

MATSEYKO, Yuriy Mikhaylovich [Matseiko, I.U.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' sotsialistichnykh krain na suchasnomu
etapi. Kyiv, 1957. 43 p. (Tovarystvo dlia poshyrennia politych-
nykh i naukovykh znan' Ukrain's'koi RSR. Ser.7, no.9) (MIRA 12:3)
(Economics)

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)

GOLOVINA, A.; DZHEGUTANOVA, G.

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

(MIRA 11:7)

DZHEKBATYROV, N.

Future development of public self-government in the activities
of local soviets. Vest. AN Kazakh. SSR 17 no.10:32-40 0 '61.
(MIRA 14:10)

(Russia→Politics and government)

TSIPARIS, I.N. [Ciparis, I.]; DZHEKZHORYUS, L.M. [Dzerkciorius, L.];
KAPITAL'NIYY, V.G.; RYENIKOV, 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,
Dzhekzhoryus). 2. Dmitriyevskiy lesokhimicheskiy zavod (for
Kapital'nyy, Rybnikov).

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 epidemilogii i mikrobiologii imeni N.F. Gamalei AMN SSSR.
(ANTIBIOTICS)
(BACTERIA)
(TEMPERATURE--PHYSIOLOGICAL EFFECT)

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 SSSR prof. Kh.Kh. Planel'yas) Instituta epidemiologii i mikrobiologii im. Gamalei AMN SSSR.

(PNEUMOCOCCAL INFECTIONS)
(HEAT--PHYSIOLOGICAL EFFECT)
(PENICILLIN)

DZHEKSENBAEV, O.Sh. (Moskva)

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

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

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-0 '60. (MIRA 13:12)

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

(PYROGENS) (BASAL METABOLISM)

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 1487)

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)

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)

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)

OZERETSKOVSKIY, N.A.; DZHEKSENBAYEV, 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)

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

Effect of the antitumor antibiotic, aurantin, on adrenal cortex function. Antibiotiki 7 no.7:627-630 J1'62. (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)

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

Effect of pyrogenal on the function of adrenal cortex. *Bul. 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.

BEHREKUNBAYEV, O.Sh.

Formation of endogenous pyrogen in normal and thyroidectomized rabbits. Biul. eksp. biol. i med. 57 no.4:49-53 Ap '64.

(MIM 15:3)

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

DZHEKSENBAIEV, 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.
Flanel'yes) Instituta epidemiologii i mikrobiologii imeni
Gamalei (dir. - prof. P.A.Vershilova) AMN SSSR, Moskva.

BEHZADKHAJEV, O. Sh.

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

2. Otchet infektsionnoy patologii i eksperimental'noy terapii infektsiy (zav. - chlen-korrespondent ANU SSSR prof. Kh. Kh. Elanelliyev) Institut'a epidemiologii i mikrobiologii imeni Gamalei (dir. - chlen-korrespondent ANU SSSR prof. P. A. Vershilova; ANU SSSR, Moskva.

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 Kal-
mytskoy ASSR (for Dzhelachinov)
(Kalmyk A.S.S.R.—Statistics)

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

ACC NR: AP6010463

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

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" Kodym'skogo rayona (for Luzhetskaya). 3. Sel'sko-khozyaystvennaya artel' "Ukraina" Kiliyskogo rayona (for Shibko).

(Odessa Province--Peas)

~~DZELEPOV 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 Institute, Leningrad

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

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

Physical-Technical Institute, Leningrad.

DZHELEPOV B.S.

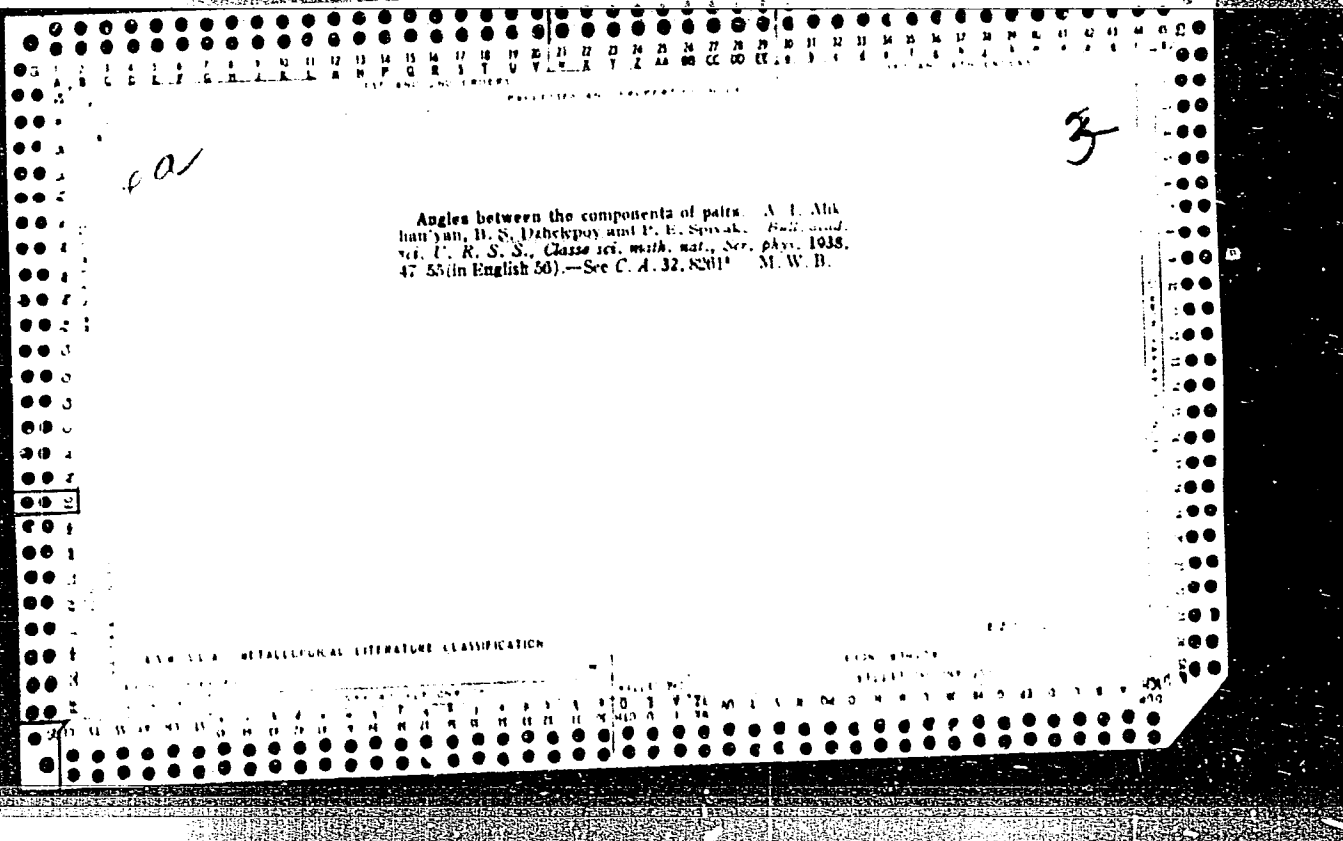
DVELEPOV, B.S., ALICHANIAN, A.I., and ALIKHANOV, A.I.

"The Continuous Spectra of RaE and RaF³⁰," Nature, Vol. 137, pp. 314-315,
1936.

Physical-Technical Institute, Leningrad.

