-ray spectrum of Br^{82} with the aid of the Radium Institute's gamma spectrometer ("ritron"), which was described by B. S. Dzhelepov and M. Orbeli ("Dok Ak Nauk SSSR" Vol 62, 615, 1948). Gives a table showing the energy and intensity of the gamma rays of Br^{82} in comparison with foreign results. Acknowledges assistance of

235T88

N. N. Zhukovskiy, Yu. V. Khol'nov, and K. Gromov. Submitted by Acad P. I. Lukirskiy 14 May 52.

(PA rb no. 671:7890 '53)

235T88

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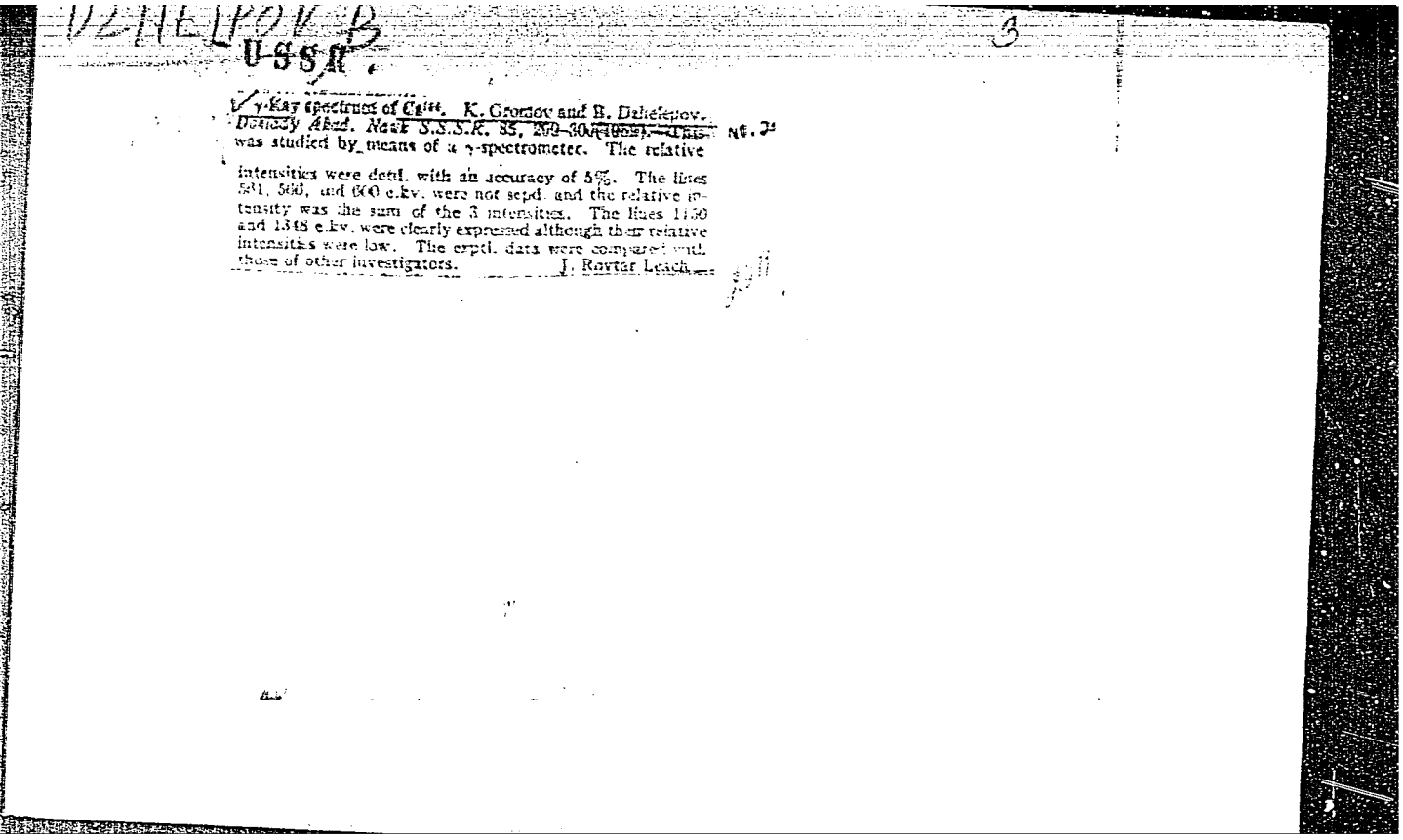

USSR

3

γ-Ray spectrum of Cs^{137}. K. Gromov and B. Dzhelepov. *Doklady Akad. Nauk S.S.S.R.* 85, 269–80(1952). This was studied by means of a γ-spectrometer. The relative intensities were detd. with an accuracy of 5%. The lines 501, 560, and 600 e.kv. were not sepd. and the relative intensity was the sum of the 3 intensities. The lines 1150 and 1348 e.kv. were clearly expressed although their relative intensities were low. The exptl. data were compared with those of other investigators. J. Rovtar Leach

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"APPROVED FOR RELEASE: 03/20/2001 CIA-RDP86-00513R000411830008-6

DZHELEPOV, B.

235T98

USSR/Physics - Gamma Radiation 11 Sep 52

"Gamma Radiation of Sb^{124}," K. Gromov, B. Dzhelepov, N. Zhukovskiy, A. Silant'yev, Yu. Khol'nov

"Dok Ak Nauk SSSR" Vol 86, No 2, pp 255-258

By means of the gamma spectrometer that employs the Compton electron, the authors investigate gamma radiation of subject antimony isotope, under conditions similar to those of the investigation of gamma spectra of Co^{60} and Ag^{110} in 1951 by the authors. The source of gamma rays was activated metallic antimony in the amt of 0.7 gram. Discuss exptl

235T98

curve of current strength in an electromagnet versus number of coincidences per unit of time. Submitted by Acad P. I. Lukirskiy 2 Jul 52.

235T98

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"APPROVED FOR RELEASE: 03/20/2001 CIA-RDP86-00513R000411830008-6

DZHELEPOV, B. S.

