"APPROVED FOR RELEASE: 03/20/2001 CIA-RDP86-00513R000101110005-2

ALIKAYEV, V. A. (Reviewer)

"Laboratory diagnostics of infectious animal diseasen. According to material, submitted to the Editor's Office."

Veterinariya, Vol. 38, No. 3, 1961, p. 80.

APPROVED FOR RELEASE: 03/20/2001 CIA-RDP86-00513R000101110005-2"

"APPROVED FOR RELEASE: 03/20/2001 CIA-RDP86-00513R000101110005-2

ALIKAYEV, V.A., referent

Prophylaxis and treatment of chick diseases. Veterinariia 38 no.6:65-67 Je '61. (MIRA 16:6)

(Poultry--Diseases)

APPROVED FOR RELEASE: 03/20/2001 CIA-RDP86-00513R000101110005-2"

"APPROVED FOR RELEASE: 03/20/2001 CIA-RDP86-00513R000101110005-2

ALBRAY:W, V.A.

New data on preventing and treating di[illegible] in calves and young pigs. Veterinarija 38 no.4[illegible]-56 Ap '61. (MIRA 18:2)

APPROVED FOR RELEASE: 03/20/2001 CIA-RDP86-00513R000101110005-2"

"APPROVED FOR RELEASE: 03/20/2001 CIA-RDP86-00513R000101110005-2

ALIKAYEV, Vladimir Aver'yanovich, dotsent, kand.veterin.nauk; ONEGOV, A.P., prof., doktor veterin.nauk; STAROV, T.K., dotsent, kand. biolog.nauk; USTIMENKO, L.F., red.; PEVZNER, V.I., tekhn.red.

[Course on practical veterinary hygiene] Praktikum po gigiene sel'skokhoziaistvennykh zhivotnykh. Izd.2., perer. i dop. Moskva, Gos.izd-vo sel'khoz.lit-ry, 1960. 295 p.
(MIRA 13:11)

(Veterinary hygiene)

APPROVED FOR RELEASE: 03/20/2001 CIA-RDP86-00513R000101110005-2"

"APPROVED FOR RELEASE: 03/20/2001 CIA-RDP86-00513R000101110005-2

ALIKAYEV, V. A., ONEGOV, A. P., AND STAROV, T. K.

"Practikum po gigienen sel'skokhozyaistvennykh zhivotnykh", M. Sel'khozgiz, into, second revised and supplemented edition, 8,500 copies.

Veterinariya, Vol. 38, No. 5 1961

APPROVED FOR RELEASE: 03/20/2001 CIA-RDP86-00513R000101110005-2"

"APPROVED FOR RELEASE: 03/20/2001 CIA-RDP86-00513R000101110005-2

ALIKAYEV, VLADIMIR AVER'YANOVICH

"Veterinarian controls of nutrition value of farm-animal fodder."

report to be submitted at the 17th World Veterinary Congress, Hanover, West Germany, 14-21 Aug 63.

APPROVED FOR RELEASE: 03/20/2001 CIA-RDP86-00513R000101110005-2"

"APPROVED FOR RELEASE: 03/20/2001 CIA-RDP86-00513R000101110005-2

ALIKAYEV, V.A.; TARANENKO, I.L., veterinarnyy vrach; NIKOLAYEV, P.Ya., veterinarnyy vrach; MIKHAYLETS, R.M., veterinarnyy vrach; ARTEMENKO, I.A., veterinarnyy fel'dsher; MOSKALENKO, A.N., veterinarnyy fel'dsher; AL'BERTYAN, M.P., veterinarnyy vrach; SKARBOVENKO, V.I., veterinarnyy vrach; MOROZOV, A.I., veterinarnyy fel'dsher; VESHCHEVAYLOV, V.T., veterinarnyy vrach; LUZHENKO, I.U., veterinarnyy fel'dsher; RUDOMETKIN, Ya.L., veterinarnyy vrach; PARSHUTKIN, I.M., veterinarnyy vrach; GOLOVANOVA, A.I., veterinarnyy vrach; SHIPILOVA, N.M., veterinarnyy vrach; SPIROV, V.D., veterinarnyy vrach; BONDARENKO, V.N., veterinarnyy vrach; KOVAL', P.K., veterinarnyy fel'dsher; ZHAMSUYEV, B.TS., veterinarnyy vrach; APALEV, Ye.M., veterinarnyy vrach; KOLOTIY, N.A., veterinarnyy vrach

Diseases of the young animal, their prevention and treatment; based on data received by the editors. Veterinariia 39 no.1:49-54 Ja '62. (MIRA 15:2)

1. Besedinskaya rayonnaya veterinarnaya lechebnitsa, Kurskoy oblasti (for Taranenko). 2. Bo'she-Sosnovskaya rayonnaya lechebnita, Permskoy oblasti (for Nikolayev). 3. Aleksandrovskiy veterinarnyy uchastok, Voznesenskogo rayona, Nikolayevskoy oblasti, Ukrainskoy SSR (for Mikhaylets, Artemenko, Moskalenko). 4. Kolkhoz "40 let Oktyabrya", Tarliyskogo rayona, Moldavskoy SSR (for Al'bertyan).

(Continued on next card)

APPROVED FOR RELEASE: 03/20/2001 CIA-RDP86-00513R000101110005-2"

"APPROVED FOR RELEASE: 03/20/2001 CIA-RDP86-00513R000101110005-2

ALIKAYEV, V.A.; IVANOV, D.P.; NIKOL'SKAYA, M.N.

Use of iron glycerophosphate for the prevention and treatment of anemia in suckling pigs. Veterinariia 39 no.1:57-59 Ja '63. (MIRA 16:6)

1. Moskovskaya veterinarnaya akademiya.
(Iron--Therapeutic use) (Anemia) (Swine--Diseases and pests)
(Phosphorus--Therapeutic use)

APPROVED FOR RELEASE: 03/20/2001 CIA-RDP86-00513R000101110005-2"

"APPROVED FOR RELEASE: 03/20/2001 CIA-RDP86-00513R000101110005-2

ALIKAYEV, V.A.

Prophylaxis and treatment of anemia in suckling piglets.
Veterinariia 40 no.3:49-51 Mr '63. (MIRA 17:1)

APPROVED FOR RELEASE: 03/20/2001 CIA-RDP86-00513R000101110005-2"

"APPROVED FOR RELEASE: 03/20/2001 CIA-RDP86-00513R000101110005-2

GRITSENYUK, N.; ALIKAYEV, V.A.

Veterinary medicine abroad. Veterinariia 40 no.10:77-82 0'63.
(MIRA 17:5)

APPROVED FOR RELEASE: 03/20/2001 CIA-RDP86-00513R000101110005-2"

"APPROVED FOR RELEASE: 03/20/2001 CIA-RDP86-00513R000101110005-2

VESELOV, Ye.A., prof.; VSYAKIKH, A.S., prof.; DENISOV, N.I., prof.; GERCHIKOV, N.P., prof.; LASTOCHKIN, S.N., prof.; ALIKAYEV, V.A., dots.; BESSARABOV, V.A., dots.; KALININ, V.I., dots.; SOKOLOV, A.K., dots.; ZAVARSKIY, A.I., red.; DEYEVA, V.M., tekhn. red.

[Animal husbandry and veterinary hygiene] Zhivotnovodstvo i zoogigiena. [By] E.A.Veselov i dr. Izd.2., perer. i dop. Moskva, Sel'khozizdat, 1963. 451 p. (MIRA 17:2)

APPROVED FOR RELEASE: 03/20/2001 CIA-RDP86-00513R000101110005-2"

"APPROVED FOR RELEASE: 03/20/2001 CIA-RDP86-00513R000101110005-2

STURMAN, A.V., veter. vrach (Strashenskiy rayon, Moldavskaya SSR); BULGAKOV, Yu.N., veter. fel'dsher (Strashenskiy rayon, Moldavskaya SSR); KALNITSKIY, P.I., veter. vrach (Strashenskiy rayon, Moldavskaya SSR); OCHAKOVSKIY, Z.M., veter. vrach (Strashenskiy rayon, Moldavskaya SSR); GOTSENOGA, A.D. (Strashenskiy rayon, Moldavskoy SSR); ABRAMYAN, G.I., veter. vrach; MEKHTIYEV, M.G., veter. fel'dsher (s.Shirozlu, Vedinskogo rayona Armyanskoy SSR); KIRAKOSYAN, A.A., veter. vrach; GEORGIYEV, Yu.P., veter. vrach; LOMAKIN, A.M., nauchnyy sotrudnik; SHEPELEV, L.A., veter. vrach.; TARASOV, I.I., assistent; ROMASHKIN, V.M., veter. tekhnik; ANDRIYAN, Ye.A.; BARTENEV, V.S.; KOROL', Ye.I., veter. tekhnik; YEROSHENKO, A.K., aspirant; BANZEN, Ya.P.; SARAYKIN, I.M., prof.; ZHEVAGIN, A.N., veter. vrach; BUT'YANOV, D.D., veter. vrach (Klimovichskiy rayon, Mogilevskoy oblasti BSSR); SHALYGIN, B.V., veter. vrach (Klimovichskiy rayon, Mogilevskoy oblasti, BSSR); RYABOKON, G.T., veter. fel'dsher; MOVSUMZADE, K.K., prof.; DUGIN, G.L., aspirant; TITOV, G.I., nauchnyy sotrudnik; MEDVEDEV, I.G., veter. vrach.; ALIKAYEV, V.A.; ALLENOV, O.A., veter.vrach.

Prophylaxis and treatment of noninfectious diseases in calves and piglets. Veterinariia 40 no.2:40-47 F '63. (MIRA 17:2)

1. Ul'yanovskaya oblastnaya veterinarno-bakteriologicheskaya laboratoriya (for Sturman). 2. Kolkhoz imeni Kirova. Volokonovskogo

(Continued on next card)

APPROVED FOR RELEASE: 03/20/2001 CIA-RDP86-00513R000101110005-2"

"APPROVED FOR RELEASE: 03/20/2001 CIA-RDP86-00513R000101110005-2

ALIKAYEV, V.A., dots., kand. vet. nauk; ONEGOV, A.P., prof., doktor vet. nauk; STAROV, T.K., dots.,kand. biol. nauk; DREVIYANSKAYA, N.I., red.

[Practical manual on the hygiene of farm animals] Praktikum po gigiene sel'skokhoziaistvennykh zhivotnykh. Izd.3., perer. i dop. Moskva, Kolos, 1964. 319 p. (MIRA 17:11)

APPROVED FOR RELEASE: 03/20/2001 CIA-RDP86-00513R000101110005-2"

"APPROVED FOR RELEASE: 03/20/2001 CIA-RDP86-00513R000101110005-2

ALIKAYEV, V.A.

Laboratory diagnosis of infectious animal diseases. Veterinariia 38 no.3:80-83 Mr '61 (MIRA 18:1)

APPROVED FOR RELEASE: 03/20/2001 CIA-RDP86-00513R000101110005-2"

"APPROVED FOR RELEASE: 03/20/2001 CIA-RDP86-00513R000101110005-2

PODKOPAYEV, V.M., kand. veter. nauk; ALIKAYEV, V.A., dots.

[Materials of the All-Union Conference on Diseases of Young Farm Animals and Poultry] Materialy Vsesoiuznoi konferentsii po bolezniam molodniaka sel'skokhoziaistvennykh zhivotnykh i ptits. Moskva, Mosk. veterinarnaia akademiia, 1964. 247 p. (MIRA 18:1)

1. Vsesoyuznaya konferentsiya po boleznyam molodnyaka sel'skokhozyaystvennykh zhivotnykh i ptits. 2. Moskovskaya veterinarnaya akademiya (for Podkopayev). 3. Zaveduyushchiy kafedroy bolezney molodnyaka Moskovskoy veterinarnoy akademii (for Alikayev).

APPROVED FOR RELEASE: 03/20/2001 CIA-RDP86-00513R000101110005-2"

"APPROVED FOR RELEASE: 03/20/2001 CIA-RDP86-00513R000101110005-2

VERTINSKIY, K.I., prof.; ALIKAYEV, V.A., dotsent; PODKOPAYEV, V.M., dotsent; SHISHKOV, V.P., dotsent; ANDREYEV, I.A., veterin. vrach (Moskovskaya obl.); VLASOV, V.P., veterin. vrach (Moskovskaya obl.); MAMAYEV, A.P., veterin. vrach (Moskovskaya obl.); SHUL'GOVSKIY, I.P., veterin. vrach (Moskovskaya obl.)

Diagnosis, therapy, and prophylaxis of toxic dyspepsia in calves. Veterinariia 41 no.1:59-64 Ja '65. (MIRA 18:2)

1. Moskovskaya veterinarnaya akademiya (for Vertinskiy, Alikayev, Podkopayev, Shishkov).

APPROVED FOR RELEASE: 03/20/2001 CIA-RDP86-00513R000101110005-2"

"APPROVED FOR RELEASE: 03/20/2001 CIA-RDP86-00513R000101110005-2

ALIKAYEV, V.A.; DUL'NEV, V.I.; VASIL'KOV, G.V.; TROKHIN, V.K.; IVASHCHENKO, S.A.; PLATONOV, V.A., veterinarno-sanitarnyy ekspert; ROMANYUKHA, A.I.; BRYUSHKOV, P.; PERGAT, F.F.; SPIRIN, F.; ARKADSKIY, V.P.; MEDVEDEV, I.