Influence of the charge of a nucleus on the form of its α spectrum. B. S. Dzhelepov. *Bull. Acad. Sci. U.S.S.R. Div. Chem. Phys.* 1930, 673. In English (1931).—The spectra of $^{213}\text{At}^{\alpha}$, $^{213}\text{Bi}^{\alpha}$, $^{213}\text{Po}^{\alpha}$ and $^{213}\text{Fr}^{\alpha}$ (H) 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.
 Georg M. Evans

AS 31A METALLURGICAL LITERATURE CLASSIFICATION



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.

PROCESSED AND REPRODUCED BY THE NATIONAL ARCHIVES

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. ^{60}Co shows γ -lines at 2.7, 4.7 and 7.0 m. e. v., agreeing with Bothe (*C. A.* 30, 5117), but the intensities of the last two are in the ratio of approx. 14:1, in disagreement with H. A. D. Allen

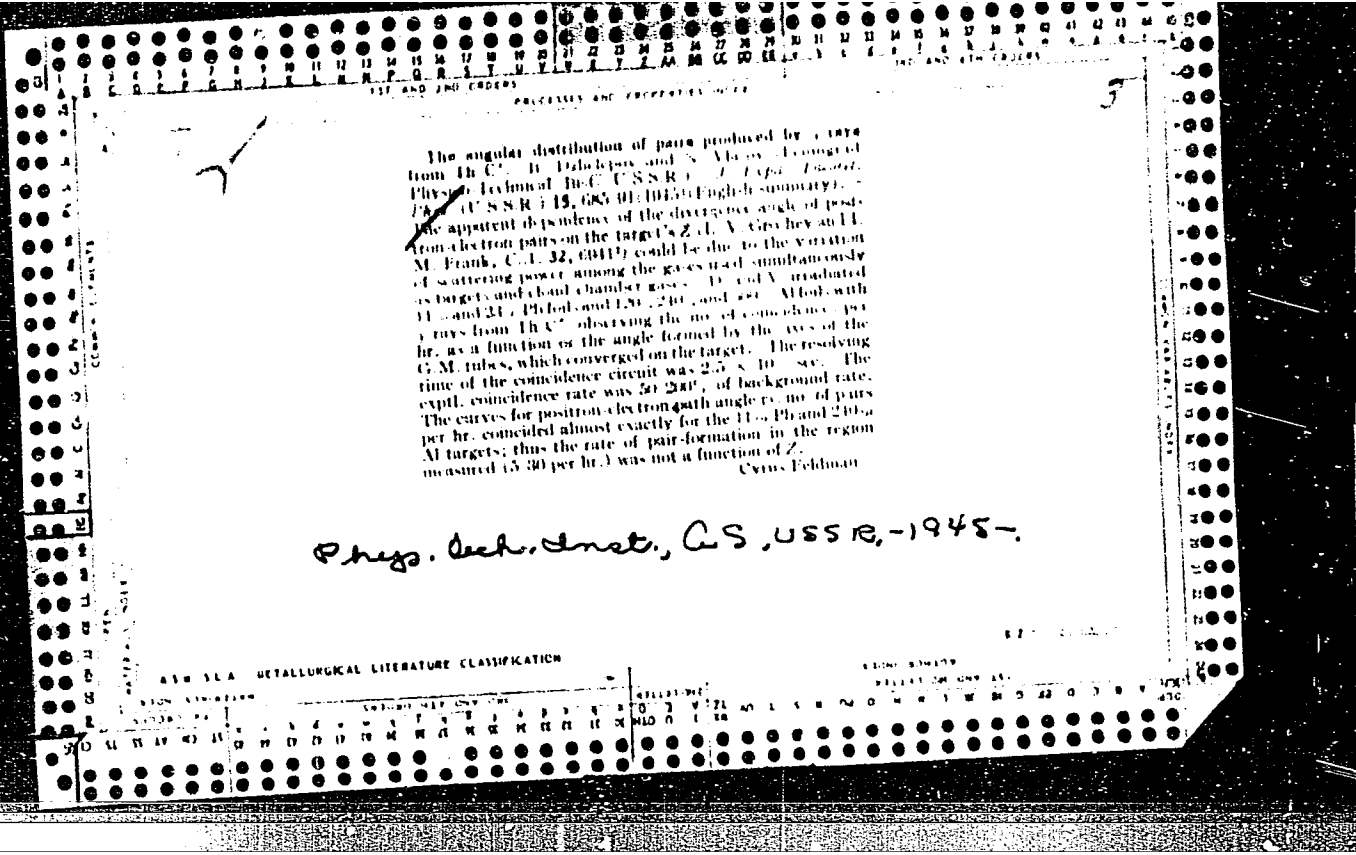
*Physics - Tech. Inst. Leningrad,
 c. 1939.*

AS & US & METALLURGICAL LITERATURE CLASSIFICATION

DZELEPCW, B.S.

"On the B-Ray Spectra of Mn⁵⁶, Dy¹⁶⁵, and Au¹⁹⁸," Dok. An, 30, No. 7, 1941.

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

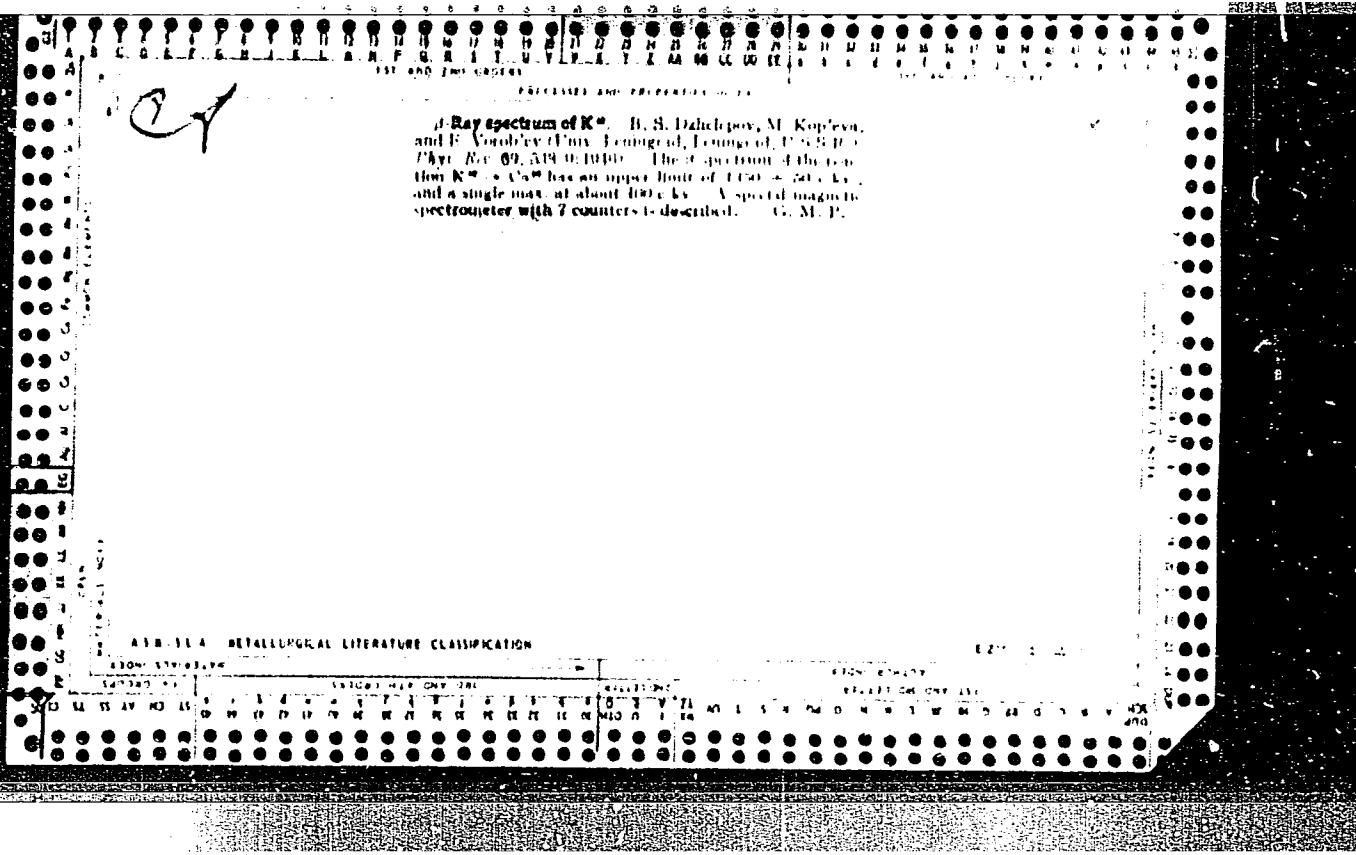


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Nuclear Energy

1527. The Mass of the Neutrino, by B. S. Dzholepov and N. M. Anton'eva. *Izvestia 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 α and 0.15 times the mass of the electron. (CA)