USSR/Nuclear Physics - Gamma Radiations

21 Sep 52

"Gamma Radiation of Fe59," B. S. Dzhelepov, N. N. Zhukovskiy, Yu. V. Kholnov, Radium Inst im Khlopin, Acad Sci USSR

DAN USSR, Vol 86, No 3, pp 497-499

Gamma radiation of Fe59 was investigated by means of gamma spectrometer using recoil electrons. Operating conditions were similar to those used in previous works by authors (DAN 77, 233 and 597 (1951); DAN 83, 3 (1952). Results of expts showed that a target of cellophane 200 thick may be used for 1-Mev rays, because the scattering of electrons distorts little the shape of spectrum lines and does not affect their intensity. Presented by Acad P. I. Lukirskiy 2 Jul 52

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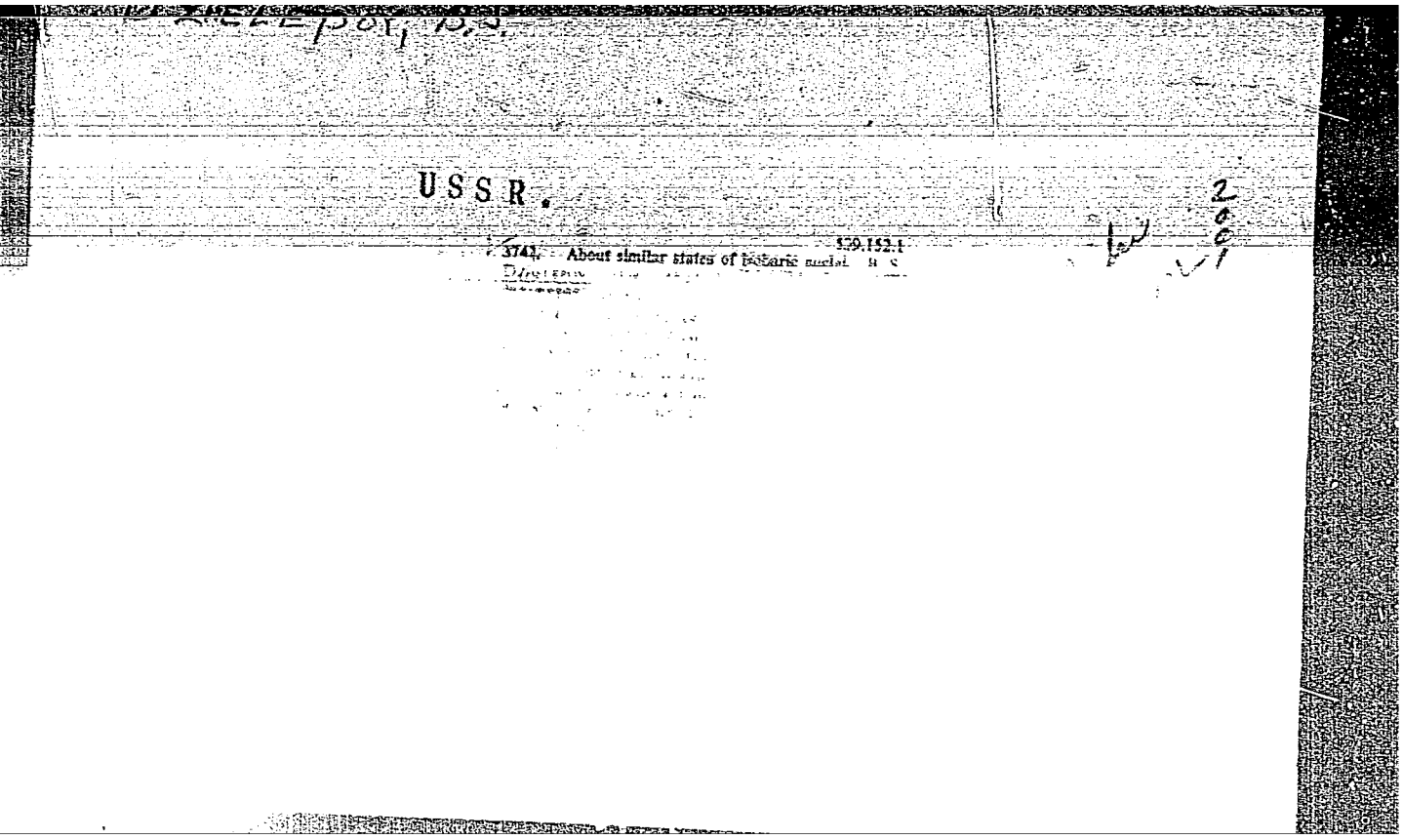

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"APPROVED FOR RELEASE: 03/20/2001 CIA-RDP86-00513R000411830008-6

DZHELEPOV, B. S.

The Committee on Stalin Prizes (of the Council of Ministers USSR) in the fields of science and inventions announces that the following scientific works, popular scientific books, and textbooks have been submitted for competition for Stalin Prizes for the years 1952 and 1953. (Sovetskaya Kultura, Moscow, No. 22-40, 20 Feb - 3 Apr 1954)

Name	Title of Work	Nominated by
Dzhelepov, B. S.	Research on the beta and gamma spectra of radioactive substances (series of articles)	Radium Institute, Academy of Sciences USSR

SO: W-30604, 7 July 1954

APPROVED FOR RELEASE: 03/20/2001 CIA-RDP86-00513R000411830008-6"

"APPROVED FOR RELEASE: 03/20/2001 CIA-RDP86-00513R000411830008-6

DZHELEPOV, B. S.

USSR/Nuclear Physics - Nuclei, Jul/Aug 53
Isobaric,
Review of

"Similar States of Isobaric Nuclei," B. S. Dzhelepov, Phys Inst, Leningrad State U im Zhdanov

Iz Ak Nauk, Ser Fiz, Vol 17, No 4, pp 391-410

Attempts to establish laws of energy at specified conditions in coupling of ground and excited states of isobaric nuclei. Reviews briefly his theory of mirror nuclei (DAN 62, 51 (1951); ZhETF 19 (1949); Izv AN, Ser Fiz 15 (1951)).

272T43

Discusses theory of similar-state nuclei and concludes that their parity and mechanical moments and their isotopic spins are identical. One hundred references, mostly American, appended. Rec 4 Jul 53.

APPROVED FOR RELEASE: 03/20/2001 CIA-RDP86-00513R000411830008-6"

"APPROVED FOR RELEASE: 03/20/2001 CIA-RDP86-00513R000411830008-6

DZHELEPOV, B. S.