Brief news. Veterinariia 41 no.10:118-126 O '64.
(MIRA 18:11)

1. Nachal'nik veterinarno-sanitarnogo uchastka stantsii Melitopol' Pridneprovskoy zheleznoy dorogi (for Romanyukha).

APPROVED FOR RELEASE: 03/20/2001 CIA-RDP86-00513R000101110005-2"

"APPROVED FOR RELEASE: 03/20/2001 CIA-RDP86-00513R000101110005-2

PETROV, P.Ye., aspirant; ALIKAYEV, V.A., nauchnyy rukovotidel' raboty, dotsent

Some data on the methodology of electrocardiographic examination of newborn calves. Veterinariia 42 no.12:54-57 D '65.
(MIR. 19:1)

1. Moskovskaya veterinarnaya akademiya.

APPROVED FOR RELEASE: 03/20/2001 CIA-RDP86-00513R000101110005-2"

"APPROVED FOR RELEASE: 03/20/2001 CIA-RDP86-00513R000101110005-2

L 1836-66 EWT(1)/ETC/EPF(n)-2/EWG(m)/EPA(w)-2 IJP(c) AT

ACCESSION NR: AT5022417 UR/3136/64/000/674/0001/0024 39 B+1

AUTHOR: Alikayev, V.V.; Glagolev, V.M.; Cheverev, N.S.

TITLE: High-frequency paramagnetic stabilization and heating of plasma with electromagnetic waves

SOURCE: Moscow. Institut atomnoy energii. Doklady, IAE-674, 1964. Paramagnitnaya vysokochastotnaya stabilizatsiya i nagrev plazmy elektromagnitnymi volnami, 1-24

TOPIC TAGS: plasma heating, plasma stability, plasma electron temperature, magnetic field plasma effect, plasma electromagnetic wave

ABSTRACT: It is shown experimentally that in the presence of HF stabilizing fields, convective-type macroscopic instabilities are either completely absent or are strongly attenuated in a plasma with a concentration n of 10^{11} to 10^{13} cm^{-3} located in a magnetic field having the geometry of an adiabatic trap. In the range of magnetic fields corresponding to $\frac{\omega_H}{\omega} \pi$ from 0.5 to 1.0, a fast heating of the plasma electrons takes place, so that the plasma pressure is about 10 times as high as the pressure of the HF field on the plasma. The maximum temperature of the electrons of the heated

Card 1/2

APPROVED FOR RELEASE: 03/20/2001 CIA-RDP86-00513R000101110005-2"

"APPROVED FOR RELEASE: 03/20/2001 CIA-RDP86-00513R000101110005-2

L 1836-66
ACCESSION NR: AT5022417

plasma is 1000 ev. At low plasma concentrations, when the Langmuir electron frequency is close in order of magnitude to the electron-cyclotron frequency, the lifetime of the plasma decreases in the presence of HF fields. This effect appears to be related to an accelerated escape of electrons into the "danger cone" of the magnetic trap owing to collective processes. The effect of removal of this instability was observed experimentally. Orig. art. has: 12 figures and 1 formula.

ASSOCIATION: none

SUBMITTED: 00 ENCL: 00 SUB CODE: ME

NO REF SOV: 001 OTHER: 002

Card 2/2

APPROVED FOR RELEASE: 03/20/2001 CIA-RDP86-00513R000101110005-2"

"APPROVED FOR RELEASE: 03/20/2001 CIA-RDP86-00513R000101110005-2

ALIKAYEVA, A. P.: "

ALIKAYEVA, A. P.: "A study of the pathogenic properties of the causative agent of paratuberculosis." All-Union Inst of Experimental Veterinary Medicine, Min Agriculture USSR. Moscow, 1956. (Dissertation for the Degree of Candidate in Veterinary Science.)

Knizhnaya Letopis'
No 32, 1956. Moscow.

APPROVED FOR RELEASE: 03/20/2001 CIA-RDP86-00513R000101110005-2"

"APPROVED FOR RELEASE: 03/20/2001 CIA-RDP86-00513R000101110005-2

USSR / Microbiology. Microbes Pathogenic for Man and Animals. Bacteria. Microbacteria. F-4

Abs Jour: Ref Zhur-Biol., 1958, No 17, 76844.

Author : Alikayeva, A. P.
Inst : Not given.
Title : On the Isolation of Pure Cultures of the Causative Agent of Paratuberculosis (b. Ione).

Orig Pub: Vestn. s.-kh. nauki, 1957, No 3, 122-123.

Abstract: The author cultivated the causative agent of paratuberculosis from pathologically-changed organs of animal patients in a modified dense Smith medium (formula and technique of preparation of the medium is cited). For the extraction of subcultures, a modified Akkart-Murray liquid medium was also used (composition cited). -- M. A. Grusman.

Card 1/1

APPROVED FOR RELEASE: 03/20/2001 CIA-RDP86-00513R000101110005-2"

"APPROVED FOR RELEASE: 03/20/2001 CIA-RDP86-00513R000101110005-2

KISELEV, V.S., kand.veterinarnykh nauk; ALIKAYEVA, A.P., mladshaya nauchnaya sotrudnitsa; YAKUSHEVA, O.V., mladshaya nauchnaya sotrudnitsa

Comparative study of standard allergens in the diagnosis of tuberculosis in cattle caused by various types of agents. Trudy VIEV 22:27-42 '59. (MIRA 13:10)

(Tuberculosis in animals)

APPROVED FOR RELEASE: 03/20/2001 CIA-RDP86-00513R000101110005-2"

"APPROVED FOR RELEASE: 03/20/2001 CIA-RDP86-00513R000101110005-2

PODDUBSKIY, I.V., prof.; SHCHUREVSKIY, V.Ye., kand.veter.nauk;
ALIKAYEVA, A.P.

Materials on a study of paratuberculosis in agricultural animals.
Trudy VIEV 26:115-134 '62. (MIRA 16:2)

1. Laboratoriya po izucheniyu tuberkuleza i paratuberkuleza Vsesoyuznogo instituta eksperimental'noy veterinarii.
(Johne's disease)

APPROVED FOR RELEASE: 03/20/2001 CIA-RDP86-00513R000101110005-2"

"APPROVED FOR RELEASE: 03/20/2001 CIA-RDP86-00513R000101110005-2

OSIPOV, A.K.; ALIKAYEVA, E.V.

Observations of lunar occultations of stars at the Astronomical Observatory of the Kiev State University in 1951-1953. Publ.KAO no.8:112-114 '59. (MIRA 14:9)
(Occultations)

APPROVED FOR RELEASE: 03/20/2001 CIA-RDP86-00513R000101110005-2"

"APPROVED FOR RELEASE: 03/20/2001 CIA-RDP86-00513R000101110005-2

S/035/62/000/008/028/090
A001/A101

AUTHORS: Alikayeva, K. V., Orlova, T. V.

TITLE: The chromospheric flare of July 12, 1961

PERIODICAL: Referativnyy zhurnal, Astronomiya i Geodeziya, no. 8, 1962, 63, abstract 8A415 ("Solnechnyye dannyye", 1961, no. 7, 68 - 70)

TEXT: About 100 spectrograms of a flare of class 3^+ were taken at the Main Astronomical Observatory, AS UkrSSR, by means of a horizontal telescope on July 12, 1961. The list is presented of 117 emission lines observed in the region λλ6563-3750; the lines are identified and their intensities are estimated on an arbitrary scale.

R. G.

[Abstracter's note: Complete translation]

Card 1/1

APPROVED FOR RELEASE: 03/20/2001 CIA-RDP86-00513R000101110005-2"

"APPROVED FOR RELEASE: 03/20/2001 CIA-RDP86-00513R000101110005-2

L 23624-65 EWT(1)/EWG(v)/EE[illegible]-4/EEC(t) Pe-5/Pq-4 MLK/GW

ACCESSION NR: AT5003159 S/0000/64/000/000/0073/0080 B+1

AUTHOR: Alikayeva, K. V.

TITLE: Investigation of the chromospheric flare of 23 June 1961

SOURCE: AN UkrSSR, Glavnaya astronomicheskaya observatoriya. Spektrofotometricheskiye issledovaniya aktivnykh obrazovaniy na Solntse (Spectrophotometric investigations of active phenomena on the sun). Kiev, Naukova dumka, 1964, 73-80

TOPIC TAGS: chromospheric flare, spectrogram, filtrogram, hydrogen line, absorption line, metallic line, sunspot penumbra, magnetic field, Zeeman effect, optical depth, atomic level, hydrogen atom

ABSTRACT: The chromospheric flare on 23 June 1961 has been investigated by spectrograms and filtrograms. The flare consisted of many nodes which appeared, developed, and disappeared independently of each other. Spectrograms obtained at 11^h26^m contained only emission lines of hydrogen and calcium and very weak absorption lines. Spectrograms obtained at 11^h35^m contained bright metallic lines in the

Card 1/3

APPROVED FOR RELEASE: 03/20/2001 CIA-RDP86-00513R000101110005-2"

"APPROVED FOR RELEASE: 03/20/2001 CIA-RDP86-00513R000101110005-2

violet range. The different contents of the spectra lines indicate that the metallic brightness appears in flares approximately 10 minutes later than the maximum brightness of hydrogen. The flare was located on the penumbra of a sunspot. The spectrograms also contained the brightness of the underlying matter. The influence of this brightness was eliminated in determining the brightness of other penumbrae near the flare. The line centers were slightly shifted corresponding to radial velocities of 2—3 km sec^{-1}. The magnetic field of the penumbra caused a Zeeman effect in the form of a widening of the spectral lines. Mg triplets 3829, 3832, and 3838 Å were chosen for determining the optical depth of the flare and the population of the atomic levels of Mg and Ca^+ in the flare. The electron concentration and the electron temperature in flare were determined from the population of Ca^+ and Mg. Using Ca^+, the electron concentration was $n_e = 10^{13}$, and the electron temperature was $T_e = 11,700K$. The Mg population yielded $n_e = 10^{13}$ and $T_e = 15,000K$. The number of hydrogen atoms in the direction of the sight line was found to be $N_H = 10^{19}$, and the thickness of the calcium filaments was $10^5 — 10^6$ cm. Orig. art. has: 2 figures, 4 tables, and 19 formulas. [EG]

APPROVED FOR RELEASE: 03/20/2001 CIA-RDP86-00513R000101110005-2"

"APPROVED FOR RELEASE: 03/20/2001 CIA-RDP86-00513R000101110005-2

L 23624-65

ACCESSION NR: AT5003159

ASSOCIATION: none

SUBMITTED: 06Aug64	ENCL: 00	SUB CODE: AA
NO REF SOV: 004	OTHER: 008	ATD PRESS: 3175

Card 3/3

APPROVED FOR RELEASE: 03/20/2001 CIA-RDP86-00513R000101110005-2"

"APPROVED FOR RELEASE: 03/20/2001 CIA-RDP86-00513R000101110005-2

L 26076-66 EWT(l)/EWT(m)/EWP(t) IJP(c) GW/JD/GS

ACC NR: AT6014846 SOURCE CODE: UR/0000/66/000/000/0060/0071

AUTHOR: Alikayeva, K. V.

ORG: none

TITLE: Investigation of calcium emission in a large chromospheric flare

SOURCE: AN UkrSSR. Voprosy astrofiziki (Problems in astrophysics). Kiev, Izd-vo Naukova dumka, 1966, 60-71

TOPIC TAGS: chromospheric flare, flare emission, solar physics, calcium emission, solar filament, solar calcium emission

ABSTRACT: The ionized calcium emission of a strong chromospheric flare observed at the Main Astronomical Observatory of the Ukrainian Academy of Sciences on 12 July 1961 is analyzed. The central parts of the H and K line profiles were broadened by predominantly nonthermal turbulent motions, and the wings by non-Maxwellian velocity distribution. Electron temperatures and concentrations are estimated for two intense spots of the flare. The physical condition of flare filaments in a stationary state for the level $4P_{3/2}$ was found to consist of a proper field of radiation, of recombinations in the level, of transitions from the 4S and 3D levels under electronic pulses, and of transitions from the 5S level. Orig. art. has: 14 formulas and 5 tables. [DM]

SUB CODE: 03/ SUBM DATE: 12Jan66/ ORIG REF: 005/ OTH REF: 003/ ATD PRESS: 4253

Card 1/1

APPROVED FOR RELEASE: 03/20/2001 CIA-RDP86-00513R000101110005-2"

"APPROVED FOR RELEASE: 03/20/2001 CIA-RDP86-00513R000101110005-2

ACC NR: AR6033098 SOURCE CODE: UR/0269/66/000/007/0057/0057

AUTHOR: Alikayeva, K. V.