PRECEDENCES AND PROPERTIES INDEX

1827. On γ -Spectroscopy Using Compton Electrons (γ -спектроскопи по комптоновским электронам) by B. T. Dzhelapov 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. Letyshev [Zhur Eksp. i Teoret. Fiz. 14 65 (1944)] used a mass spectrometer and counter coincidences for the study of RaC and Th(C + C²) on samples having 300 mC activity. The present author's modifications of Letyshev'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, $\theta = 4^\circ$, slit 1-8 mm, thickness of the celluloid target 50 μ . Two

ASB-51A METALLURGICAL LITERATURE CLASSIFICATION

COMMON ELEMENTS: A B C D E F G H I J K L M N O P Q R S T U V W X Y Z

OPEN MATERIALS INDEX: A B C D E F G H I J K L M N O P Q R S T U V W X Y Z

PRECEDENCES AND PROPERTIES INDEX: A B C D E F G H I J K L M N O P Q R S T U V W X Y Z

PRECEDENCES AND PROPERTIES INDEX: A B C D E F G H I J K L M N O P Q R S T U V W X Y Z

examples of γ -lines determined by this method are shown: the line
2620 Kev of ThC" and the line 1708 Kev of Sb¹²⁴.

DZHELEPOV, B. S.

PA 35/49T87

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

"Type M_{β}^{2Z-1} Radioactive Nuclei," V. S. Dzhelepyov,
Radium Inst, Acad Sci USSR, 4 pp

613.783

"Dok Ak Nauk SSSR" Vol LXIII, No 1

(4)

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

35/49T87

C. A.
1951

3 a.

The β -decay of tritium. M. R. Volkanski, B. S. Dzhelepov, and I. A. Siv (A. A. Zhil'nov State Univ., Leningrad). *Dokl. Akad. Nauk SSSR*, 1951, 166, 1069 (in Russian). See C. A. 43, 10617. R. J. C.

DZHELEPCV, E.S., KUDRVAVTSEVA, A.V.

26912. DZHELEPCV, E.S., KUDRVAVTSEVA, A.V.- Tablitay po raspada. Proizbenedeniya
Zhurnal eksperiment. Teoret, Fiziki, 1949, VYP. 9, s. 761-83-Bibliogr: 320
nazb.

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

DZHELEPCV, B.S.

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

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

PA 46/49T87

DZHELEPOV, B. S.

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

"Radioactive Nuclei of the Type M_Z^{2Z-1} " B. S. Dzhelepor, Padium Inst, Acad Sci USSR, 21 pp

"Zhur Ekspor 1 Teoret Fiz" Vol XIX, No 5

All nuclei of type M_Z^{2Z-1} , beginning with C_6^{11} , 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/AugT87

USSR/Nuclear Physics - Nuclei (Contd) 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/AugT87

62/39T96

DZHELEPOV, B. S.

USSR

USSR/Nuclear Physics - Beta Decay

Sep 49

"Tables on Beta-Decay: I, the β Products,"
E. S. Dzheleпов, A. V. Kudryavtseva, Leningrad
State U, 23 pp

"Zhur Ekspert 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 β products. Submitted 4 May 49.

62/49T96

DZHELEPOV, B. S.

62/49T97

USSR/Nuclear Physics - Beta Decay Sep 49

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

"Zhur Ekspier i Teoret Fiz" Vol XIX, No 9,

pp 784-95.

Having calculated the β products (Fig. 2) for all beta-active substances from available data, analyzes the distribution of β values according to magnitude. Concludes that the number of regularities observed, i.e., the constancy of β for mirror (isomeric) nuclei, the distinct division into A and B groups, the form of the beta-spectrum 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.

DZHELEPOV, B. S.

PA 27/49T85

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

" β^+ and β^- Dissociation in Br-80," B. S. Dzheleпов, 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

DZHELEPOV, B. S.