USSR/Nuclear Physics - Conversion Spectrum, RaD Jul/Aug 53

"Conversion Spectrum of RaD," A. A. Bashilov, B. S. Dzhelepov and L. S. Chervinskaya, Phys Inst Leningrad State U im Zhdanov

Iz Ak Nauk, Ser Fiz, Vol 17, No 4, pp 428-435

Attempt to find experimentally more accurate relative intensities of conversional transition lines at 47.7 keV, to define coeff of conversion and the multipolarity of this transition. The number of conversion electrons was found to be 58 ± 3 and the transition ΔE = 46.7 keV

272T45

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was found to have a magnetic dipole. Indebted to N. M. Anton'yeva and G. A. Kazina. Rec 20 Jun 53. Thirty, mostly foreign, references appended.

APPROVED FOR RELEASE: 03/20/2001 CIA-RDP86-00513R000411830008-6"

"APPROVED FOR RELEASE: 03/20/2001 CIA-RDP86-00513R000411830008-6

DZHELEPOV, B. S. Jul/Aug 53

USSR/Nuclear Physics - Hf Isotopes

"Emission of Hf175 and Hf 181," A. A. Bashilov, N. M. Anton'yeva, B. S. Dzhelepov and A. I. Dolgintseva, Phys Inst, Leningrad State Univ im Zhdanov

Iz Ak Nauk, Ser Fiz, Vol 17, No 4, pp 437 -467

Briefly review present knowledge of subject which they consider incomplete. Study emission of radioactive Hf175 and Hf181 irradiated by slow neutrons, and describe the schemes of decay of Hf175 and Hf181. Forty-three, references, mostly foreign. Rec 27 Jun 53.

272T46

APPROVED FOR RELEASE: 03/20/2001 CIA-RDP86-00513R000411830008-6"

"APPROVED FOR RELEASE: 03/20/2001 CIA-RDP86-00513R000411830008-6

DZHELEPOV, B. S.

Chemical Abstracts
Vol. 48 No. 5
Mar. 10, 1954
Nuclear Phenomena

Radiation of zinc^{65}. A. A. Bashilov, N. M. Anton'eva, V. L. Broder, and B. S. Dzhelepov (A. A. Zhdanov State Univ., Leningrad). *Izvest. Akad. Nauk S.S.S.R., Ser. Fiz.* 17, 468–80(1953).—The upper limit of the β^+-spectrum is 325 ± 2 e.kv. The energy of γ-rays corresponding to the conversion of Zn^{65} with a K-electron to Cu^{65} is 1122 ± 5 e.kv.; $e/\beta^+ = (5.5 \pm 0.5) \times 10^{-4}$ (e = the no. of conversion electrons). The ratio β^+/γ was established with the help of the photoeffect, a piece of Zn wire, activated by slow neutrons and enclosed in Pb foil being used as a photoelectron source; $\beta^+/\gamma = (3.0 \pm 0.2) \times 10^{-3}$. $\alpha_K \leq 0.9\alpha_{K+L}$; $\alpha_K] = (1.5 \pm 0.2) \times 10^{-4}$ which corresponds to a $M1$ transition type. The β^+-decay of Zn^{65} leads to the ground state of Cu^{65}. The γ line is emitted when Zn^{65} is transformed into an excited state 1122 e.kv. of Cu^{65}. fl for the transition to the ground state = 3.2×10^6; for the K-electron capture = 2.5×10^7. The ground state of Cu^{65} is $p_{3/2}$, the excited state $-5/2$. Zn^{65} can have transitions to the 1122-e.kv. level of Cu^{65} and to a 2nd higher level, 1490 e.kv. (p/s). Several facts still remain contradictory. S. P.

8-19-54 RMZ

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"APPROVED FOR RELEASE: 03/20/2001 CIA-RDP86-00513R000411830008-6

DZHELEPOV, B. S.

USSR/Nuclear Physics - Radioactive Re186

Jul/Aug 53

"Beta Spectrum of Re186," N. M. Anton'yeva, A. A. Bashilov, B. S. Dzhelepov and L. S. Chervinskaya, Phys Inst, Leningrad State U im Zhdanov

Iz Ak Nauk, Ser Fiz, Vol 17, No 4, pp 507-510

Studied emission of Re186 seven days after irradiation and elimination of Re188. Re186 transmites into Os186 by beta-decay and into W186 by electron capture, releasing in both cases gamma rays. Half life of Re186 was found to be 93 hours. Rec 16 July 53.

272T50

APPROVED FOR RELEASE: 03/20/2001 CIA-RDP86-00513R000411830008-6"

"APPROVED FOR RELEASE: 03/20/2001 CIA-RDP86-00513R000411830008-6

DZHELEPOV, B. S.

USSR/Nuclear Physics - Cu, Gamma Emission Jul/Aug 53

"Gamma Emission of Cu^{64}," B. S. Dzhelepov, N. N. Zhukovskiy, V. P. Prikhodtseva and Yu. V. Kholnov, Radio Inst, Acad Sci USSR

Iz Ak Nauk, Ser Fiz, Vol 17, No 4, pp 511-517

Studied in the gamma-spectrum of Cu^{64} the line $h\nu$ = 1.34 MeV, also observed by F. Kurie and M. Ter-Pogossian (Phys Rev 74,677 (1948)). Worked with gamma spectrometer, using recoil electrons. Obtained the same results as previously (DAN 86, 497 (1952)). Indebted to A. V. Kudryavtseva, L. N. Zyryanova and V. Chumin.

Rec 9 Jul 53. 272T51

APPROVED FOR RELEASE: 03/20/2001 CIA-RDP86-00513R000411830008-6"

"APPROVED FOR RELEASE: 03/20/2001 CIA-RDP86-00513R000411830008-6

DZHELEPOV, B. S.

USSR/Nuclear Physics - Gamma-Spectrometer Jul/Aug 53

"Gamma Spectrometer With Improved Focusing," B. S. Dzhelepov, N. N. Zhukovskiy, A. S. Karamyan and S. A. Shestopalova, All-Union Sci-Res Inst of Metrology; Radium Inst, Acad Sci USSR

Iz Ak Nauk, Ser Fiz, Vol 17, No 4, pp 518-520

Attempt to improve resolution of gamma spectroscope described previously by Dzhelepov et al. (DAN 62, 613 (1948); 77, 233 (1951)). Because this spectroscope is based on recoil electrons, author named it "elotron." Indebted to V. Chumin and S. Rusinova. Rec 16 Jul 53.

272T52

APPROVED FOR RELEASE: 03/20/2001 CIA-RDP86-00513R000411830008-6"

"APPROVED FOR RELEASE: 03/20/2001 CIA-RDP86-00513R000411830008-6

USSR/ Nuclear Physics

Card 1/1 Pub. 43 - 2/11

Authors : Bashilov, A. A.; Antonyeva, N. M.; Blinov, M. V.; and Dzhelepov, B. S.