TITLE: Conditions of excitation and ionization of Ca II in a solar flare

SOURCE: Ref. zh. Astronomiya, Abs. 7.51.399

REF SOURCE: Solnechnyye dannyye, no. 10, 1965, 50-55

TOPIC TAGS: solar flare, electron energy level, electron temperature, electron concentration

ABSTRACT: The population of the 4P, 5S of CaII electron energy levels and the ratio N_{caIII}/N_{caII} for a series of values of electron temperature T_e from 6×10^3 to 1.5×10^4 and an electron concentration n_e from 1×10^{13} to 1×10^{14} have been calculated by solving steady-state and ionization equilibrium equations. The results of the calculations are used for the evaluation of n_e and T_e in the flare of July 21, 1961. In addition, the effective flare thickness h was determined. It was found that with the development of the flare, h varies from $\sim 10^5$ to $\sim 10^6$ cm; n_e

Card 1/2 UDC: 523.75

APPROVED FOR RELEASE: 03/20/2001 CIA-RDP86-00513R000101110005-2"

"APPROVED FOR RELEASE: 03/20/2001 CIA-RDP86-00513R000101110005-2

ACC NR: AR6033098

varies from 1 x 10^{13} to 2.1 x 10^{13}; and T_e from 9750 to 10,630K. The obtained data show that the λ 3737 of CaII emission emanates from deeper layers than H and K of CaII emission. Bibliography of 11 titles. V. Banin. [Translation of abstract]

SUB CODE: 03/

Card 2/2

APPROVED FOR RELEASE: 03/20/2001 CIA-RDP86-00513R000101110005-2"

"APPROVED FOR RELEASE: 03/20/2001 CIA-RDP86-00513R000101110005-2

АЛИКБЕРОВ, С.С.

AUTHOR: ALIMARIN, I.P., ALIKBEROV, S.S. 32-6-5/54

TITLE: The Application of Benzol Sulphidine Acids for the Determination of Zirconium. (Primeneniye byenzolsulfinovoy kisloty dlya opredeleniya tsirkoniya, Russian)

PERIODICAL: Zavodskaya Laboratoriya, 1957, Vol 23, Nr 6, pp 658-660, (U.S.S.R.)

ABSTRACT: The fact is stressed that the application of benzol sulphine acid $C_6H_5SO_2H_2$ is of great importance in analytical chemistry because of its good precipitation properties. Though FAIGL pointed out the possibility of the precipitation of quadrivalent cations Th, U, Zr, Ti, Sn by means of benzol sulphine acid, he says nothing about a method for quantitative determination or separation of elements. The present paper draws a parallel between the reactions of benzol sulphine acid and other acids, in which connection he gives preference to benzol sulphine acid in connection with zirconium reaction, because other elements are not affected and also because sodium benzol sulphinate is produced in great quantities by the Soviet chemical industry and is, therefore, easily available for being used as a reagent.

Under the effect of benzol sulphine acid or of its sodium salt zirconium has a precipitation in form of a flaky white substance which can be described by the formula $/ZrO(C_6H_5SO_2)_2$ / when in a

Card 1/2

APPROVED FOR RELEASE: 03/20/2001 CIA-RDP86-00513R000101110005-2"

"APPROVED FOR RELEASE: 03/20/2001 CIA-RDP86-00513R000101110005-2

AUTHORS: Alimarin, I. P., Alikberov, S. S. SOV/32-24-7-8/65

TITLE: The Quantitative Determination of Thorium by Precipitation With Sodium Benzene Sulfinate (Kolichestvennoye opredeleniye toriya osazhdeniyem benzolsul'finatom natriya)

PERIODICAL: Zavodskaya Laboratoriya, 1958, Vol. 24, Nr 7, pp. 804 - 807 (USSR)

ABSTRACT: Concerning the theory by Hecht and Donan (Ref 2) it was found that also benzene sulfo acid can be used for the determination of thorium and zirconium. The precipitate has the composition $Th(C_6H_5SO_2)_4$. It can be dried at 110° and then be weighed. An acidity of up to 1 n hydrochloric acid is best suited for the precipitation. Hence, the experiments were conducted in 0,5 normal hydrochloric acid-or nitrous acid solution, a 1% sodium benzene sulfinate solution serving as reagent. In order to verify the precipitation process the reagent "thoron" ("toron") proposed by V. I. Kuznetsov was used. After the method itself was investigated, determinations of thorium in the presence of rare earths were performed. Among others, ground samples of orthite and monazite were investigated. It was found that

Card 1/2

APPROVED FOR RELEASE: 03/20/2001 CIA-RDP86-00513R000101110005-2"

"APPROVED FOR RELEASE: 03/20/2001 CIA-RDP86-00513R000101110005-2

The Quantitative Determination of Thorium by Precipitation With Sodium Benzene Sulfinate

beryllium, aluminium, rare earths and small amounts of titanium and iron do not disturb the determination. If iron is contained in greater amounts, it must be reduced with ascorbic acid and transferred into the trilonate complex. The uranyl ion does not precipitate with sodium benzene sulfinate whereas uranium (IV) forms a crystalline pale green precipitate. Hence, it is possible to determine uranium. Zirconium, which has a disturbing effect, can be removed by a precipitation in a more acidous medium. Experimental results and the prescriptions for the analysis are given.
There are 2 figures, 3 tables, and 5 references, 2 of which are Soviet.

ASSOCIATION: Moskovskiy institut tonkoy khimicheskoy tekhnologii im. M. V. Lomonosova (Moscow Institute for Fine Chemical Technology imeni M. V. Lomonosov)

APPROVED FOR RELEASE: 03/20/2001 CIA-RDP86-00513R000101110005-2"

"APPROVED FOR RELEASE: 03/20/2001 CIA-RDP86-00513R000101110005-2

5.2400

AUTHORS: Alikberov, S. S., Shklover, L. P.

69054
S/078/60/005/03/001/048
B004/B002

TITLE: The Production of High-purity Silicon

PERIODICAL: Zhurnal neorganicheskoy khimii, 1960, Vol 5, Nr 3, pp 513 - 518 (USSR)

ABSTRACT: After a short survey of the properties of silicon chlorides and the methods known for their reduction (Table 1), the authors state that trichlorosilane can most easily be reduced by hydrogen. Figure 1 shows the temperature dependence of the equilibrium constant for the reactions $SiHCl_3 + H_2$ and $SiCl_4 + 2H_2$ (according to data by A. I. Mel'nikov, Ref 4). According to it, $SiHCl_3$ can be reduced to elementary Si more easily than $SiCl_4$. The authors describe the synthesis of $SiHCl_3$ from industrial silicon type KR-0 at 290° (Refs 8,9) by the influence of hydrogen chloride, the rectification of $SiHCl_3$ and the quartz apparatus in which $SiHCl_3$ was reduced by hydrogen, carefully cleaned from O_2 and H_2O (Fig 2). In a stoichiometrical relation between $SiHCl_3$ and H_2, the silicon yield is

Card 1/2

APPROVED FOR RELEASE: 03/20/2001 CIA-RDP86-00513R000101110005-2"

"APPROVED FOR RELEASE: 03/20/2001 CIA-RDP86-00513R000101110005-2

very low due to side reactions. As is shown by figure 3, the yield can be increased by a hydrogen excess. Figure 4 shows the dependence of the yield on the silicon temperature, figure 5 its dependence on the flow velocity of the mixture in the reaction zone, and figure 6 the temperature distribution in the reaction vessel. The optimum conditions were: 60-70-fold hydrogen excess, 1050°, rate of 80 cm/sec. Figures 7-9 show samples of the silicon obtained. Figure 10 shows a single crystal of silicon, obtained according to Chokhral'skiy's method. The large hydrogen excess can be used in a second apparatus connected in series. The yield in the second apparatus was lower by 20 - 25% (Table 2) due to the presence of HCl. Further use of the hydrogen in a third apparatus, therefore, is only possible after HCl has been removed. There are 10 figures, 2 tables, and 10 references, 5 of which are Soviet.

SUBMITTED: July 25, 1958

APPROVED FOR RELEASE: 03/20/2001 CIA-RDP86-00513R000101110005-2"

"APPROVED FOR RELEASE: 03/20/2001 CIA-RDP86-00513R000101110005-2

S/078/60/005/010/008/021
B004/B067

AUTHORS: Alikberov, S. S., Shklover, L. P., Syromyatnikova, A. S., Belanovskiy, A. S.

TITLE: Use of Acetonitrile as Complex-forming Substance in the Purification of $SiCl_4$ and $SiHCl_3$

PERIODICAL: Zhurnal neorganicheskoy khimii, 1960, Vol. 5, No. 10, pp. 2258-2260

TEXT: The authors checked the data from Refs. 6,7 according to which impurities can be easily separated from silicon tetrachloride and trichlorosilane by means of acetonitrile. They found that this applies for $SiCl_4$ because a mixture of $SiCl_4$ and CH_3CN is separated into two layers (Fig.). $SiCl_4$ takes up 2 wt% of CH_3CN which must be removed by fractional distillation. Since, however, an azeotropic mixture boiling at 49-50°C is formed, this method leads to considerable losses in $SiCl_4$. The data of Refs. 6,7 do not apply for $SiHCl_3$. $SiHCl_3$ and CH_3CN are mixible at any ratio. This is also confirmed by the polarity of these

Card 1/2

APPROVED FOR RELEASE: 03/20/2001 CIA-RDP86-00513R000101110005-2"

"APPROVED FOR RELEASE: 03/20/2001 CIA-RDP86-00513R000101110005-2

Use of Acetonitrile as Complex-forming Substance in the Purification of $SiCl_4$ and $SiHCl_3$

S/078/60/005/010/008/021
B004/B067

compounds (Table 1). Hence, the authors used the capability of acetonitrile of forming complexes with metal salts to purify silicon chlorides. They added only 1-2 vol% of acetonitrile and achieved good purification by fractional distillation. The residue contained the complexes of acetonitrile with Al, Fe, Cu, Mg, Mn, and Ti. Table 2 shows the purification of $SiHCl_3$ obtained herewith. The complex formation of CH_3CN with iron was examined also by means of Fe^{55}. Activity was measured with an MCT-17 (MST-17) counter of a B-2 (B-2) apparatus (Table 3). Formamide was successfully applied instead of acetonitrile. With iron, hydrocyanic acid which is formed in this case forms nonvolatile compounds. The results of experiments with formamide and Fe^{55} are given in Table 4. There are 1 figure, 4 tables, and 11 references: 6 Soviet, 1 US, 3 German, and 1 Polish.

SUBMITTED: July 10, 1959

Card 2/2

APPROVED FOR RELEASE: 03/20/2001 CIA-RDP86-00513R000101110005-2"

"APPROVED FOR RELEASE: 03/20/2001 CIA-RDP86-00513R000101110005-2

ALIKBEROV, S.S.; SHKLOVER, L.P.; SYROMYATNIKOVA, A.S.; SHCHERBAKOVA, T.M.

Mutual solubility in the system silicon tetrachloride - acetonitrile.
Zhur. fiz. khim. 34 no.4:935-936 Ap '60. (MIRA 14:5)
(Silicon chloride) (Acetronitrile)

APPROVED FOR RELEASE: 03/20/2001 CIA-RDP86-00513R000101110005-2"

"APPROVED FOR RELEASE: 03/20/2001 CIA-RDP86-00513R000101110005-2

ACC NR: AP6036351 (A) SOURCE CODE: UR/0138/66/000/011/0002/0002

AUTHOR: Nagibina, T. D.; Yasenkova, L. S.; Alikberova, G. I.; Petrov, A. D.; Chernyshev, Yu. A.; Krasnova, T. L.

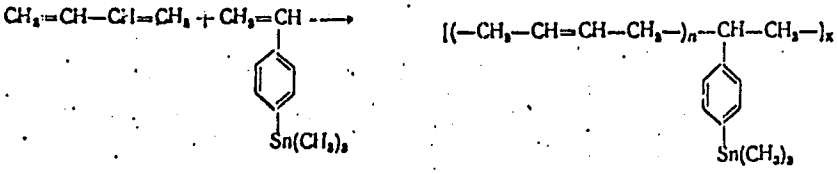
ORG: Institute of Organic Chemistry im. N. D. Zelinskiy, AN SSSR (Institut organicheskoy khimii AN SSSR)

TITLE: Tin-containing synthetic rubber

SOURCE: Kauchuk i rezina, no. 11, 1966, 2

TOPIC TAGS: organotin compound, synthetic rubber, copolymerization

ABSTRACT: A new type of tin-containing synthetic rubber (SKDOS-30) has been produced by copolymerizing butadiene and p-trimethyltinstyrene at 60°C:



The yield of the copolymer was 60-70%. At the end of the reaction, the latex was stabilized with a 2% alcohol solution of neozone D. The latex was coagulated with a

Card 1/2 UDC: (678.762.2+678.86).547.07.004.12

APPROVED FOR RELEASE: 03/20/2001 CIA-RDP86-00513R000101110005-2"

"APPROVED FOR RELEASE: 03/20/2001 CIA-RDP86-00513R000101110005-2

ACC NR: AP6036351

solution of sodium chloride and acetic acid. The range of highly elastic deformation of the DOS-30 copolymer extends from -40 to +220°C; the glass transition temperature is -40°C; the copolymer begins to cross-link at 220°C. Rubber mixtures based on SKDOS-30 copolymer were prepared in accordance with the standard recipe for SKS-30 rubber. The vulcanization of the mixtures lasted 20 min at 142±1°C. In physico-mechanical properties, SKDOS-30 vulcanizates are equivalent to rubbers based on SKS-30, with the exception of the fatigue strength, which is several times greater than that of SKS-30 rubbers.