USSR/Physics
Spectrum Analysis
Gold

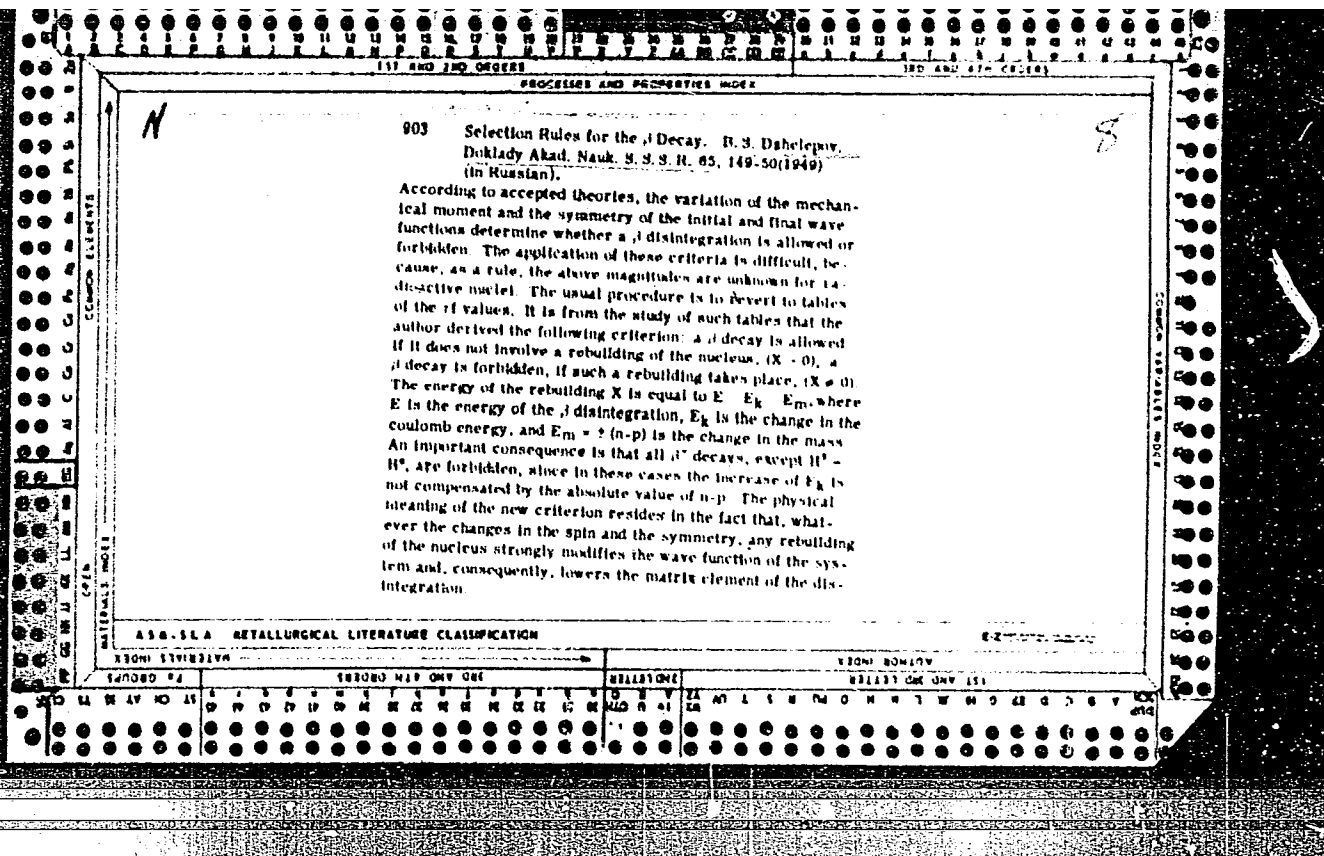
Feb 49

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

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

Studied the β -spectrum of Am^{198} using a new magnetic spectrometer with improved focus ($\phi = 30^\circ$, $F = 3$ ($w^2/p = 1$)). Results correlated well with those of de Hood and Watson. Submitted Acad P. I. Lektorskiy, 10 Oct 48.

PA 29/49T99



DSHELEPOV, B. S.

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

Jun 49

"The Problem of Beta-Disintegration of H^3 ," H. Ye. Voyhanskiy, B. S. Dshalepov, 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 compact group of permissible beta-emitters; their theory concerns properties of type M^{2z+1} beta-emitters, upper limits of which change from 18 keV to 5,000 keV and the period from one second to $4 \cdot 10^6$ seconds.

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

PA 50/47187

DZHELEPOV, B. S.

PA 173189

USSR/Nuclear Physics - Gamma Rays 21 Dec 49

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

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

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.

173189

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

Problem of polarization of 2-annihilation quanta can be proved by exptl tests, as described here, with lead block, C₁ and O₂ counters, radiating source, and aluminum cones. Submitted by Acad Lukatskiy 2 Jul 49.

173189

PA 187182

DZHELEPOV, B. S.

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

"Ketrion, the Magnetic Spectrometer With Im-
proved Focusing." B. S. Dzhelapov, A. A.
Bashilov; Sci Res Phys Inst, Leningrad State
U Imeni Zhidunov

¹⁴
Iz Ak Nauk SSSR, Ser Fiz. Vol. ~~XXX~~, No. 3,
pp 264-298

Authors describe the ketrion, an instr construc-
ted by them, which uses inhomogeneous transverse
magnetic fld decreasing in one direction. Gave
results of controlled measurements of atd elec-
tron lines for resolving power 0.5% and for
187182

USSR/Physics - Electron Micro-
scope (Contd) May/June 50

solid angle of capture $\varphi = 30^\circ$ and $\xi = \pm 3^\circ$.
Lines of conversion electrons of ^{226}Ra and Au 198
gamma-rays of ^{226}Ra ($\text{B}+\text{C}+\text{C}'+\text{C}''$), ^{226}Ra and Au 198
are taken as the std. Submitted 24 Apr 50 at
session of the Dept of Physicomath Sci, Acad
Sci USSR.

187182

DZHELEFOV, B. S.

USSR/Nuclear Physics - Gamma Rays

May/June 50

"Radiation of Au¹⁹⁸, Ho¹⁶⁶ and Lu¹⁷⁷, "N. M. Anton'yeva, A. A. Bashilov, B. S. Dzhelepov, A. V. Zolotarev, 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 radiation of Au¹⁹⁸, Ho¹⁶⁶ and Lu¹⁷⁷ as measured by the "ketron," a spectrometer with improved focusing (cf. Per Abs 187T82). Beta-spectrum of Au¹⁹⁸ was found to be simple; spectra of Ho¹⁶⁶ and Lu¹⁷⁷, complex. Computes assumed half life of Ho¹⁶⁶. Submitted 24 Apr 50 at session of the Dept of Physicomath Sci, Acad Sci USSR.

Pa 187T68

DZHELEPOV, B.

Zhurnal Eksperimental Teoreticheskoi Fiziki, 1950, Vol. 20, No1 2, 1950

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

DZHELEPOV, B.

EA 161T112

USSR/Nuclear Physics - Nuclei, Atomic Apr 50

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

"Uspekhi 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.

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161T112

168T62

DZHELEPOV, B.