Title : Cs^{134} radiation

Periodical : Izv. AN SSSR. ser. fiz. 18/1, 43-64, Jan-Feb 1954

Abstract : The β-spectrum and the spectra of conversion electrons and photoelectrons obtained from gamma-rays of a long-life Cs^{134} isomer were investigated. The measurements were carried out on several sources of different origin and having different surface densities. The general form of the Cs^{134} beta-spectrum obtained with a source having an average surface density is shown in one of the tables. The spectrum of conversion electrons was observed to consist of 14 lines corresponding to eight gamma-conversions. Data regarding the conversion intensities and interpretations of these data are given. In order to determine the relative intensities of gamma-lines the authors investigated the radiation of Cs^{134} by observing the photoelectrons expelled from the target. Twenty-nine references: 8-USSR; 21-USA (1934-1952). Tables; graphs.

Institution : The A. A. Zhdanov State University, Physics Institute, Leningrad

Submitted : November 30, 1953

APPROVED FOR RELEASE: 03/20/2001 CIA-RDP86-00513R000411830008-6"

"APPROVED FOR RELEASE: 03/20/2001 CIA-RDP86-00513R000411830008-6

USSR/ Nuclear Physics

Card 1/1 Pub. 43 - 4/11

Authors : Dzhelepov, B. S.; Novosil'tseva, N. D.; and Tishkin, P. A.

Title : Formation of Re^{188} during the bombardment of W with slow neutrons

Periodical : Izv. AN SSSR. ser. fiz. 18/1, 76-78, Jan-Feb 1954

Abstract : Experiments prove that the entrapment of neutrons by Re, which is found among the substances usually attached to W, results in the formation of Re^{188} with a spectrum limit of 2 mev and a very small life period of 16.9 hr. One of the stable tungsten isotopes (W^{188}) is considered to be the basic source for the formation of Re^{188}. The beta-spectrum of the W^{185} plus W^{188} plus Re^{188} compound derived after repeated extraction of Re from W was measured and the results obtained are given in graphs. The decomposition period for Re^{188} was established. Three references: 2-USSR and 1-USA (1946-1951). Graphs.

Institution : The A. A. Zhdanov State University, Physics Institute, Leningrad

Submitted : January 5, 1954

APPROVED FOR RELEASE: 03/20/2001 CIA-RDP86-00513R000411830008-6"

"APPROVED FOR RELEASE: 03/20/2001 CIA-RDP86-00513R000411830008-6

USSR/ Nuclear Physics - Radioactive decomposition

Card 1/1 Pub. 43 - 6/11

Authors : Bashilov, A. A.; Dzhelepov, B. S.; and Chervinskaya, L. S.

Title : Radioactive decomposition of La^{140}

Periodical : Izv. AN SSSR. ser. fiz. 18/1, 88-92, Jan-Feb 1954

Abstract : The radioactive decomposition of the La140 isotope was investigated by means of a ketron-spectrometer having a non-uniform magnetic field and improved focus. Electron registration was carried out on a counter the window of which was covered with a collodion layer with a surface density of ~0.25 mg cm^{-2}. The semi-decomposition period for La^{140} was established and the experimental results obtained are tabulated. Eighteen references: 16 USA; 1-USSR and 1-German (1935-1951). Tables; graphs.

Institution : The A. A. Zhdanov State University, Physics Institute, Leningrad

Submitted : November 30, 1953

APPROVED FOR RELEASE: 03/20/2001 CIA-RDP86-00513R000411830008-6"

"APPROVED FOR RELEASE: 03/20/2001 CIA-RDP86-00513R000411830008-6

USSR/ Nuclear Physics - Spectral analysis

Card 1/1 Pub. 43 - 7/11

Authors : Antonyeva, N. M.; Bashilov, A. A.; Dzhelepov, B. S.; and Orlov, V. I.

Title : The beta-spectrum of P^{32}

Periodical : Izv. AN SSSR. ser. fiz. 18/1, 93-94, Jan-Feb 1954

Abstract : The form of the beta-spectrum of the radioactive P^{32} isotope, obtained according to the reaction P^{31} (n,gamma) P^{32}, was investigated by means of a magnetic ketron-spectroscope of high resolving power and by means of a conventional spectrometer with semi-circular focus in a homogeneous magnetic field with resolving power of 1.5%. The results regarding the form of the beta-spectrum are presented by a Curie curve. Data on the semi-decomposition period of the investigated radioactive phosphorous isotope are included. Ten references: 2-USSR and 8-USA (1946-1952). Table; graph.

Institution : The A. A. Zhdanov State University, Physics Institute, Leningrad

Submitted : November 30, 1953

APPROVED FOR RELEASE: 03/20/2001 CIA-RDP86-00513R000411830008-6"

"APPROVED FOR RELEASE: 03/20/2001 CIA-RDP86-00513R000411830008-6

USSR/ Nuclear Physics - Spectroscopy

Card 1/1 Pub. 43 - 8/11

Authors : Dzhelepov, B. S.

Title : The role of rereated electron diffusion in different gamma-spectroscopy methods

Periodical : Izv. AN SSSR. ser. fiz. 18/1, 95-126, Jan-Feb 1954

Abstract : The method employed in calculating the angular electron distribution distortions, due to repeated electron diffusions, is described. The effect of repeated electron diffusion was evaluated on the basis of the F. Williams theory. The ideas of the theory are explained. The role of repeated electron diffusion in various gamma-spectroscopy methods is discussed. A special instance is cited where the electrons diffuse in the very same target in which they originated. A method for the calculation of photoelectron diffusion is briefly described. Seven references: 5-USSR and 2-English (1939-1948). Tables; graphs; drawings.

Institution : Academy of Sciences USSR, Radium Institute

Submitted : December 15, 1953

APPROVED FOR RELEASE: 03/20/2001 CIA-RDP86-00513R000411830008-6"

"APPROVED FOR RELEASE: 03/20/2001 CIA-RDP86-00513R000411830008-6

DZHELEPOV, B.S.

USSR/Nuclear Physics

Card 1/2 Pub. 43 - 1/5

Authors : Dzhelepov, B. S.