SUB CODE: 11/ SUBM DATE: 09Nov64/ ORIG REF: 001/ OTH REF: 002

Card 2/2

APPROVED FOR RELEASE: 03/20/2001 CIA-RDP86-00513R000101110005-2"

"APPROVED FOR RELEASE: 03/20/2001 CIA-RDP86-00513R000101110005-2

ALIKBEROVA, G.I.

S/138/62/000/005/001/010
A051/A126

AUTHORS: Nazarov, I.N. (deceased); Nagibina, T.D.; Yasenkova, L.S.; Alikberova, G.I.; Yas'ko, L.V.

TITLE: Copolymers based on butadiene, isoprene and dimethylvinylethynyl carbinol

PERIODICAL: Kauchuk i rezina, no. 5, 1962, 1 - 4

TEXT: The article deals with the reaction of copolymerization in an emulsion of butadiene and isoprene with dimethylvinylethynyl carbinol (DMVEC), in the presence of various initiators. A comparative evaluation of the vulcanizates of these rubber bases is made. Monomers used in the reaction were: rectified butadiene, DMVEC (boiling point 58 - 59°C/13 mm, n_D^{15} 1.4786, d_4^{15} 0.8925), isoprene (boiling point 34°C, n_D^{21} 1.4203). The various initiators used were: potassium persulfate, diazoaminobenzene and glucose, diazoaminobenzene with hydroquinone. The physico-chemical properties are studied of the butadiene and DMVEC copolymers [ДК-30 (DK-30) and ДК-10 (DK-10)], and of the isoprene and DMVEC copolymers [ИК-30 (IK-30) and ИК-10 (IK-10)]. It was found in experiments that car-

Card 1/2

APPROVED FOR RELEASE: 03/20/2001 CIA-RDP86-00513R000101110005-2"

"APPROVED FOR RELEASE: 03/20/2001 CIA-RDP86-00513R000101110005-2

Copolymers based on butadiene, isoprene and ....

bon black vulcanizates of the butadiene and DMVEC copolymers have a high tensile strength, a sufficiently high thermal resistance, satisfactory wear and crack growth resistance in repeated bends. They are superior to vulcanizates of industrial butadiene-styrene and butadiene-nitrile rubbers [CKC-30 (SKS-30) and CKH-26 (SKN-26)]. The DK-30 copolymers, produced in the presence of diazoaminobenzene and glucose, have the highest mechanical strength. The thermomechanical indices of the former are higher than those of the SKN-26 copolymers. The physico-mechanical properties of the IK-30 copolymer vulcanizates (excluding crack growth) are on one level with rubbers based on industrial SKS-30 rubber, and are superior to the latter in their crack growth resistance. The IK-10 copolymer vulcanizates are inferior to rubbers based on the industrial SKS-30 rubber as to physico-mechanical properties, excepting frost resistance.

ASSOCIATION: Institut organicheskoy khimii AN SSSR (Institute of Organic Chemistry at the AS USSR)

Card 2/2

APPROVED FOR RELEASE: 03/20/2001 CIA-RDP86-00513R000101110005-2"

"APPROVED FOR RELEASE: 03/20/2001 CIA-RDP86-00513R000101110005-2

NAGIBINA, T.D.; YASENKOVA, L.S.; ALIKBEROVA, G.I.; KORABLEV, Yu.G.; KUZIN, V.S.; KUZNETSOVA, A.I.; ZHAROVA, A.S.; VASHUNINA, N.D.

Phenol-containing SKDF-10 rubber. Kauch. i rez. 24 no.11:2-3 '65. (MIRA 19:1)

1. Institut organicheskoy khimii imeni Zelinskogo AN SSSR i Moskovskiy institut tonkoy khimicheskoy tekhnologii imeni M.V. Lomonosova.

APPROVED FOR RELEASE: 03/20/2001 CIA-RDP86-00513R000101110005-2"

"APPROVED FOR RELEASE: 03/20/2001 CIA-RDP86-00513R000101110005-2

NAGIBINA, T.D.; YASENKOVA, L.S.; ALIKBEROVA, G.I.; YAS'KO, L.V.

Copolymerization of butadiene and isoprene with dimethylvinylethynylcarbinol at 5°C. Kauch.i rez. 21 no.7:6-8 Jl '62. (MIRA 15:7)

1. Institut organicheskoy khimii AN SSSR.
(Butadiene) (Isoprene) (Alcohols)

APPROVED FOR RELEASE: 03/20/2001 CIA-RDP86-00513R000101110005-2"

"APPROVED FOR RELEASE: 03/20/2001 CIA-RDP86-00513R000101110005-2

L 7709-66 EWT(m)/EPF(c)/EWF(j)/T WW/RM

ACC NR: AP5028897 SOURCE CODE: UR/0138/65/000/011/0002/0003

AUTHOR: Nagibina, T. D.; Yasenkova, L. S.; Alikberova, G. I.; Korablev, Yu. G.; Kuzin, V. S.; Kuznetsova, A. I.; Zharova, A. S.; Vashunina, N. D.

ORG: Institute of Organic Chemistry im. Zelinskiy, AN SSSR (Institut organicheskoy khimii AN SSSR); Moscow Institute of Fine Chemical Technology im. M. V. Lomonosov (Moskovskiy institut tonkoy khimicheskoy tekhnologii)

TITLE: Phenol-containing rubber SKDF-10

SOURCE: Kauchuk i rezina, no. 11, 1965, 2-3

TOPIC TAGS: synthetic rubber, phenol containing rubber, copolymer

ABSTRACT: Phenol-containing rubbers have been prepared by emulsion copolymerization at 60C of butadiene and dimethyl(vinylethynyl)(4-hydroxyphenyl)methane(I) in the presence of diazoaminobenzene and hydroquinone. The best chemical, physical and mechanical properties were exhibited by copolymers containing 10% of I(SKDF-10 rubber). IR absorption spectra indicated that copolymerization occurs via the double band of I. SKDF-10 rubbers can be vulcanized by such agents as sulfur, phenol-formaldehyde resins, or hexamethylene tetramine. The formulation of the mixtures, the properties of the rubbers, vulcanization methods, and the vulcanizate properties are described in the source. The properties of SKDF-10 vulcanizates are similar to those of butadiene-styrene SKS-30 vulcanizates, but their fatigue strength in compression is

Card 1/2 UDC: 678.762.2-134.647:546/547.07.00

APPROVED FOR RELEASE: 03/20/2001 CIA-RDP86-00513R000101110005-2"

"APPROVED FOR RELEASE: 03/20/2001 CIA-RDP86-00513R000101110005-2

L 7709-66

ACC NR: AP5028877

twice as high as that of SKS-30 vulcanizates. SKDF-10 latex impregnation compositions exhibit enhanced adhesion. [BO]

SUB CODE: MT/ SUBM DATE: none/ ORIG REF: 003/ ATD PRESS: 4142

Card 2/2

APPROVED FOR RELEASE: 03/20/2001 CIA-RDP86-00513R000101110005-2"

"APPROVED FOR RELEASE: 03/20/2001 CIA-RDP86-00513R000101110005-2

40070

S/138/62/000/008/001/007
A051/A126

15.9201

AUTHORS: Nikitin, V. I., Glazunova, Ye. M., Nagibina, T. D., Yasenkova, L. S., Alikberova, G. I., Grigina, I. N.

TITLE: Copolymers based on butadiene and glycols of the isopropenylacetylene row

PERIODICAL: Kauchuk i rezina, no. 8, 1962, 1 - 3

TEXT: The properties of copolymers containing a large number of hydroxyl groups were studied by investigating a copolymerization reaction between butadiene and glycols of the isopropenylacetylene row. The glycols used and produced by dehydration of the corresponding glycerines or by condensation of oxyketones with isopropenylacetylene, in the presence of potassium hydroxide, were: 2,3,6-trimethylheptene-6-in-4-diol-2,3 [glycol Г (G)], and 2-methyl-5(1-oxycyclopentyl)-hexene-1-in-3-ol-5 [glycol ЦГ (TsG)]. Experimental data showed the copolymer of butadiene and glycol G [ДГ-10 (DG-10)], to be non-soluble in ordinary organic solvents, and the copolymer of butadiene and glycol TsG [ДЦГ-10 (DTsG-10)], to be soluble in ether and benzene. The molecular weight of DTsG-10 (determined by

Card 1/2

APPROVED FOR RELEASE: 03/20/2001 CIA-RDP86-00513R000101110005-2"

"APPROVED FOR RELEASE: 03/20/2001 CIA-RDP86-00513R000101110005-2

Copolymers based on butadiene and...

the light diffusion method), is equal to 206,000. The Carrer hardness of DG-10 and DTsG-10, prior to mastication, is equal to 0.1 - 0.2. Further data revealed that DG-10 vulcanizates are superior to СКС-30А (SKS-30A), and equal to СКН-26 (SKN-26) as to tensile strength, elasticity, thermal resistance, destruction resistance in repeated deformations. They are far superior to SKS-30A and SKN-26 and ДК-10 (DK-10) in fatigue strength during repeated compression. DTsG-10 vulcanizates are equal to rubbers of the serial SKS-30A rubber base in their main physical and mechanical properties, excepting crack growth resistance in repeated flextures. The former are superior to SKS-30A, SKN-26 and ДК-10 Х (DK-10Kh) in their resistance to repeated deformations of flexure. There is 1 table.

ASSOCIATION: Institut khimii Akademii nauk Tadzhikskoy SSR i Institut organicheskoy khimii Akademii Nauk SSSR (Institute of Chemistry of the Tadzhik SSR Academy of Sciences and Institute of Organic Chemistry of the USSR Academy of Sciences)

APPROVED FOR RELEASE: 03/20/2001 CIA-RDP86-00513R000101110005-2"

"APPROVED FOR RELEASE: 03/20/2001 CIA-RDP86-00513R000101110005-2

NAGIBINA, T.I.; YASENKOVA, L.S.; YAS'KO, L.V.; ALIKBEROVA, G.I.

Isoprene and acrylonitrile copolymers. Kauch. i rez. 22 no.12:4 D '63. (MIRA 17:9)

1. Institut organicheskoy khimii AN SSSR.

APPROVED FOR RELEASE: 03/20/2001 CIA-RDP86-00513R000101110005-2"

"APPROVED FOR RELEASE: 03/20/2001 CIA-RDP86-00513R000101110005-2

L 41367-66 EWT(m)/EWP(j)/T IJP(c) WW/DJ/RM

ACC NR: AP6022886 (A) SOURCE CODE: UR/0138/66/000/004/0002/0003

AUTHOR: Nagibina, T. D.; Yasenkova, L. S.; Alikberova, G. I.; Petrov, A. D. (Deceased); Chernyshev, Ye. A.; Krasnova, T. L.

ORG: Institute of Organic Chemistry im. N. D. Zelinskiy (Institut organicheskoy khimii)

40
36
B

TITLE: A synthetic butadiene-silicostyrene rubber

15

SOURCE: Kauchuk i rezina, no. 4, 1966, 2-3

TOPIC TAGS: synthetic rubber, butadiene styrene rubber, organosilicon compound, COPOLYMERIZATION, EMULSION POLYMERIZATION

ABSTRACT: In order to obtain new types of rubbers, the emulsion copolymerization of n-trimethylsilicostyrene $(CH_3)_3Si-C_6H_4-CH=CH_2$ with butadiene was studied at 60°C, with potassium persulfate or azoisobutyrodinitrile as the polymerization initiator, and also at 5°C in the presence of the redox system tert-butylisopropylbenzene - hydroquinone. n-Trimethylsilicostyrene was obtained from trimethylchlorosilane and n-chlorostyrene. The latexes obtained were stabilized with a 2% alcohol solution of Neozone D. The copolymers obtained with azoisobutyrodinitrile (DKS-30) at 60°C are poorly soluble in benzene (up to 20%); those obtained at 5°C (DKS-30Kh) dissolved in benzene almost completely, and their MW was found to be 270,000. The DKS-30 polymers contain up to 6% Si, and DKS-30Kh, up to 5% Si; this corresponds to a copolymer composition in which 5 and 8 units of butadiene respectively are present for one unit of

Card 1/2 UDC: (678.762.2-134.622+546.28).004.12

APPROVED FOR RELEASE: 03/20/2001 CIA-RDP86-00513R000101110005-2"

"APPROVED FOR RELEASE: 03/20/2001 CIA-RDP86-00513R000101110005-2

L 41367-66

ACC NR: AP6022886

4

n-trimethylsilicostyrene. Rubber mixtures based on DKS-30 and DKS-30Kh copolymers were prepared and vulcanized at 142°C. Vulcanizates of DKS-30 copolymer have a greater wear resistance, fatigue strength, resistance to benzene and heat resistance than vulcanizates prepared from SKS-30. Vulcanizates of the low-temperature copolymers DKS-30Kh surpass vulcanizates from SKS-30A in fatigue strength and heat resistance. The remaining properties of both copolymers are the same as those of vulcanizates from SKS-30 and SKS-30A. Orig. art. has: 1 table.