USSR/Nuclear Physics - Helium

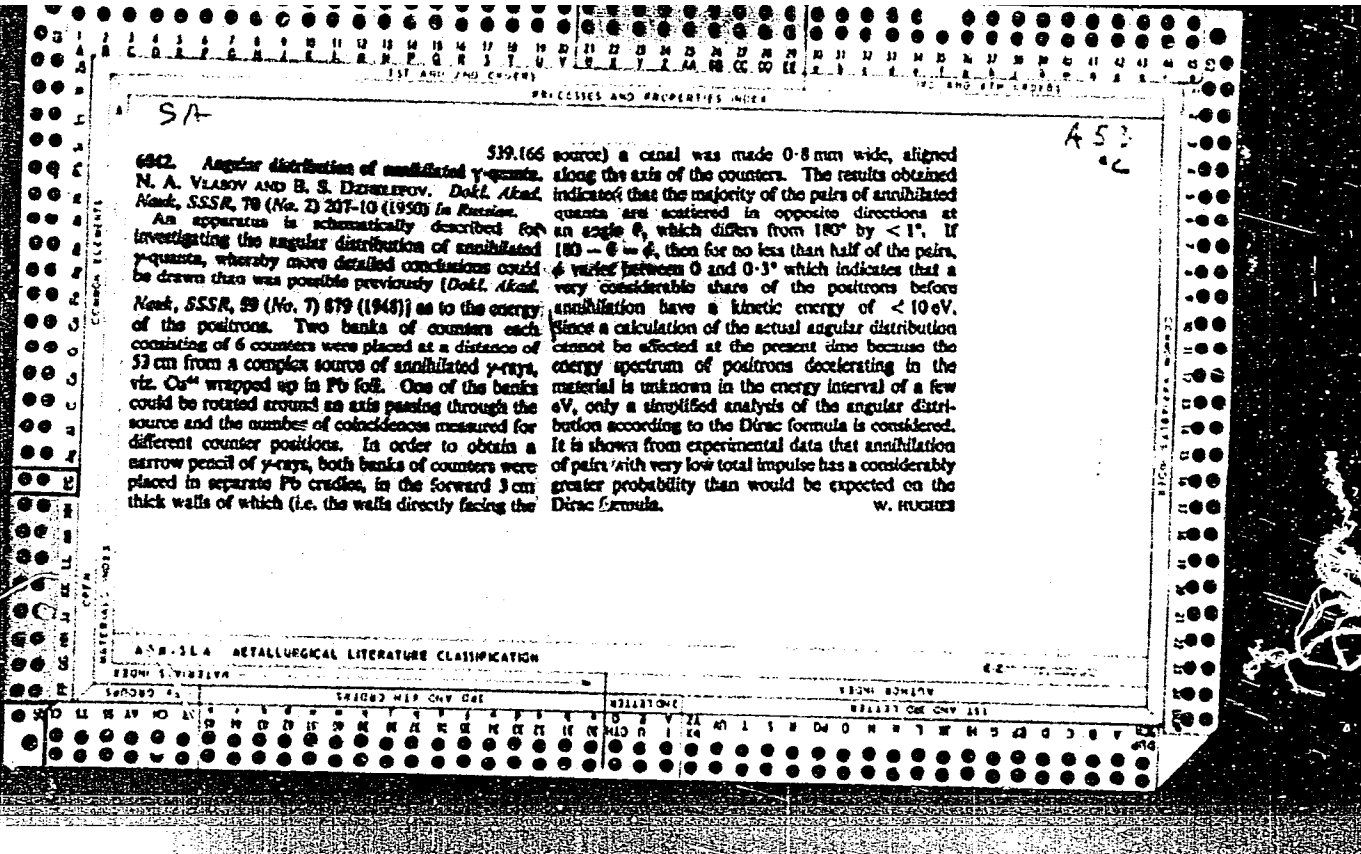
Jun 50

"Radioactive Helium Isotopes," K. Artemov, B. Dzhele-
pov

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

Comprehensive survey of available literature on He⁵
and He⁶. Discusses reactions $Li^7 + H^2 = He^4 + He^5$, $He^4 + H^2 = He^5$, $He^4 + n = He^5$, and $He^4 + H^2 = He^5 + H^1$. In section on He⁶,
discusses threshold and cross section of the reactions
 $Be^9(\alpha, n)He^6$, $Li^6(n, p)He^6$, and $Li^7(\alpha, p)He^6$. Also
discusses use of He⁶ to check neutrino hypothesis.
Only eight of the 65 sources listed are Soviet.

168T62



DZHELIPOV, B. S.

USSR/Nuclear Physics - Beta-Spectrum
Isotope

Jan 50

"Beta-Spectrum of Ho¹⁶⁶," 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 Ho¹⁶⁶. Thin layer of Ho₂O₃, irradiated by neutrons and deposited on strip of cigarette paper, was electron source. Electron radiation of Ho¹⁶⁶ 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

DZHELEPOV, B.S.

"Beta Spectrum of: Lu¹⁷⁷," Dok.AN., 70, No. 4, 1950.
Physics Inst., Ak.A. Zhdanov Leningrad State U., -1950-.

SA
sect. A

Radioactivity

539.166
6827. Gamma radiation of Ag¹¹⁰. B. S. DZEMLEPOV,
N. N. ZHUKOVSKI AND YU. V. KHOLMOV. *Guide
Russ. Period. Lit. Brookhaven*, 4, 369-70 (Dec., 1951).
Full translation of article abstracted in Abstr. 9671
(1951).

DZHELEPOV, B. S.

USSR/Nuclear Physics

Jul/Aug 51

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

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

PA 195T63

"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 $N + Zp$ 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.

✓ Tables on β -decomposition. II. Effect of the Coulomb field on β -spectra. B. S. Dzheleпов and L. N. Zyryanova (Leningrad State Univ.). *Zh. teoret. i eksper. fiz.* 21, 823-41 (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 (Iulme, *C.A.* 26, 311). 14 pages of tables.
J. Rortar Leach

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178190

COMMISSION, U. S.

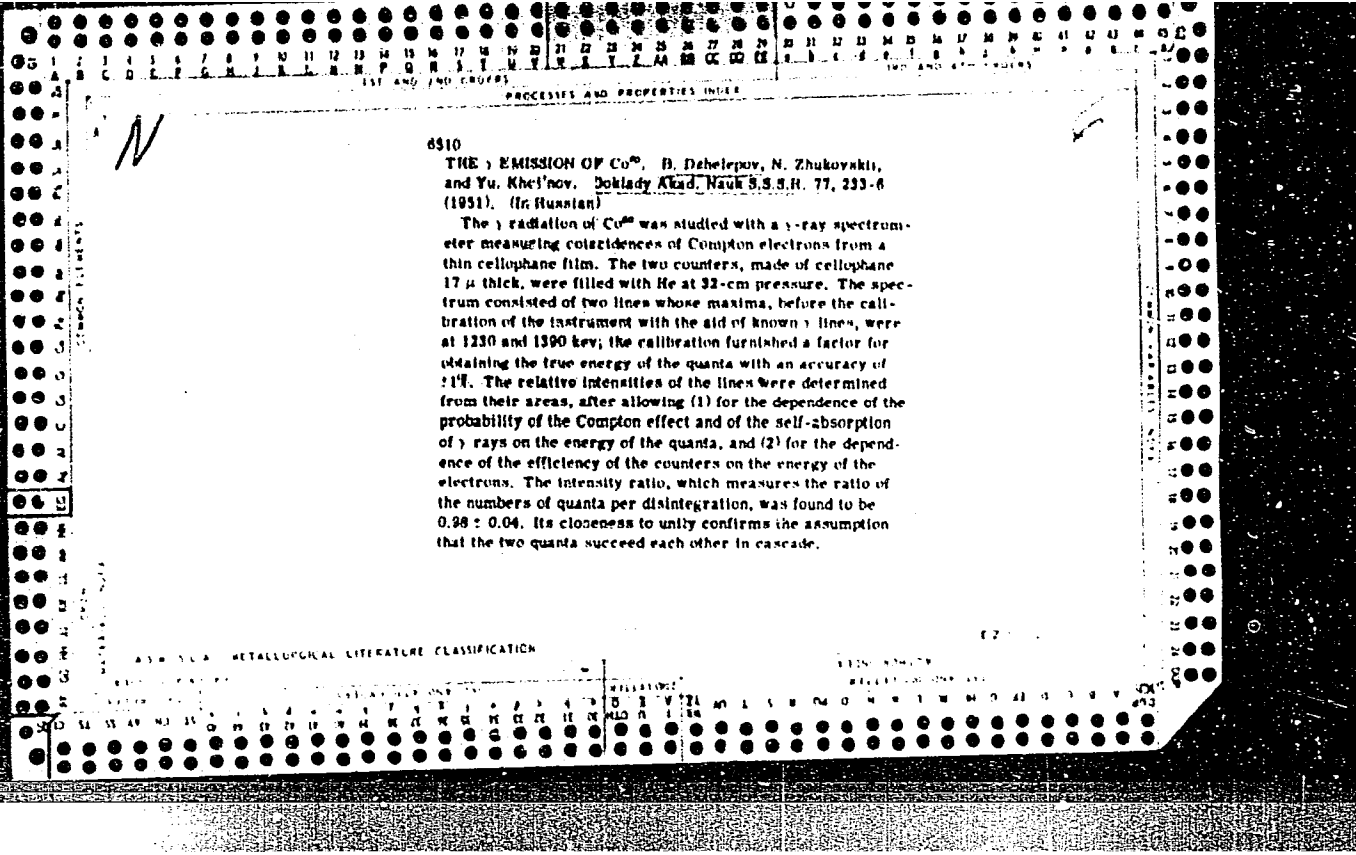
USSR/Nuclear Physics - Chlorine, Level of 21 Jan 51