Title : Isobaric spins and similar states of atomic nuclei

Periodical : Izv. AN SSSR. Ser. fiz. 18/5, 523 - 562, Sep - Oct 1954

Abstract : Scientific data are presented regarding the isobaric spins of three known types of π-mesons (π^+, π^0, π^-). All these particles have almost identical mass and their spin is apparently equal to 0. It was established that all π-mesons (pseudo-scalar particles) have uneven wave functions. No contradicting factors were found to show that all three π-mesons do not represent three different charges states of one and the same particle, all these mesons strongly react with nuclei and this reaction at sufficiently high energies is of no electromagnetic nature. The probability of forming π-mesons by stable gamma-quanta or fast nucleons was established for all three particles.

Institution: .....

Submitted: September 30, 1954

APPROVED FOR RELEASE: 03/20/2001 CIA-RDP86-00513R000411830008-6"

"APPROVED FOR RELEASE: 03/20/2001 CIA-RDP86-00513R000411830008-6

Periodical: Izv. AN SSSR. Ser. fiz. 18/5, 523 - 562, Sep - Oct 1954

Card 2/2 Pub. 43 - 1/5

Abstract: The specific meson reaction forces of all three π -mesons with any nuclon or nucleus are considered identical. One-hundred references: 11 USSR; 81 USA; 1 Canadian; 2 German; 3 Swiss and 2 English (1932-1954). Tables; graphs; diagrams; drawings.

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DZHELEPOV, B.S.

USSR/ Physics - Instruments

Card 1/ Pub. 43 - 5/5

Authors : Dzhelepov, B. S.; Zhukovskiy, N. N.; and Khol'nov, Yu. V.

Title : Ritron - gamma-spectrometer utilizing output electrons

Periodical : Izv. AN SSSR. Ser. fiz. 18/5, 599 - 624, Sep - Oct 1954

Abstract : The Ritron-magnetic gamma-spectrometer described in this report can be used for the study of gamma-spectra of radicactive substances with energies of from 300 - 4000 kev. With respect to resolving power the instrument was found to be inferior to the gamma-spectrometer with improved focus "Elotron", however, it has a certain advantage over the former, namely, it utilizes only uniform magnetic fields which makes it possible to calculate the form of the spectral line, spectral sensitivity, luminosity and other properties of the instrument. Some results obtained by the application of the Ritron-spectrometer are listed. Twenty-seven references: 15 USSR; 1 Canadian; 1 English; 1 Dutch and 9 USA (1927 - 1954). Tables; diagrams; drawings.

Institution: Academy of Sciences USSR, Radium Institute

Submitted: October 4, 1954

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IOFFE, A.F.; LEBEDEV, A.A.; FOK, V.A.; STARIK, I.Ye.; KONSTANTINOV, B.P.; DZHELEPOV, B.S.; PERFILOV, N.A.; DOBRETSOV, L.N.; STARODUBTSEV, A.V; NEMILOV, Yu.A.; ZHDANOV, A.P.; MURIN, A.N.; AGLINTSEV, K.K.; TSARE-VA, T.V.; SHUL'MAN, A.R.; YEREMEYEV, M.A.

P.I.Lukirskii; obituary. Vest.AN SSSR 24 no.12:62 D '54.(MLRA 8:1)
(Lukirskii, Petr Ivanovich, 1894-1954)

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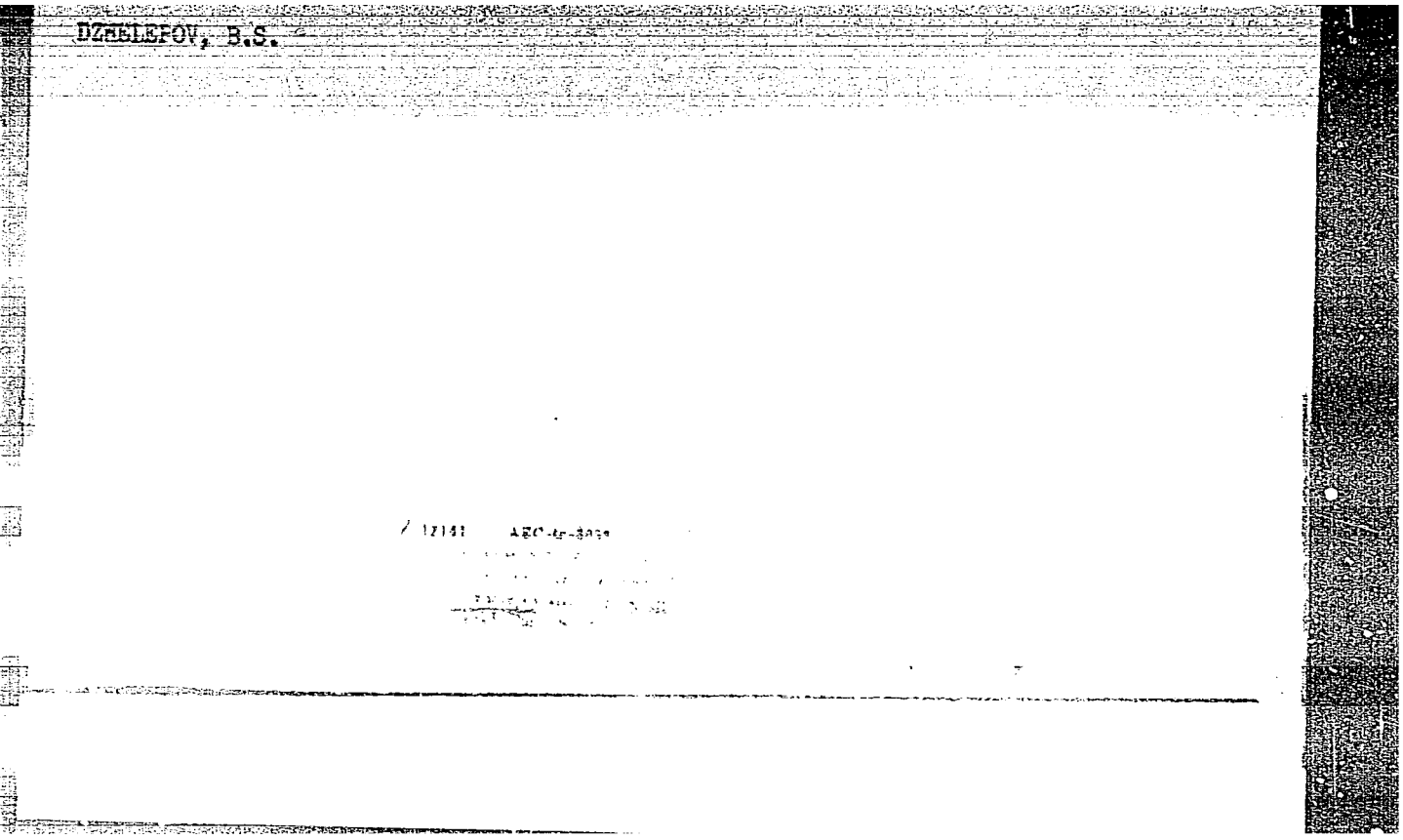
DZHELEPOV, B.S.