SUB CODE: 11/ SUBM DATE: 05Oct64/ ORIG REF: 001/ OTH REF: 001

Card 2/2

APPROVED FOR RELEASE: 03/20/2001 CIA-RDP86-00513R000101110005-2"

"APPROVED FOR RELEASE: 03/20/2001 CIA-RDP86-00513R000101110005-2

ALIKHANIDI, A.G., inzh.

Using starterless switching circuits for fluorescent lamps.
Svetotekhnika 4 no.10:5-8 O '58. (MIRA 11:10)

1.Moskovskiy elektrolampovyy zavod.
(Fluorescent lamps)

APPROVED FOR RELEASE: 03/20/2001 CIA-RDP86-00513R000101110005-2"

"APPROVED FOR RELEASE: 03/20/2001 CIA-RDP86-00513R000101110005-2

ALIKHANIDI, A.G., inzh.

Standard measuring choke for fluorescent lamps. Svetotekhnika 5 no.2:8-10 F '59. (MIRA 12:1)

1.Moskovskiy elektrolampovyy zavod.
(Fluorescent lamps--Equipment and supplies)

APPROVED FOR RELEASE: 03/20/2001 CIA-RDP86-00513R000101110005-2"

"APPROVED FOR RELEASE: 03/20/2001 CIA-RDP86-00513R000101110005-2

ALIKHANIDI, A.G., inzh.

Basic requirements for starting apparatus flourescent lamps.
Svetotekhnika 5 no.9:10-14 S '59. (MIRA 13:2)

1. Moskovskiy elektrolampovyy zavod.
(Flouresent lamps)

APPROVED FOR RELEASE: 03/20/2001 CIA-RDP86-00513R000101110005-2"

"APPROVED FOR RELEASE: 03/20/2001 CIA-RDP86-00513R000101110005-2

S/196/61/000/010/C10/037
E194/E155

AUTHORS: Alikhanidi, A.G., and Sasorov, V.P.

TITLE: A rational method of connecting fluorescent lamps

PERIODICAL: Referativnyy zhurnal, Elektrotekhnika i energetika, no.10, 1961, 9-10, abstract 10V 73. (Svetotekhnika, no.4, 1961, 27)

TEXT: The selection of starter or starterless methods of connecting fluorescent lamps should depend upon the circumstances of the particular case. Both methods have their advantages, disadvantages and preferred applications. The correct choice of circuit will provide the required lamp starting and working conditions and minimum losses. In systems for special applications it is sometimes necessary to sacrifice lamp life to reduce the amount of starting equipment, to increase the reliability or the like.

[Abstractor's note: Complete translation.]

Card 1/1

APPROVED FOR RELEASE: 03/20/2001 CIA-RDP86-00513R000101110005-2"

"APPROVED FOR RELEASE: 03/20/2001 CIA-RDP86-00513R000101110005-2

ALIKHANIDI, A.G., inzh.; SASOROV, V.P., kand.tekhn.nauk

Efficient circuit for connecting fluorescent lamps. Svetotekhnika 7 no.4:27 Ap '61. (MIRA 14:6)
(Fluorescent lamps)

APPROVED FOR RELEASE: 03/20/2001 CIA-RDP86-00513R000101110005-2"

"APPROVED FOR RELEASE: 03/20/2001 CIA-RDP86-00513R000101110005-2

ALIKHANIDI, A.G., inzh.

Concerning the use of a circuit for the quick ignition of fluorescent lamps for use by railroads. Svetotekhnika 7 no.4:28-29 Ap '61. (MIRA 14:6)

(Railroads--Electric lighting)
(Fluorescent lamps)

APPROVED FOR RELEASE: 03/20/2001 CIA-RDP86-00513R000101110005-2"

"APPROVED FOR RELEASE: 03/20/2001 CIA-RDP86-00513R000101110005-2

ALIKHANIDI, A.G., inzh.

Characteristics of fluorescent lamps and ballast devices with a frequency of 440 c.p.s. Svetotekhnika 7 no.10:8-13 O '61. (MIRA 14:9)

1. Moskovskiy elektrolampovyy zavod.
(Fluorescent lamps)

APPROVED FOR RELEASE: 03/20/2001 CIA-RDP86-00513R000101110005-2"

"APPROVED FOR RELEASE: 03/20/2001 CIA-RDP86-00513R000101110005-2

ALIKHANIDI, A.G., inzh.

Some special features of high-speed ignition start regulating equipment. Svetotekhnika 8 no.10:20-25 O '62. (MIRA 15:9)

1. Moskovskiy elektrolampovyy zavod.
(Electric lighting)

APPROVED FOR RELEASE: 03/20/2001 CIA-RDP86-00513R000101110005-2"

"APPROVED FOR RELEASE: 03/20/2001 CIA-RDP86-00513R000101110005-2

ALIKHANIDI, A.G., inzh.

Use of start regulating apparatus. Svetotekhnika 9 no.7:13-17 Jl '63. (MIRA 16:7)

1. Moskovskiy elektrolampovyy zavod.
(Fluorescent lighting)

APPROVED FOR RELEASE: 03/20/2001 CIA-RDP86-00513R000101110005-2"

"APPROVED FOR RELEASE: 03/20/2001 CIA-RDP86-00513R000101110005-2

ALIKHANIDI, A.G., inzh.; KRASNOPOL'SKIY, A.Ye., kand. tekhn. nauk;
LITVINOV, V.S., kand. tekhn. nauk

Choice of networks for connecting fluorescent lamps.
Svetotekhnika 9 no.9:22-24 S '63. (MIRA 16:10)

1. Moskovskiy elektrolampovyy zavod i Moskovskiy energeticheskiy institut.

APPROVED FOR RELEASE: 03/20/2001 CIA-RDP86-00513R000101110005-2"

"APPROVED FOR RELEASE: 03/20/2001 CIA-RDP86-00513R000101110005-2

ALIKHANIDI, A.G.

Analysis of circuits and testing methods of standard measuring choke coils. Izm.tekh. no.11:38-40 N '63. (MIRA 16:12)

APPROVED FOR RELEASE: 03/20/2001 CIA-RDP86-00513R000101110005-2"

"APPROVED FOR RELEASE: 03/20/2001 CIA-RDP86-00513R000101110005-2

ALIKHANIDI, A.G., inzh.

Graph for determining choke voltage. Energetik 11 no.9:24 S '63. (MIRA 16:10)

APPROVED FOR RELEASE: 03/20/2001 CIA-RDP86-00513R000101110005-2"

"APPROVED FOR RELEASE: 03/20/2001 CIA-RDP86-00513R000101110005-2

ALIKHANIDI, A.G., inzh.

Standard measuring choke with a new design. Svetotekhnika 10 no.2:27-29 F '64. (MIRA 17:4)

1. Moskovskiy elektrolampovyy zavod.

APPROVED FOR RELEASE: 03/20/2001 CIA-RDP86-00513R000101110005-2"

"APPROVED FOR RELEASE: 03/20/2001 CIA-RDP86-00513R000101110005-2

ALIKHANIDI, A.G., inzh.

Method for calculating a transformer with leakage. Elektrotekhnika 35 no.12:54-58 D '64. (MIRA 18:4)

APPROVED FOR RELEASE: 03/20/2001 CIA-RDP86-00513R000101110005-2"

"APPROVED FOR RELEASE: 03/20/2001 CIA-RDP86-00513R000101110005-2

ALIKHANOV, A.A.

538 Opyt po likuidatsii yalouosti korov na molochno-touarnoy ferme kolkhoza imeni Zhdanova, lakskogo rayona. Makhochkala. Dagknigoizdat, 1954. 8 s. 20sm. (M-vo sel'skogo khozyaystva Dagest. ASSR. Upr. s-kh. propagandy i nauki. Dagest. resp. s-kzh. Vystavka). 1.000 ekz. Bespl.-/54-54207/ p. 636.2082.454. (47.914)

SO: Knizhnaya Letopos, Vol. 1, 1955

APPROVED FOR RELEASE: 03/20/2001 CIA-RDP86-00513R000101110005-2"

"APPROVED FOR RELEASE: 03/20/2001 CIA-RDP86-00513R000101110005-2

USSR/General Biology - Individual Development. Embryonal Development. B

Abs Jour : Ref Zhur Biol., No 6, 1959, 23593

Author : Alikhanov, A.A.

Inst : Institute of Animal Husbandry, Dagestan Division of Academy of Sciences

Title : Some Laws of the Growth of Follicles of Sheep Ovaries.

Orig Pub : Tr. In-ta zhivotnovodstva. Dagestansk. fil. AN SSSR, 1956, 3, 96-111

Abstract : The change of shape and location of follicles with respect to the surface of ovary was studied on the material of 21 ovaries from 13 sheep. The significance of the "wedge" for the exit of the ripe follicle to the surface was determined. The following stages connected with the location, character of moving and shape of follicles

Card 1/2

APPROVED FOR RELEASE: 03/20/2001 CIA-RDP86-00513R000101110005-2"

"APPROVED FOR RELEASE: 03/20/2001 CIA-RDP86-00513R000101110005-2

USSR/General Biology - Individual Development. Embryonal Development. B

Abs Jour : Ref Zhur Biol., No 6, 1959, 23593

were determined: primordial spherical, which lie on the surface of the ovary with single layer membrane; ellipsoid, with double-layer membrane; pear-shaped, with triple-layer (the stage is ended by the time of the formation of many-layered membrane), cone-shaped, with an average diameter of 1 mm. At this stage (the follicle diameter from 1 to 2 mm), the submersion of the area of the granulous membrane which is directed towards the free surface terminates. The approach of this part of the membrane to the surface follows. A ripe follicle has the shape of an eyeball. The author states that the "wedge" is the result of depression of the follicle inside of the ovary and is not device which assists the motion of the follicle towards the surface. -- Yu.B. Bayevskiy

Card 2/2

APPROVED FOR RELEASE: 03/20/2001 CIA-RDP86-00513R000101110005-2"

"APPROVED FOR RELEASE: 03/20/2001 CIA-RDP86-00513R000101110005-2

USSR/Human and Animal Physiology. Internal Secretion. Sex Glands.

T-8

Abs Jour: Ref Zhur-Biol., No 12, 1958, 55933.

Author : Alikhanov, A.A.
Inst : Institute of Animal Husbandry, Academy of Sciences USSR, Daghestan Section.
Title : The Methods of Examining in vivo the Ovaries in Sheep.

Orig Pub: Tr. In-ta zhivotnovodstva. Dagest fil. AN SSSR, 1956, 4, 68-70.

Abstract: No abstract.

Card : 1/1

APPROVED FOR RELEASE: 03/20/2001 CIA-RDP86-00513R000101110005-2"

"APPROVED FOR RELEASE: 03/20/2001 CIA-RDP86-00513R000101110005-2

USSR / Human and Animal Physiology. Internal Secretion. T
Sexual Glands.

Abs Jour: Ref Zhur-Biol., No 22, 1958, 102107.

Author : Alikhanov, A. A.
Inst : Dagestan Scientific Research Institute of Agriculture.
Title : A Biological Method for Estrogen Hormone Determination.

Orig Pub: Byul. nauchno-tekhn. inform. Dagestansk. n.-i. in-ta s. kh. 1957, No 1, 48-49.

Abstract: A method of determination of estrogens (I) on mice is proposed based on the reaction of the vaginal epithelium after intravaginal introduction of I. The methods allows determining a considerably smaller account of I than does the method of Allen-Doisy.

Card 1/1

APPROVED FOR RELEASE: 03/20/2001 CIA-RDP86-00513R000101110005-2"

"APPROVED FOR RELEASE: 03/20/2001 CIA-RDP86-00513R000101110005-2

ALIKHANOV A. I.