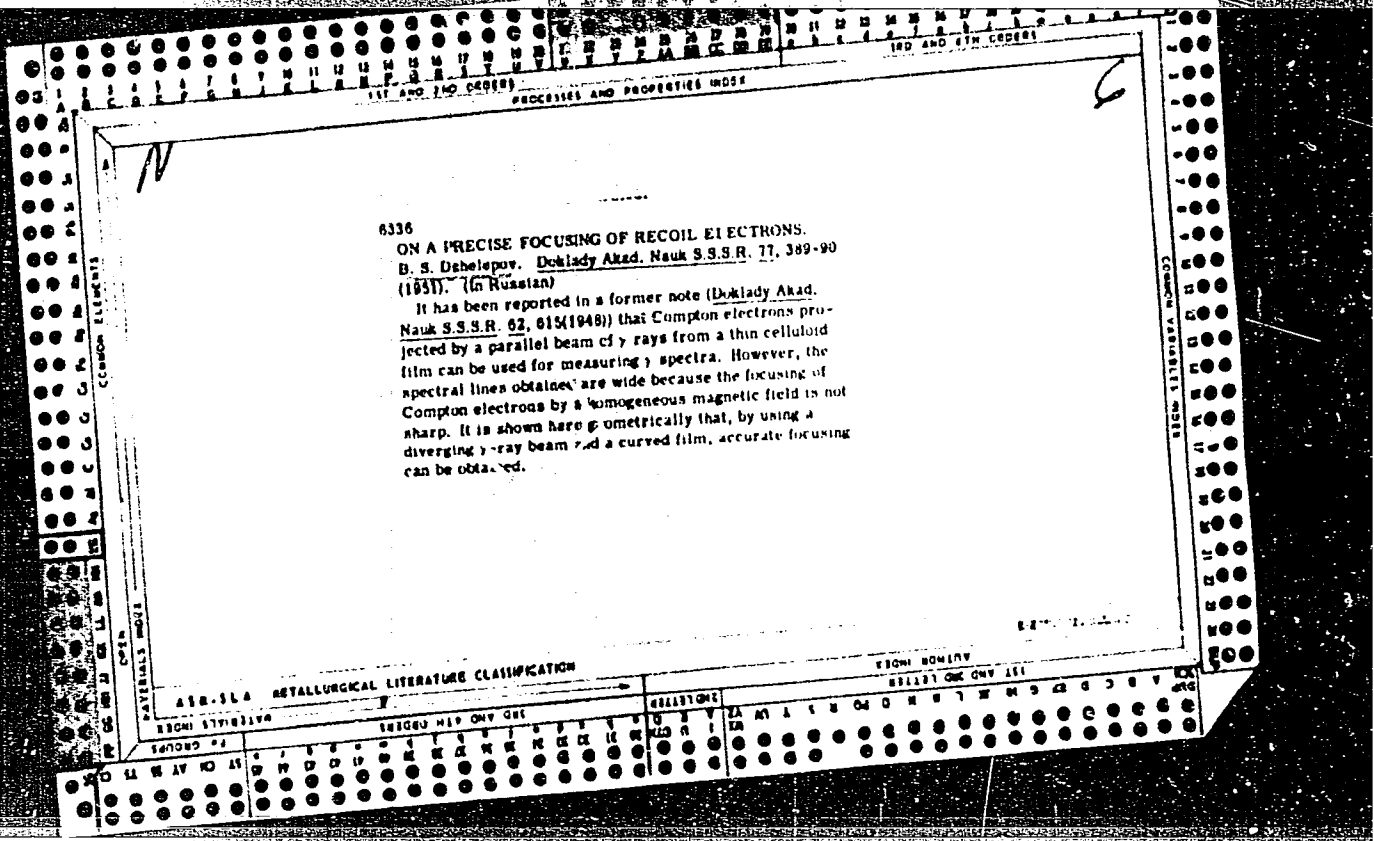
"Natural Width of the Gamma Level of Cl^{36*} ," B. S. Dzhelepoz

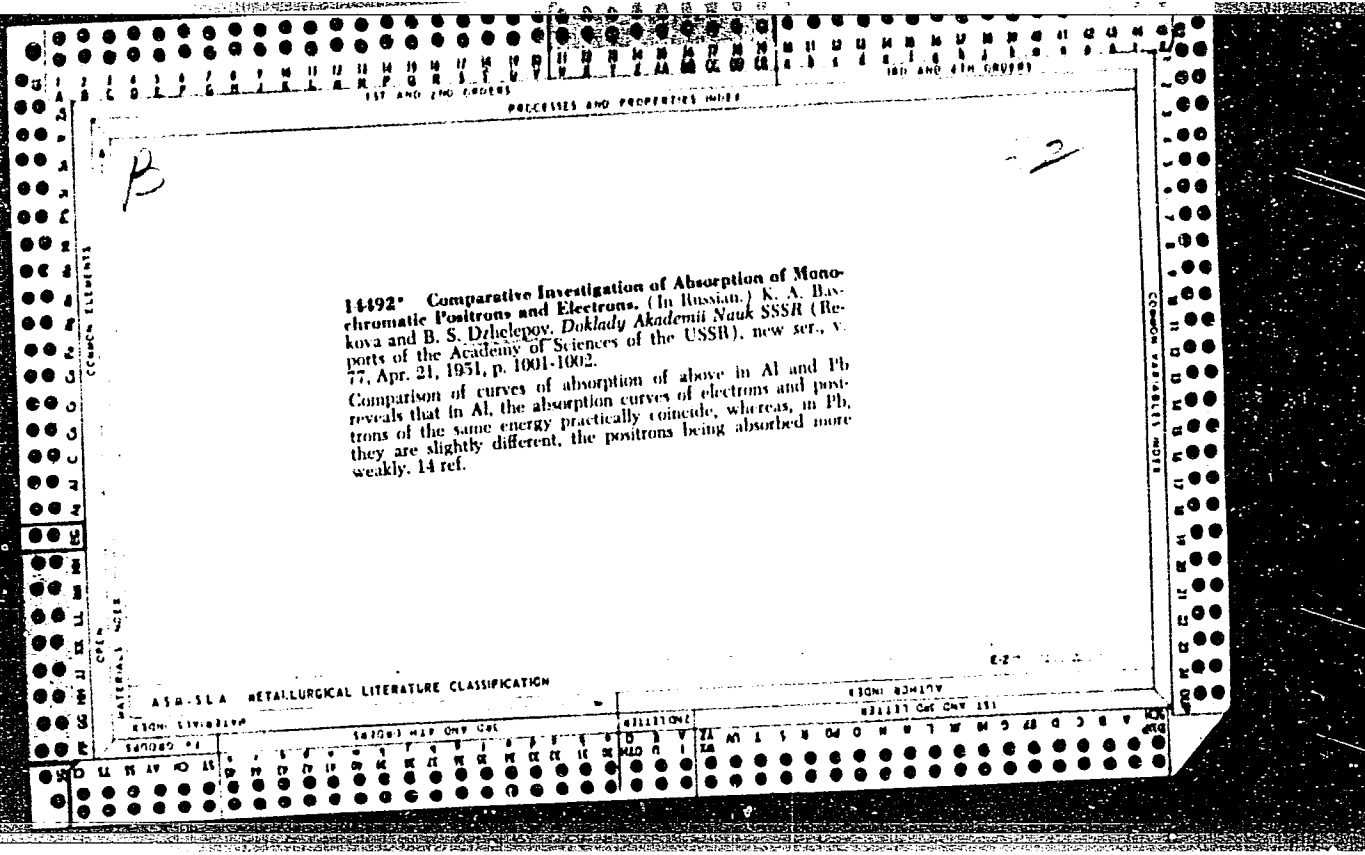
"Dok Ak Nauk SSSR" Vol LXXVI, No 3, pp 385-388

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.

178190







Dzhelezov, E. S.

May-Jun 52

USSR/Nuclear Physics - Beta -Spectrum of Ir

"The Beta-Spectrum of Ir¹⁹²," A. A. Bashilov, N. M. Anton'yeva, E. S. Dzhelezov

"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 Ir¹⁹²; the spectrometer used and the conditions governing the measurements; general appearance of the beta-spectrum of Ir¹⁹²; comparison of the results of the measurements of the beta-spectrum of Ir¹⁹² with the data of various authors mostly foreign; the spectrum of the electrons of internal conversion of Ir¹⁹² and their conversion lines and energy lines; the spectrum of electrons of conversion of gamma-rays of Ir¹⁹² according various authors; the gamma-radiation of Ir¹⁹² according to the data of various authors; positrons and the capture of atomic electrons; the schema describing the decay of Ir¹⁹². Acknowledges the assistance of Ye. G. Kuznetsov.

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DZHELEPOV, B. S.