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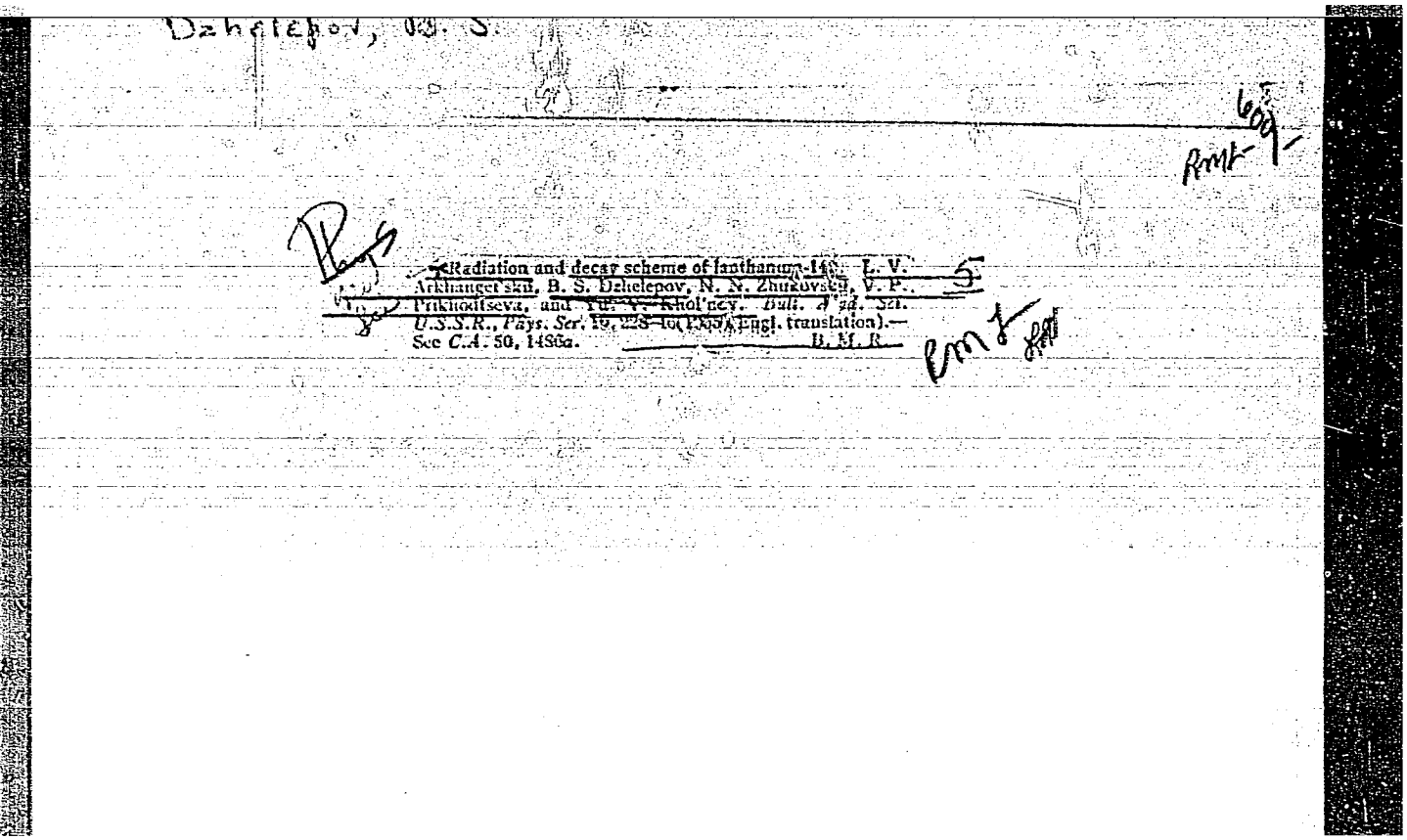

Dzhelepov, B. S.

Radiation and decay scheme of lanthanum-140. L. V. Arkhangel'skii, B. S. Dzhelepov, N. N. Zhuravleva, V. P. Prikhodtseva, and Yu. V. Kholnov. *Bull. Acad. Sci. U.S.S.R., Phys. Ser.* 19, 228–40(1955)(Engl. translation).—See *C.A.* 50, 14866a. B. M. R.

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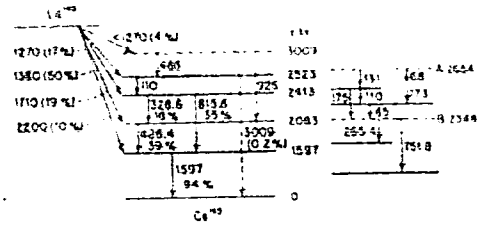
Dzhelepov, B.S.

γ-Radiation and decay scheme of lanthanum-140. [illegible] Arkhangel'skii, B. S. Dzhelepov, N. N. Zhukovskii, V. P. Prikhodtseva, and [illegible]. *Izvest. Akad. Nauk S.S.S.R., Ser. Fiz.* 19, 251–70(1955). — The γ-ray spectrum of La_2O_3 irradiated by neutrons was investigated with a nitron γ-spectrometer (cf. *C.A.* 49, 5143c). The energy and the relative intensities are 135 (0.10), 482 (0.41), 822 (0.37), 918 (0.12), 1597 (1.00), 2535 (0.058), > 2770 e kv (<0.002). The half-life of decay is 40 hrs. From all data a decay scheme is derived.