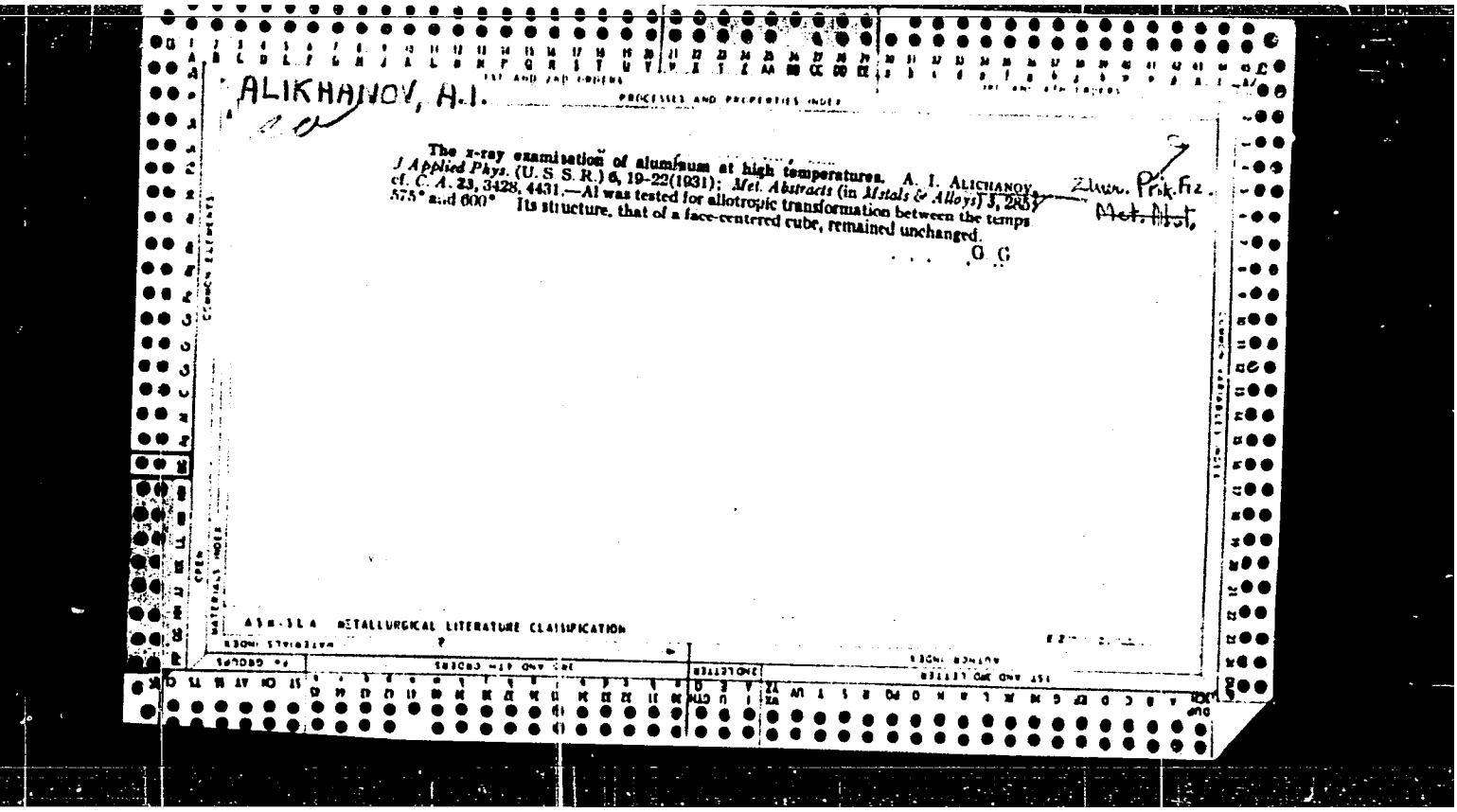
ALICHANOV, A.J.

"X-ray Investigation of Aluminum at High Temperatures," Zeitschrift fur Metallkunde, Vol. 21, No1 4, p. 127, 1929.

Leningrad. Physikalisch-Technisches Institut

APPROVED FOR RELEASE: 03/20/2001 CIA-RDP86-00513R000101110005-2"

"APPROVED FOR RELEASE: 03/20/2001 CIA-RDP86-00513R000101110005-2



ALIKHANOV, A.I.

The x-ray examination of aluminum at high temperatures. A. I. ALICHANOV. *J Applied Phys.* (U. S. S. R.) 6, 19-22(1931); *Met. Abstracts* (in *Metals & Alloys*) 3, 285; cf. *C. A.* 23, 3428, 4431.—Al was tested for allotropic transformation between the temps 575° and 600° Its structure, that of a face-centered cube, remained unchanged.

Zhur. Prik. Fiz. Met. Abst.

O. G.

A S M - S L A METALLURGICAL LITERATURE CLASSIFICATION

APPROVED FOR RELEASE: 03/20/2001 CIA-RDP86-00513R000101110005-2"

"APPROVED FOR RELEASE: 03/20/2001 CIA-RDP86-00513R000101110005-2

A.I.

ALICHANOV, A.I. and ARZIMOVIC, L.A.

"The Partial Absorption of X-Ray Quanta," Zeitschrift fur Physik, Vol. 69, pp. 853-856, 1931.

APPROVED FOR RELEASE: 03/20/2001 CIA-RDP86-00513R000101110005-2"

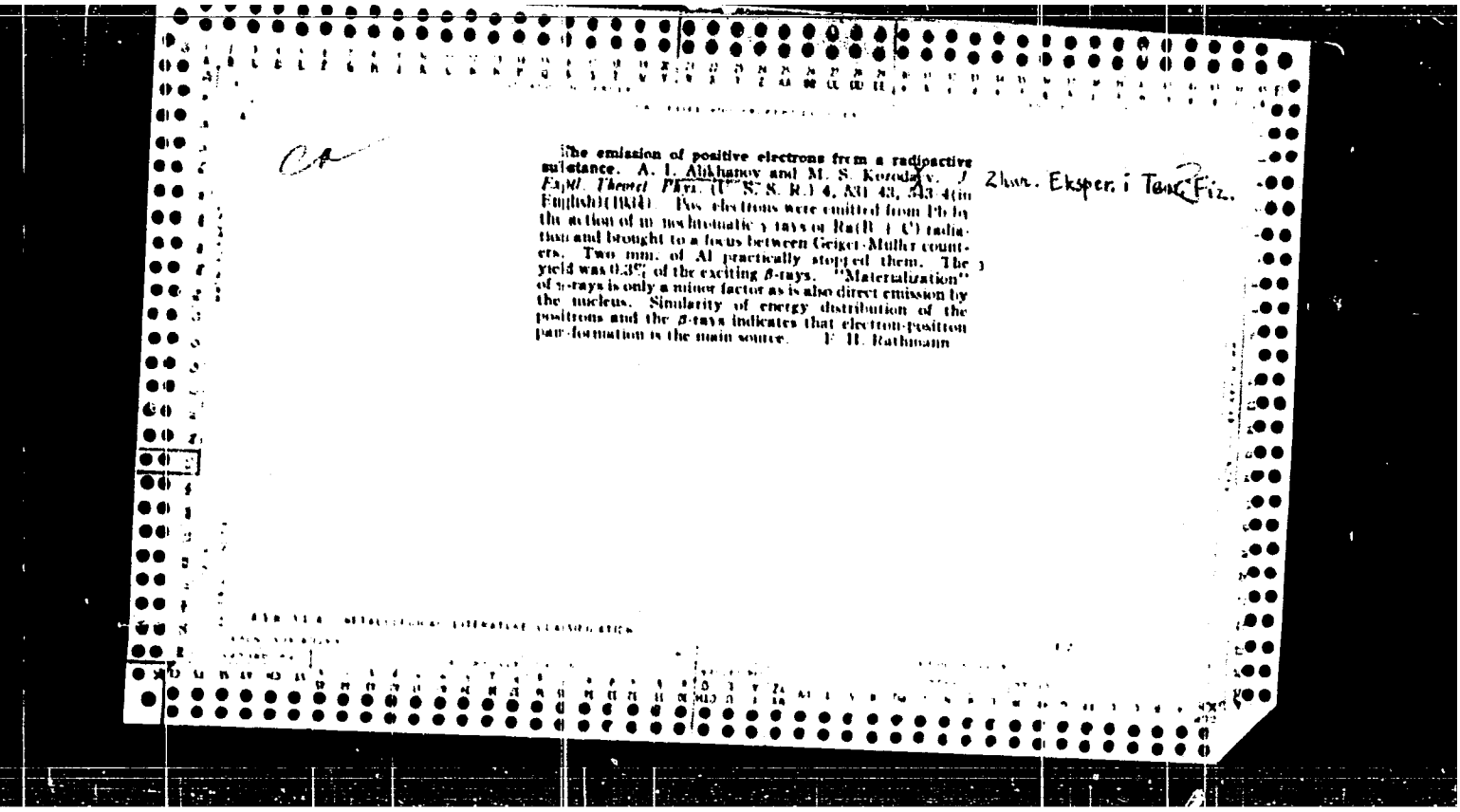
"APPROVED FOR RELEASE: 03/20/2001 CIA-RDP86-00513R000101110005-2

ALIKHANOV, A.I., and ARTSIMOVICH, L.A.

"Total Reflection of X-Rays by Thin Layers," Zetischrift für Physik, Vol. 82, pp 489-506, 1933. Zhurnal Eksperimental'noi i Teoreticheskoi Fiziki, 1933, Vol. 3, p115

APPROVED FOR RELEASE: 03/20/2001 CIA-RDP86-00513R000101110005-2"

"APPROVED FOR RELEASE: 03/20/2001 CIA-RDP86-00513R000101110005-2



The emission of positive electrons from a radioactive substance. A. I. Alikhanov and M. S. Kozodaev. *J. Exptl. Theoret. Phys.* (U. S. S. R.) 4, 831-43, 933-4 (in English) (1934). Pos. electrons were emitted from Pb by the action of 10 inch-quantic γ rays of Ra(B + C) radiation and brought to a focus between Geiger-Müller counters. Two mm. of Al practically stopped them. The yield was 0.3%; of the exciting β-rays. "Materialization" of γ-rays is only a minor factor as is also direct emission by the nucleus. Similarity of energy distribution of the positrons and the β-rays indicates that electron-positron pair-formation is the main source. F. H. Rathmann

Zhur. Eksper. i Teor. Fiz.

APPROVED FOR RELEASE: 03/20/2001 CIA-RDP86-00513R000101110005-2"

"APPROVED FOR RELEASE: 03/20/2001 CIA-RDP86-00513R000101110005-2

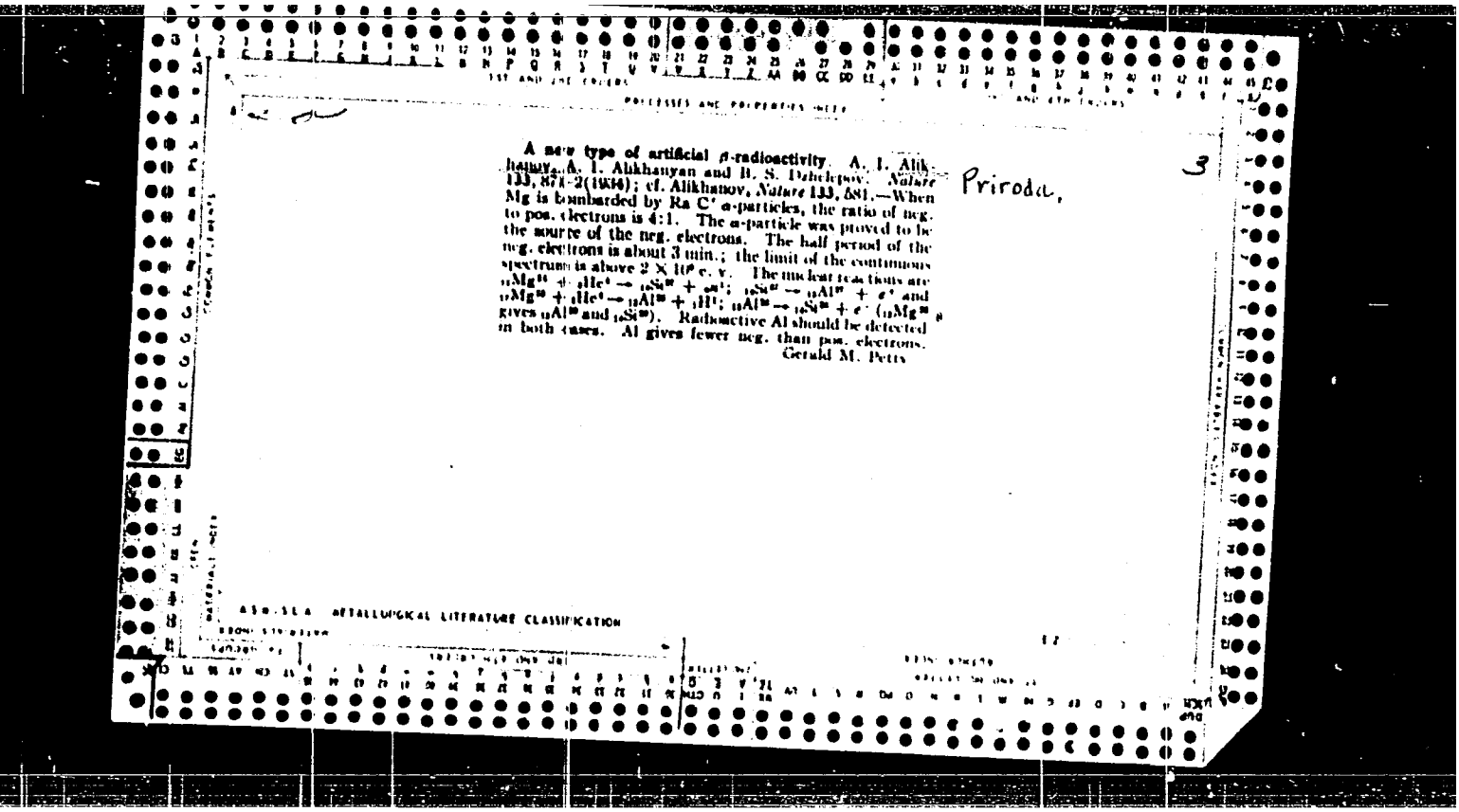
ALIKHANOV A I

ALICHANOV, A.I. and KOSODAEW, M.S.