FA 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. Dis-
cusses 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

DZHELEPOV, B.

235T88

USSR/Physics - Gamma-Spectrum of Br⁸² - 21 Jul 52

"The Gamma-Ray Spectrum of Br⁸²," B. Dzhelapov, 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 Br⁸² with the aid of the Radium Institute's gamma spectrometer ("ritron"), which was described by B. S. Dzhelapov and M. Orbell ("Dok Ak Nauk SSSR" Vol 62, 615, 1948). Gives a table showing the energy and intensity of the gamma rays of Br⁸² 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 56 no. 671:7890 (3))

235T88

VZNEKOV B
USSR

3

γ-ray spectrum of Cs¹³⁷ K. Gromov and B. Dzhelepov.
Doklady Akad. Nauk S.S.S.R. 85, 299-300 (1952) No. 2
was studied by means of a γ-spectrometer. The relative
intensities were detd. with an accuracy of 5%. The lines
531, 548, and 660 e.kv. were not sep'd. and the relative in-
tensity was the sum of the 3 intensities. The lines 1150
and 1348 e.kv. were clearly expressed although their relative
intensities were low. The exp'd. data were compared with
those of other investigators. J. Rovtar Leach

DZHELEPOV, B.

235T98

USSR/Physics - Gamma Radiation

11 Sep 52

"Gamma Radiation of Sb^{124} ," K. Gromov, B. Dzheleпов, 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

DZHELEPOV, B. S.

USSR/Nuclear Physics - Gamma Radiations

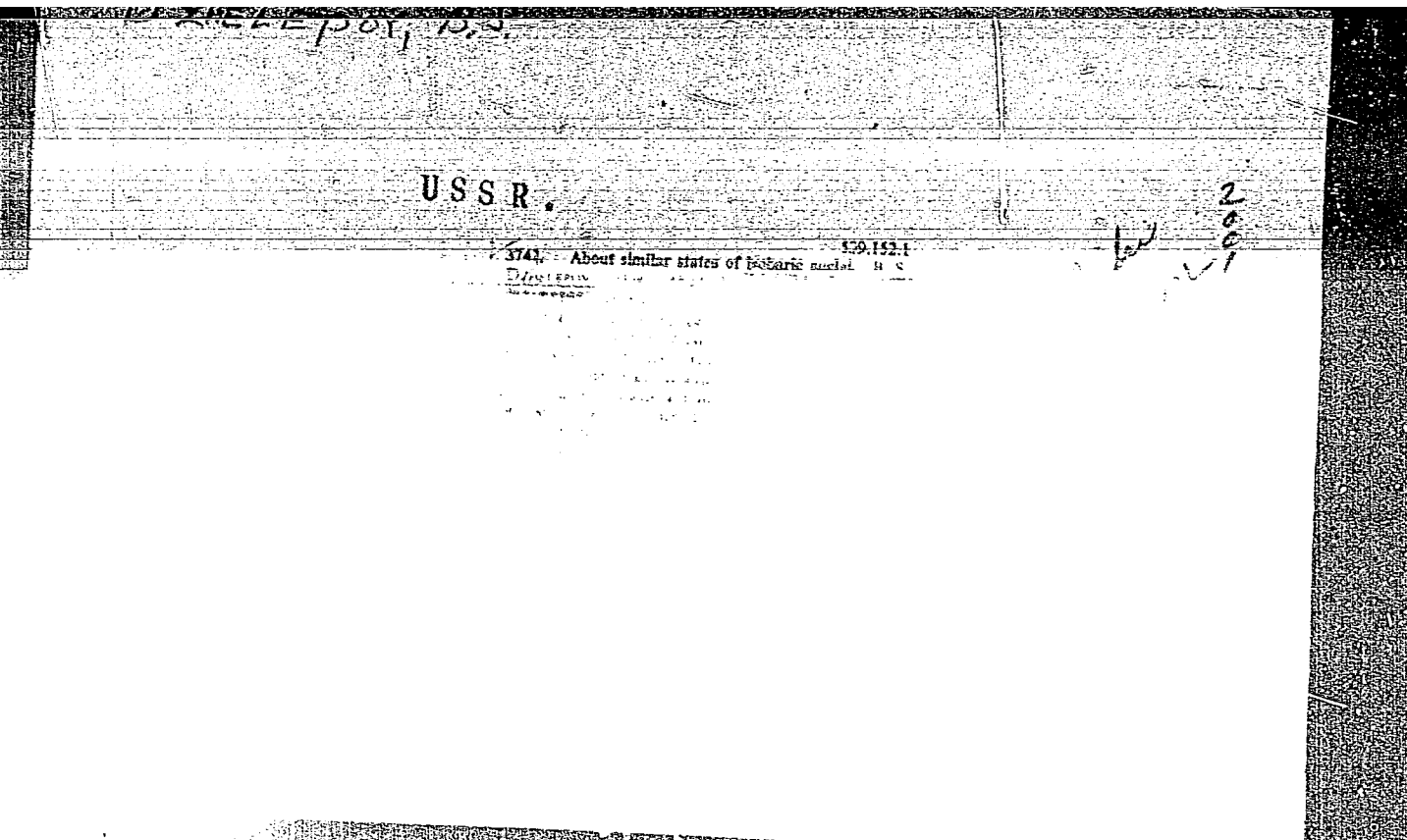
21 Sep 52

"Gamma Radiation of Fe59," B. S. Dzheleпов, N. N. Zhukovskiy, Yu. V. Kholnov, Radium
Inst in 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

PA 247T100



DZHELEPOV, E. 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)

<u>Name</u>	<u>Title of Work</u>	<u>Nominated by</u>
Dzhelepov, E. 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

DZHELEPOV, B. S.

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

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

Is 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 mom-
ents and their isotopic spins are identical.
One hundred references, mostly American,
appended. Rec 4 Jul 53.

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 in 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 $\Delta E = 46.7$ keV

272T45

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.

DZHELEPOV, B. S.

Jul/Aug 53

USSR/Nuclear Physics - Hf Isotopes

"Emission of Hf175 and Hf 181," A. A. Bushilov, 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

DZHELEPOV, B. S.

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

Radiation of zinc⁶⁵. A. A. Bashilov, N. M. Anton'eva, V. L. Broder, and B. S. Dzheleпов (A. A. Zhukov State Univ., Leningrad). *Izvest. Akad. Nauk S.S.S.R., Ser. Fiz.* 17, 468-86(1953). The upper limit of the β^- -spectrum is 325 ± 2 e.kv. The energy of γ -rays corresponding to the conversion of Zn⁶⁵ with a K-electron to Cu⁶⁵ is 1122 ± 5 e.kv.; $e/\beta^- = (5.5 \pm 0.5) \times 10^{-3}$ (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; $\beta^-/\gamma = (3.0 \pm 0.2) \times 10^{-2}$, $\alpha/\beta^- = (1.5 \pm 0.2) \times 10^{-4}$ which corresponds to a M1 transition type. The β^- -decay of Zn⁶⁵ leads to the ground state of Cu⁶⁵. The γ rays emitted when Zn⁶⁵ is transformed into an excited state 1122 e.kv. of Cu⁶⁵. β^- for the transition to the ground state = 3.2×10^7 ; for the K-electron capture = 2.5×10^7 . The ground state of Cu⁶⁵ is $d_{3/2}$, the excited state $-5/2$. Zn⁶⁵ can have transitions to the 1122-e.kv. level of Cu⁶⁵ and to a 2nd higher level, 1490 e.kv. (β^-). Several facts still remain contradictory. S. P.

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DZHELEPOV, B. S.