The conversion coeffs. and the abs. intensities of γ-transitions are calcd. The properties and the decay of the radioactive isobars Xe^{140}, Cs^{140}, Ba^{140}, Pr^{140}, and Nd^{140} are discussed. A diagram is drawn on a unitary energetic scale of the levels and transitions in these atoms. The particularly dense packing of Ce^{140} is attributed to the presence of a completed 82 neutron shell (magic no. [illegible]). S. Pakawer

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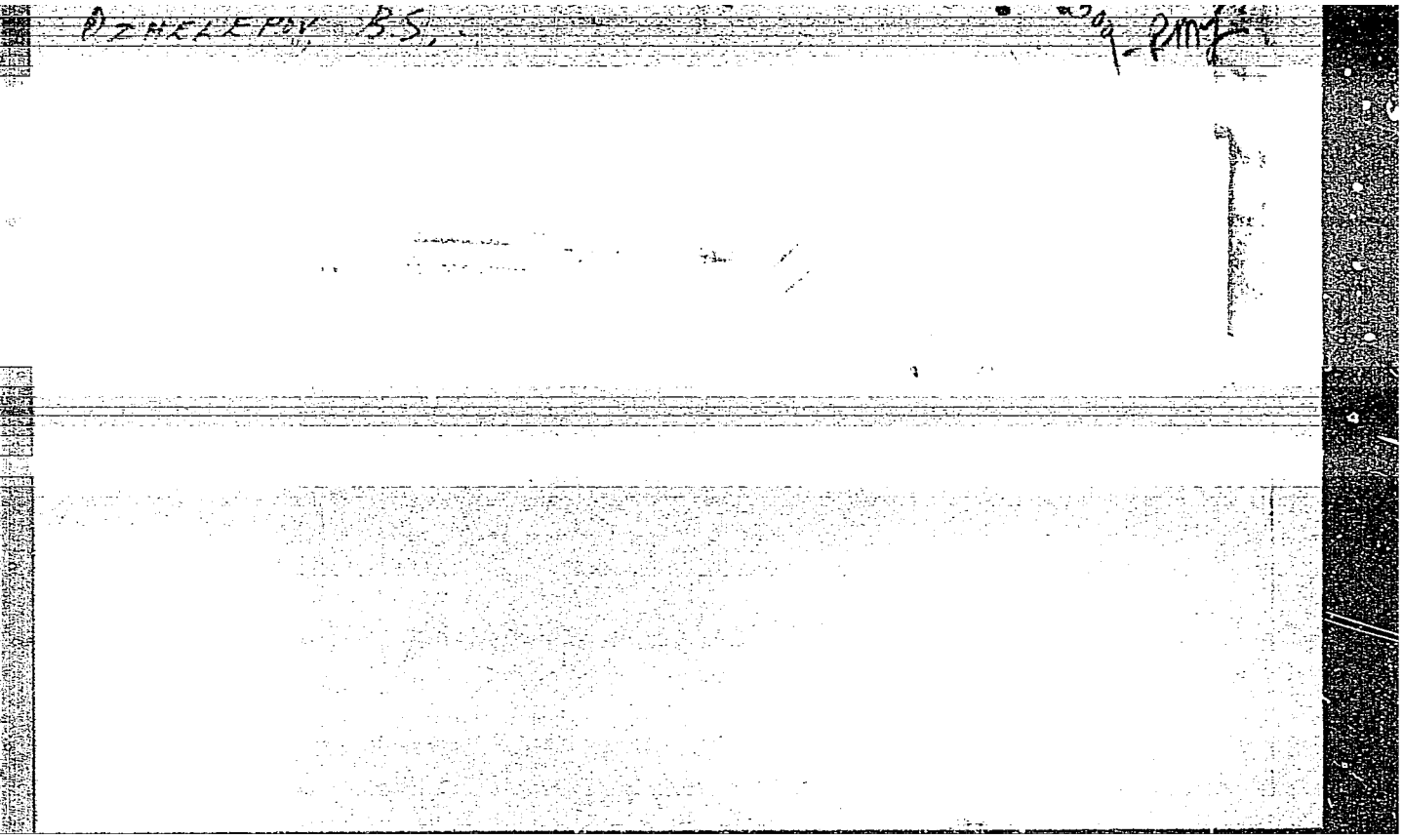

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DLHELEPOV B. S.

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GAMMA RADIATION FROM Au^{198}. B. S. Dzhelepov, N. N. Zhukovskii, V. P. Prikhodtseva and Yu. V. Khot'kov. (Khlopin Radium Inst.). Izvest. Akad. Nauk S.S.S.R. Ser. Fiz. 19, 271-6(1955) May-June. (In Russian)

Investigation concerning γ radiation of Au^{198} based on two new γ lines of 676 and 1089 Kc and associated $\beta-\gamma$ and $\gamma-\gamma$ coincidences. Systematic and detailed description of the Au^{198} decay scheme is given. 31 references. (R.V.J.)

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Dzhelepov, B.S.

γ-Spectrum of Iridium-192, M. P. Chaminov, B. S. Dzhelepov and Yu. V. Kholnov, Izvest. Akad. Nauk S.S.S.R., Ser. Fiz. 19, 204-8(1955). — The following measurements with a nitron spectrometer of the energy and intensity of γ-lines are reported: 314 (9.09), 468 (4.58), (A 12)(1.74:788), <0.002, 598(0.007), 1063 e.kv (0.0098).
S. Pakswer

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Dzhelepov, B.S.

γ-Radiation of europium-152,154. B.S. Dzhelepov, N.N. Zhukovskii, and V. O. Nedovesov. Trudy Akad. Nauk SSSR, Ser. Fiz. 19, 290-9(1955).—The γ-lines were measured on γ-spectrometers by using Compton electrons and nitron. The relative intensities of the lines 341, 427, 593, 717, 779, 871, 958, 1106, 1281, and 1409 e kv. obtained by both methods are tabulated. S. Pakswer

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DZHELEPOV, B. [S.]

USSR/ Physics

Card 1/1 Pub. 22 - 11/51

Authors : Dzhelepov, B., Member Correspondent of the Acad. of Sc., USSR

Title : About the natural width of the spectral lines of recoiled electrons

Periodical : Dok. AN SSSR 101/5, 825-828, Apr. 11, 1955

Abstract : Experiments, conducted to determine the causes of the discrepancies between the calculated and observed widths of the spectral lines of recoiled electrons, are described. The experiments were conducted with the assumption that the spectrum line of an electron must have its own natural width which does not mainly depend on the comparatively small bond energy, but on the speed of atomic electrons which, e.g., for a K-electron of nitrogen atom is $V=117 \times 10^6$ cm/sc ($V=\beta_0 c$, where $\beta_0=0.039$ and c is the speed of light). Disregarding the natural width of the spectral line of a recoiled electron is considered the main cause of the mentioned discrepancies. Eight references: 4 USSR, 2 German and 2 USA (1942-1954). Diagrams; graph.