"The Emission of Positive Electrons from a Radioactive Source," Zeitschrift für Physik, Vol. 90, pp. 249-265, 1934.

APPROVED FOR RELEASE: 03/20/2001 CIA-RDP86-00513R000101110005-2"

"APPROVED FOR RELEASE: 03/20/2001 CIA-RDP86-00513R000101110005-2



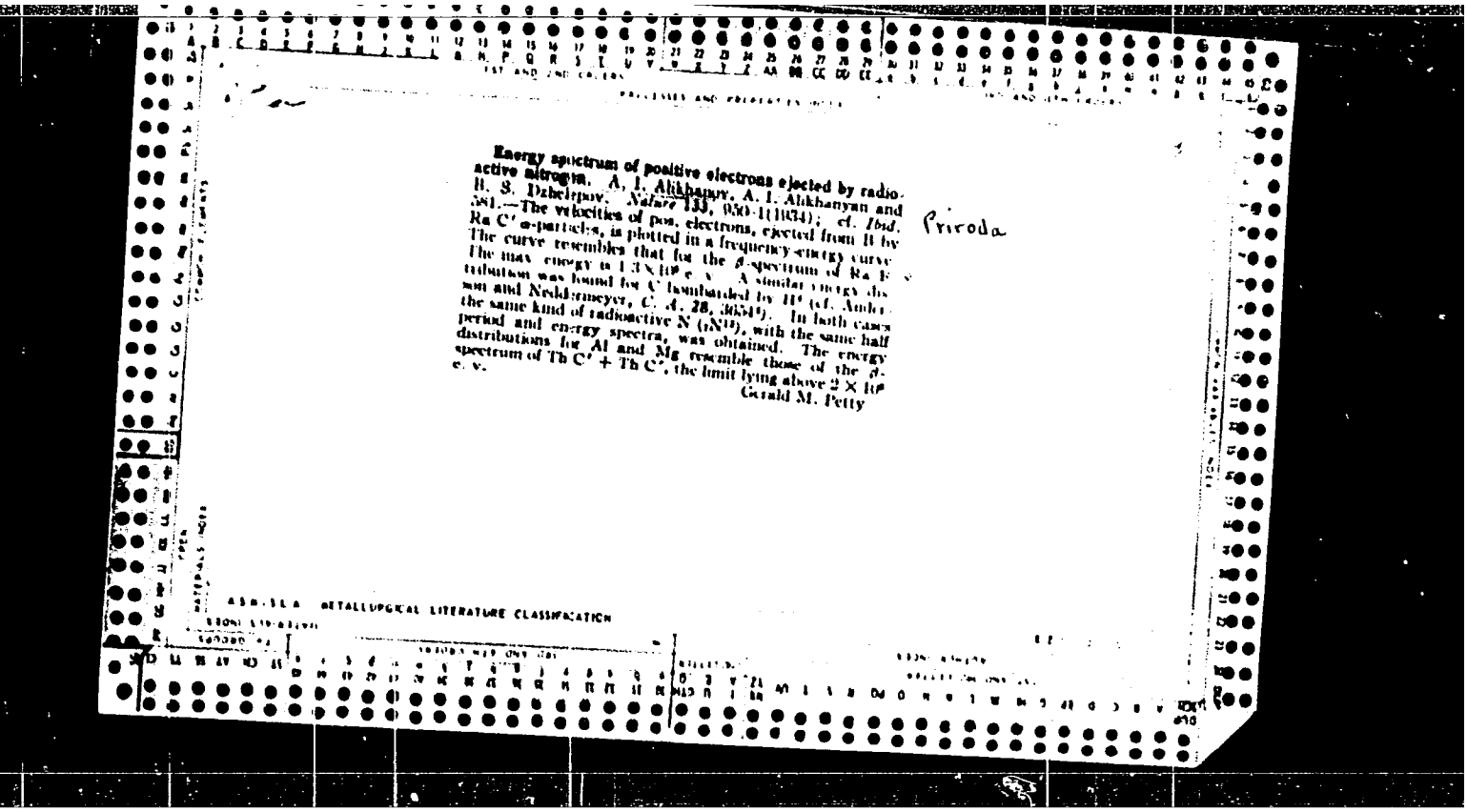
A new type of artificial β-radioactivity. A. I. Alikhanov, A. I. Alikhanyan and B. S. Dzhelepov. *Nature* 133, 871-2(1934); cf. Alikhanov, *Nature* 133, 681.—When Mg is bombarded by Ra C' α-particles, the ratio of neg. to pos. electrons is 4:1. The α-particle was proved to be the source of the neg. electrons. The half period of the neg. electrons is about 3 min.; the limit of the continuous spectrum is above 2×10^6 e. v. The nuclear reactions are $_{12}Mg^{26} + {}_2He^4 \rightarrow {}_{14}Si^{29} + {}_0n^1$; $_{14}Si^{29} \rightarrow {}_{13}Al^{29} + e^+$ and $_{12}Mg^{26} + {}_2He^4 \rightarrow {}_{13}Al^{29} + {}_1H^1$; $_{13}Al^{29} \rightarrow {}_{14}Si^{29} + e^-$ ($_{12}Mg^{26}$ gives $_{13}Al^{29}$ and $_{14}Si^{29}$). Radioactive Al should be detected in both cases. Al gives fewer neg. than pos. electrons.
Gerald M. Petty

Priroda, 3

ASM-SLA METALLURGICAL LITERATURE CLASSIFICATION

APPROVED FOR RELEASE: 03/20/2001 CIA-RDP86-00513R000101110005-2"

"APPROVED FOR RELEASE: 03/20/2001 CIA-RDP86-00513R000101110005-2



Energy spectrum of positive electrons ejected by radioactive nitrogen. A. I. Alikhanov, A. I. Alikhanyan and H. S. Dzhelepov. *Nature* **133**, 930-1(1934); cf. *Ibid.* 581.—The velocities of pos. electrons, ejected from B by Ra C' α-particles, is plotted in a frequency-energy curve. The curve resembles that for the β-spectrum of Ra E. The max. energy is 1.3×10^6 e. v. A similar energy distribution was found for C bombarded by H^+ (cf. Anderson and Neddermeyer, *C. A.* **28**, 3654). In both cases the same kind of radioactive N (N^{13}), with the same half period and energy spectra, was obtained. The energy distributions for Al and Mg resemble those of the β-spectrum of Th C' + Th C'', the limit lying above 2×10^6 e. v.

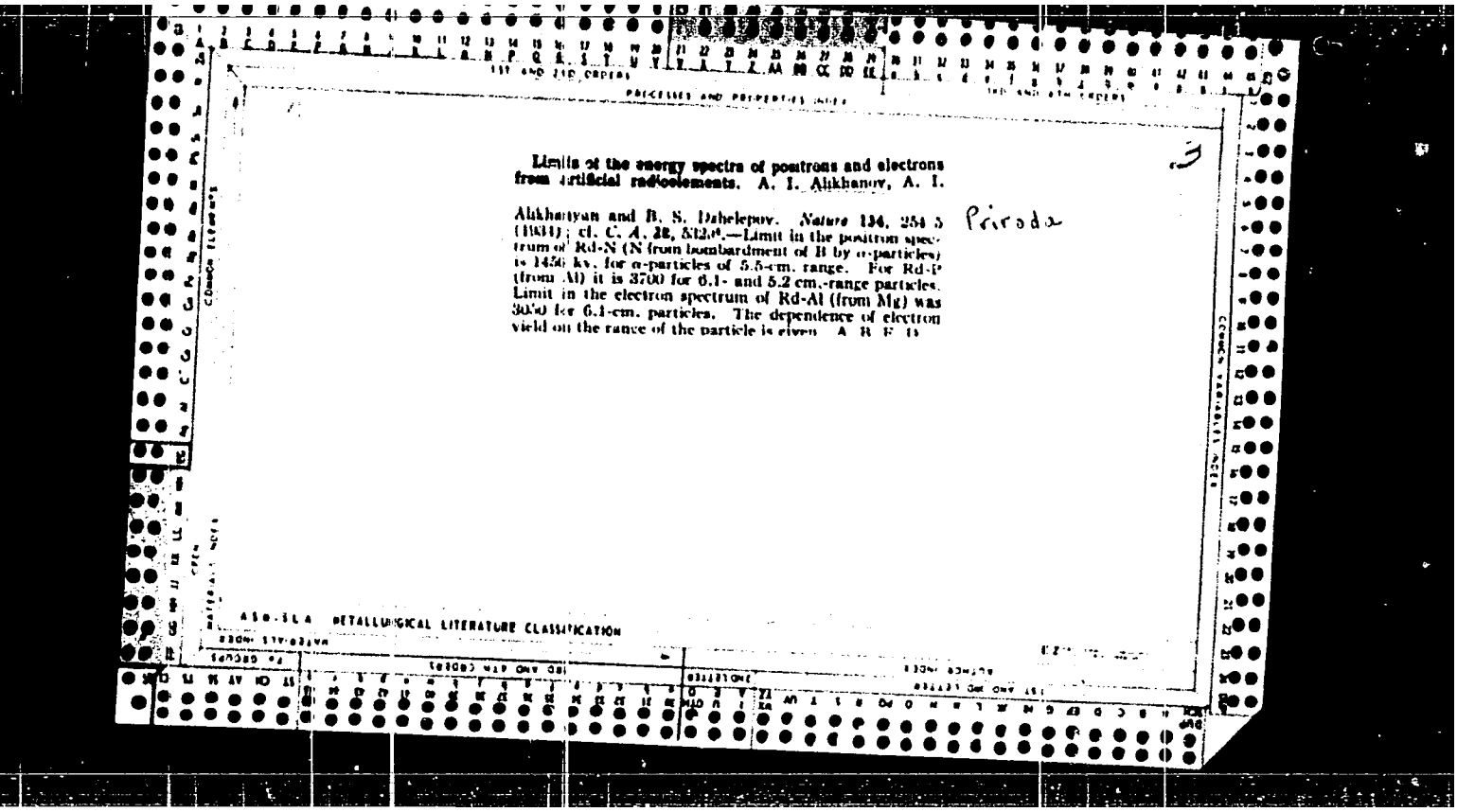
Gerald M. Petty

Priroda

ASM-SLA METALLURGICAL LITERATURE CLASSIFICATION

APPROVED FOR RELEASE: 03/20/2001 CIA-RDP86-00513R000101110005-2"