USSR/Nuclear Physics - Radioactive Re186

Jul/Aug 53

"Beta Spectrum of Re186," N. M. Anton'yeva, A. A. Bashilov, B. S. Dzheleпов 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 Re186. Re186 transmutes 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.

272153

DZHELEPOV, B. S.

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

"Gamma Emission of Cu^{64} ," B. S. Dzheleпов, 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.

272151

DZHELEPOV, B. S.

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

"Gamma Spectrometer With Improved Focusing," B. S. Dzhelepov, N. N. Zhukovskiy, A. S. Karanyan 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 spectroscopy described previously by Dzhelepov et al. (DAN 62, 613 (1948); 77, 233 (1951)). Because this spectroscopy is based on recoil electrons, author named it "elotron." Indebted to V. Chumin and S. Rusinova. Rec 16 Jul 53.

272T52

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 : Cs¹³⁴ 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 Cs¹³⁴ isomer were investigated. The measurements were carried out on several sources of different origin and having different surface densities. The general form of the Cs¹³⁴ 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 Cs¹³⁴ 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

USSR/ Nuclear Physics

Card 1/1 Pub. 43 - 4/11

Authors : Dzheleпов, B. S.; Novosil'tseva, K. 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 entrainment 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

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 La^{140} isotope was investigated by means of a ketrone-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 $\sim 0.25 \text{ mg cm}^{-2}$. 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

USSR/ Nuclear Physics - Spectral analysis

Card 1/1 Pub. 43 - 7/11

Authors : Antonyeva, N. M.; Bashilov, A. A.; Dzhelapov, 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 ketrone-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

USSR/ Nuclear Physics - Spectroscopy

Card 1/1 Pub. 43 - 8/11

Authors : Dzhelepov, B. S.

Title : The role of repeated 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

DZHELEPOV, B.S.

USSR/ Nuclear Physics

Card 1/2 Pub. 43 - 1/5

Authors : Dzheleпов, 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 nuclons was established for all three particles.

Institution:

Submitted: September 30, 1954

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.

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 radioactive 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

IOFFE, A.F.; LEBEDEV, A.A.; FOK, V.A.; STARIK, I.Ye.; KONSTANTINOV, B.P.;
DZHELEPOV, B.S.; PERFILOV, N.A.; DOBRETISOV, L.H.; STARODUBTSEV, A.V.;
NEMILOV, Yu.E.; 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.(MIRA 8:1)
(Lukirskii, Petr Ivanovich, 1894-1954)

DZEBLEFOV, B.S.

12141 AEC-6-3034
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Dzhalepov, B. S.

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Rmk-09

R/S

Radiation and decay scheme of lanthanum-140. L. V. Arkhangel'skiy, B. S. Dzhalepov, N. N. Zhukovskiy, V. P. Prikhodtseva, and Yu. V. Khol'nyy. *Dokl. Akad. Nauk S.S.S.R., Phys. Ser.* 19, 228-16 (1959) (Engl. translation).— See C.A. 50, 1490a. U.S.S.R.

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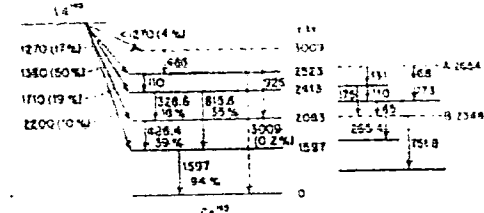
Dzhelegov, B.S.

γ -Radiation and decay scheme of lanthanum-140.

Arkangel'skii, B. S., Dzhelgov, B. S., Zhukovskii, V. P.

Prikladnaya i teoreticheskaya fizika, Tomskiy gos. univ., Tomsk, S.S.S.R., Ser. Fiz. 19, 351-79 (1962).

The γ -ray spectrum of La^{140} irradiated by neutrons was investigated with a nitron γ -spectrometer (cf. CA 40, 3143). The energy and the relative intensities are 135 (0.10), 482 (0.4), 822 (0.37), 918 (0.12), 1597 (1.00), 2335 (0.058), >2770 e kv (<0.002). The half-life of decay is 49 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} , Ce^{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.). S. Pokamer

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DZHELEPOV B. S.

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GAMMA RADIATION FROM Au¹⁹⁸. B. S. Dzhelepoz, N. N.

Zhukovskii, V. P. Petkhodtseva and Yu. V. Khor'nov.

(Khlopin Institute). Izvest. Akad. Nauk S.S.S.R. Ser.

Fig. 19, 271-8(1955) May-June. (In Russian)

Investigation concerning γ radiation of Au¹⁹⁸ based on two new γ lines of 676 and 1039 Ke and associated β - γ and γ - γ coincidences. Systematic and detailed description of the Au¹⁹⁸ decay scheme is given. 31 references. (R.V.J.)

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Dzhelepow, B.S.

✓ γ-Spectrum of Iridium-192, M. P. Olesunov, B. S. Dzhelepow, and Yu. V. Zhelezov, Soviet Acad. Sci. Ser. Phys. Math. Sci. 19, 204-2 (1953). 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, 508 (0.007), 1053 e.k.v. (0.0098).

S. Finkler
Bret
MIT

Dzhelepor, B.S.

✓ γ-Radiation of europium-152, 154. B.S. Dzhelepor, N.M. Zhukovskii, and V. G. Nedgrosny. 1955. Akad. Nauk S.S.S.R. Ser. Fiz. 19, 290-9 (1955).—The γ-lines were measured on γ-spectrometers by using Compton electrons and citron. The relative intensities of the lines 341, 427, 593, 717, 779, 871, 958, 1103, 1281, and 1409 e kv. obtained by both methods are tabulated. S. Paktwer

PKP
MPT (2)

DZHELEPOV, B. [S.]

USSR/ Physics

Card 1/1 Pub. 22 - 11/51

Authors : Dzhelepor, 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/sec ($V= \beta_0 c$, 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

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

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

10 ppm

The γ -spectrum of antimony-124, R. S. Dzhelepyov, N. N. Zhukovskii, V. G. Nedoversoy, R. P. Lychevskikh, and V. G. Chumina (Radiation Inst., Acad. Sci. U.S.S.R., Leningrad). *Nuclear Phys.* 2, 408-10 (1956). — A new detn. of the γ -ray spectrum is reported based on data obtained with the clootro, 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^{24} , and $Th\ C^{232}$ are described. The γ -rays and relative intensities observed in the decay of 80-day Sb^{124} are as follows: energy (e.k.v.) and relative intensity, 600 (33 \pm 30), 614 (26 \pm 4), 725 (37 \pm 5), 987 (6.0 \pm 0.8), 1048 (4.8 \pm 1.8), 1330 (4.5 \pm 1.5), 1370 (5.7 \pm 1.2), 1443 (3.6 \pm 0.6), 1625 (1.1 \pm 0.7), 1700 (100), and 2090 (14.3 \pm 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 regions decayed with a half-life of 80 days. Also in *ibid.* 13, 1, 115-13 (1956), see Fig. 10, p. 117.

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Dzhelepor, B.S.

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AN ELECTRON RECOIL STUDY OF THE GAMMA SPECTRA OF ¹¹³Sb, ¹¹³Fe, ¹¹³Ag, ¹¹³Cu, ¹¹³Ir, ¹¹³La, AND ¹¹³Au. B. S.

Dzhelepor and Ju. V. Hol'cov (Academy of Sciences of the U.S.S.R., Moscow). Nuovo cimento (10) 3, Suppl. 1, 49-53 (1958). (In English)

An apparatus "riton" used to investigate γ -ray spectra is described. Energy calibrations were made with γ rays of accurately known energies and the spectral sensitivity was checked with the Na²² lines. The spectra of the radioactive

substances were investigated and compared with those obtained in earlier experiments. (F.S.)

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