Institution : Acad. of Sc., USSR, Institute of Radiations

Submitted : December 6, 1954

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"APPROVED FOR RELEASE: 03/20/2001 CIA-RDP86-00513R000411830008-6

DZHELEPOV, B.S.; ZYRYANOVA, L.N.; ZENDEL', M.Ye., tekhnicheskiy redaktor

[Influence of the electric fiel of the atom on beta decay] Vliianie elektricheskogo polia atoma na beta-raspad. Moskva, Izd-vo Akademii nauk SSSR, 1956. 312 p. (MLRA 9:10)
(Beta rays)

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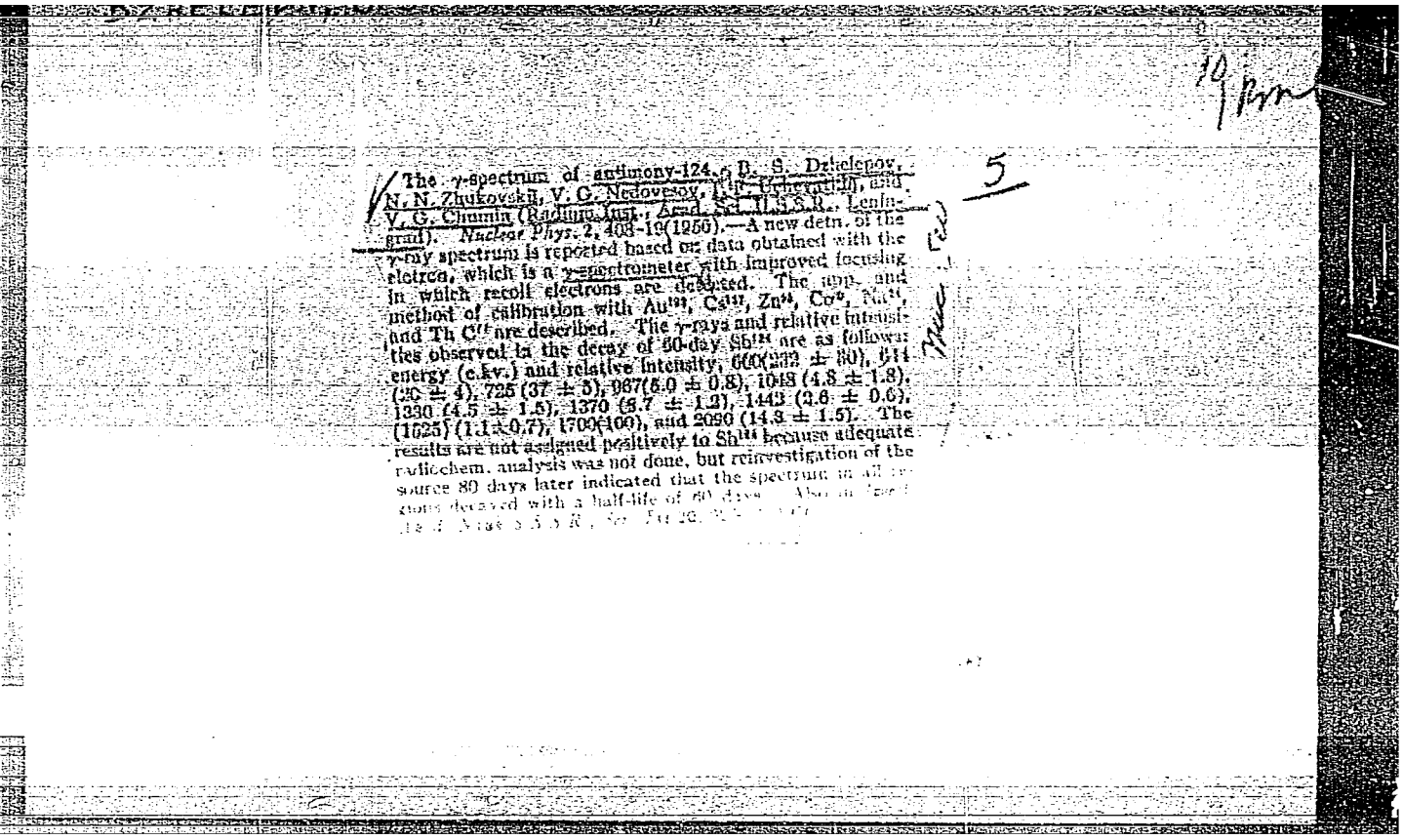

The γ-spectrum of antimony-124. B. S. Dzhelepov, N. N. Zhukovskiĭ, V. G. Nedovesov, [illegible], and V. G. Chumin (Radium Inst., Acad. Sci. U.S.S.R., Leningrad). *Nuclear Phys.* 2, 403–19(1956).—A new detn. of the γ-ray spectrum is reported based on data obtained with the electron, which is a γ-spectrometer with improved focusing in which recoil electrons are detected. The app. and method of calibration with Au^{198}, Cs^{137}, Zn^{65}, Co^{60}, Na^{22}, and Th C'' are described. The γ-rays and relative intensities observed in the decay of 60-day Sb^{124} are as follows: energy (e.kv.) and relative intensity, 600(333 ± 80), 611 (20 ± 4), 725 (37 ± 5), 967(8.0 ± 0.8), 1048 (4.8 ± 1.8), 1330 (4.5 ± 1.5), 1370 (8.7 ± 1.2), 1443 (2.6 ± 0.6), (1625) (1.1 ± 0.7), 1709(100), and 2090 (14.3 ± 1.5). The results are not assigned positively to Sb^{124} because adequate radiochem. analysis was not done, but reinvestigation of the source 80 days later indicated that the spectrum in all [illegible] decayed with a half-life of 60 days. [illegible]

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Dzhelepov, B. S.

6959
AN ELECTRON RECOIL STUDY OF THE GAMMA SPECTRA OF ^{121}Sb, ^{59}Fe, ^{110}Ag, ^{64}Cu, ^{192}Ir, ^{140}La, AND ^{198}Au. B. S. Dzhelepov and Ju. V. Hol'nov (Academy of Sciences of the U.S.S.R., Moscow). Nuovo cimento (10) 3, Suppl. 1, 49-63 (1956). (In English)

An apparatus "ritou" used to investigate γ-ray spect. t is described. Energy calibrations were made with γ rays of accurately known energies and the spectral sensitivity was checked with the Na^{24} lines. The spectra of the radioactive substances were investigated and compared with those obtained in earlier experiments. (F.S.)

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