"APPROVED FOR RELEASE: 03/20/2001 CIA-RDP86-00513R000101110005-2



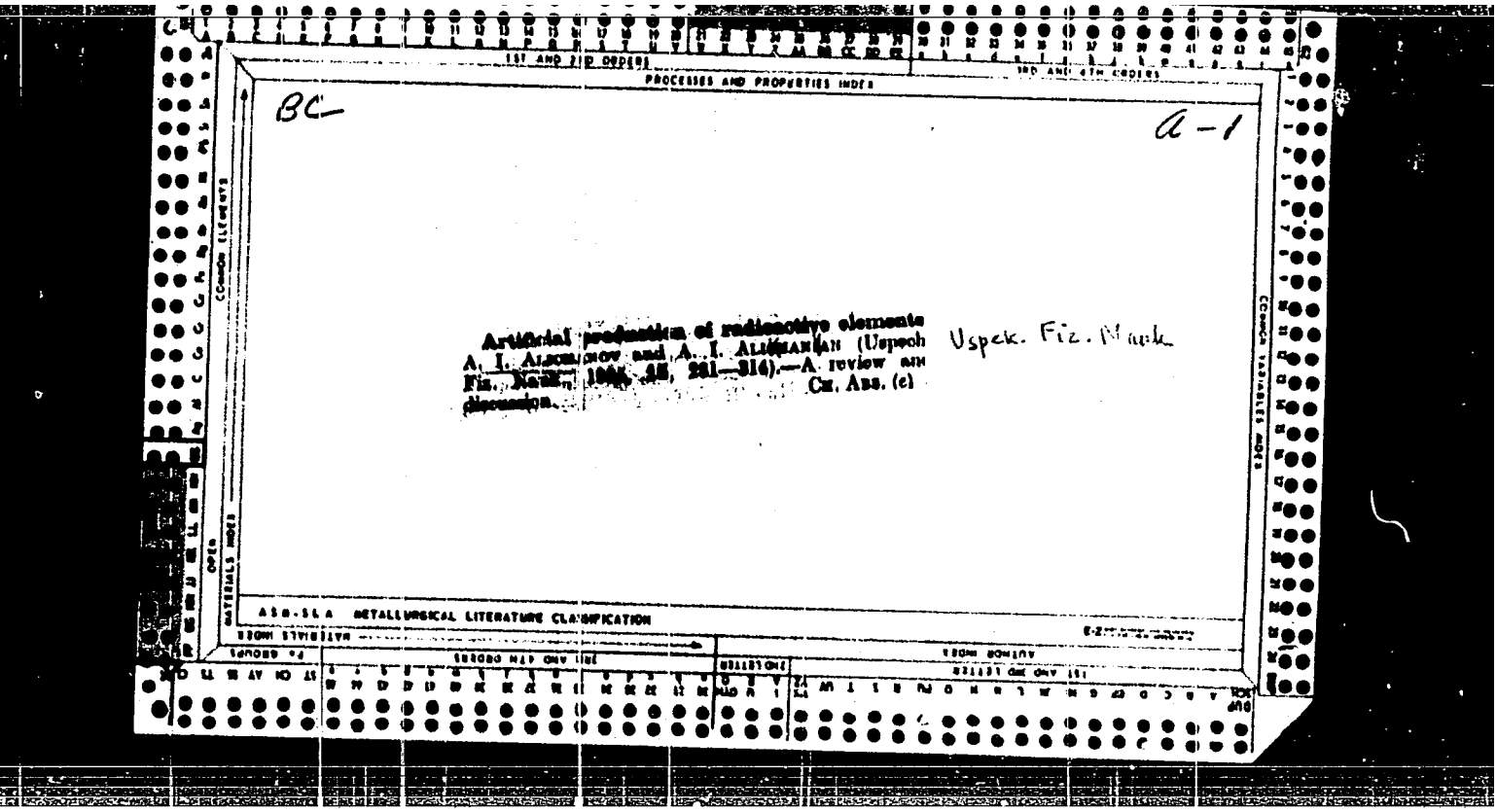
Limits of the energy spectra of positrons and electrons from artificial radioelements. A. I. Alikhanov, A. I. Alikhanyan and B. S. Dzhelepov. *Nature* 134, 254–5 (1934); cf. *C. A.* 28, 532⁸.—Limit in the positron spectrum of Rd-N (N from bombardment of B by α-particles) is 1450 kv. for α-particles of 5.5-cm. range. For Rd-P (from Al) it is 3700 for 6.1- and 5.2 cm.-range particles. Limit in the electron spectrum of Rd-Al (from Mg) was 3050 for 6.1-cm. particles. The dependence of electron yield on the range of the particle is given. A. R. F.

Physics

A50-5L4 METALLURGICAL LITERATURE CLASSIFICATION

APPROVED FOR RELEASE: 03/20/2001 CIA-RDP86-00513R000101110005-2"

"APPROVED FOR RELEASE: 03/20/2001 CIA-RDP86-00513R000101110005-2



APPROVED FOR RELEASE: 03/20/2001 CIA-RDP86-00513R000101110005-2"

"APPROVED FOR RELEASE: 03/20/2001 CIA-RDP86-00513R000101110005-2

ALIKHANOV, A.I.

"Artificial Radioactivity," Zeitschrift für Physik, Vol. 93, pp 350-363, 1935.

APPROVED FOR RELEASE: 03/20/2001 CIA-RDP86-00513R000101110005-2"

"APPROVED FOR RELEASE: 03/20/2001 CIA-RDP86-00513R000101110005-2

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

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

Physical-Technical Instiutute, Leningrad.

APPROVED FOR RELEASE: 03/20/2001 CIA-RDP86-00513R000101110005-2"

"APPROVED FOR RELEASE: 03/20/2001 CIA-RDP86-00513R000101110005-2

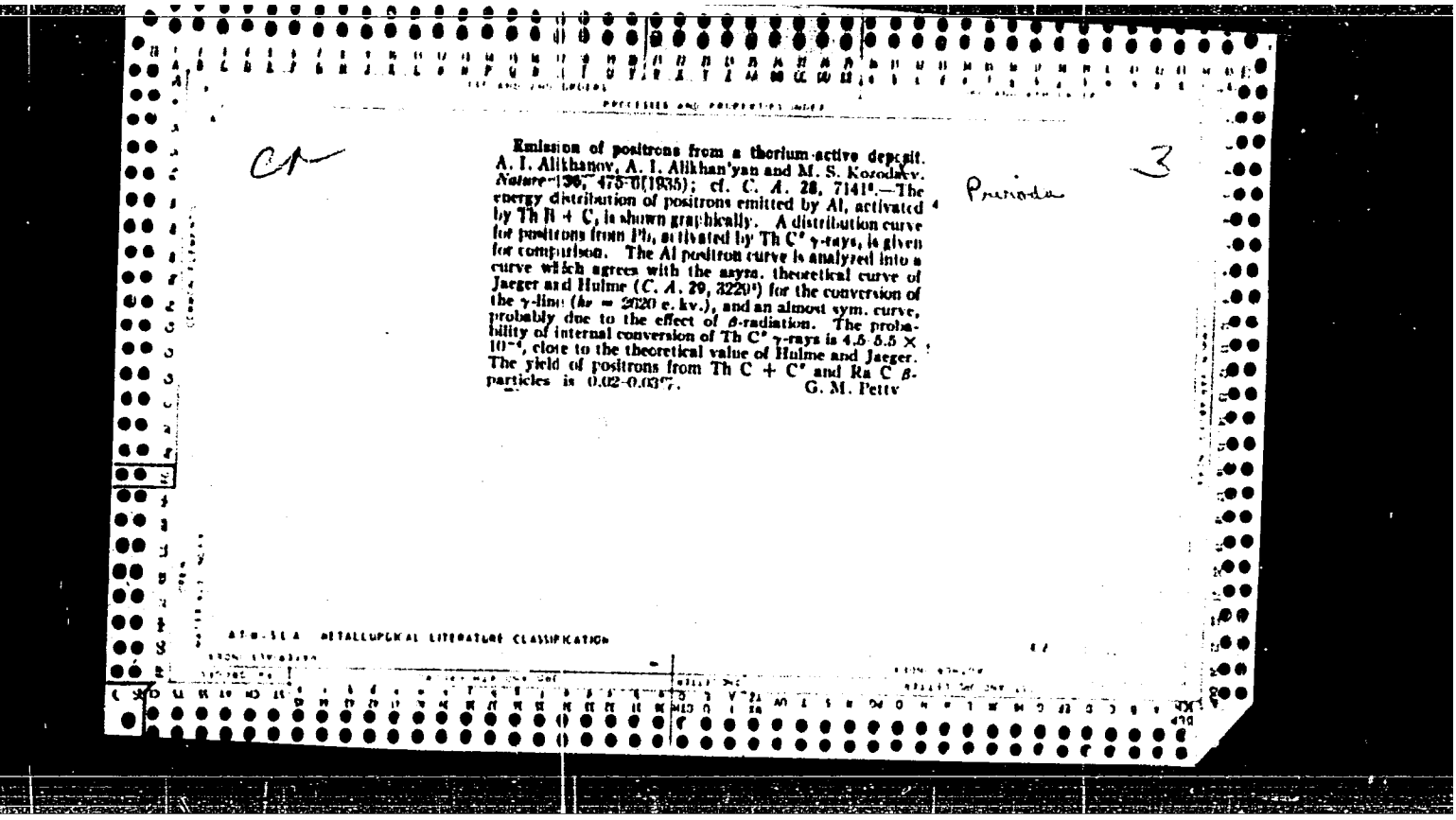
ALIKHANOV, A.I., and ALICHANIAN, A.I., And DZELEPOV, B.S.

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

Physical-Technical Institute, Leningrad.

APPROVED FOR RELEASE: 03/20/2001 CIA-RDP86-00513R000101110005-2"

"APPROVED FOR RELEASE: 03/20/2001 CIA-RDP86-00513R000101110005-2

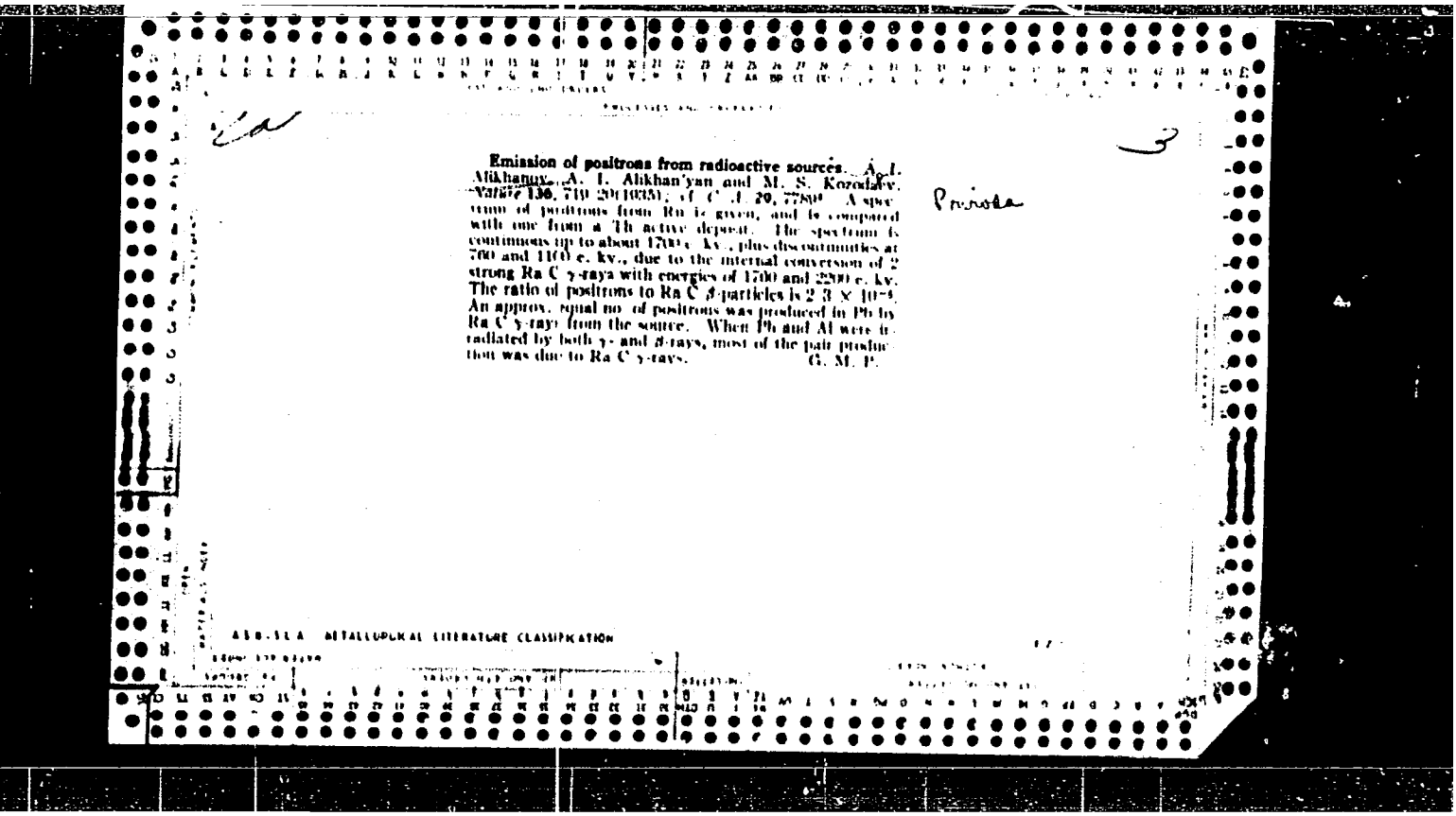


Emission of positrons from a thorium-active deposit. A. I. Alikhanov, A. I. Alikhan'yan and M. S. Kozodaev. *Nature* 136, 475-6(1935); cf. C. A. 28, 7141⁶.—The energy distribution of positrons emitted by Al, activated by Th B + C, is shown graphically. A distribution curve for positrons from Pb, activated by Th C″ γ-rays, is given for comparison. The Al positron curve is analyzed into a curve which agrees with the asym. theoretical curve of Jaeger and Hulme (C. A. 29, 3220⁴) for the conversion of the γ-line ($h\nu$ = 2620 e. kv.), and an almost sym. curve, probably due to the effect of β-radiation. The probability of internal conversion of Th C″ γ-rays is 4.5-5.5 × 10^{-4}, close to the theoretical value of Hulme and Jaeger. The yield of positrons from Th C + C″ and Ra C β-particles is 0.02-0.03%.

G. M. Petty

APPROVED FOR RELEASE: 03/20/2001 CIA-RDP86-00513R000101110005-2"

"APPROVED FOR RELEASE: 03/20/2001 CIA-RDP86-00513R000101110005-2



Emission of positrons from radioactive sources. A. I. Alikhanov, A. I. Alikhan'yan and M. S. Kozodaev. *Nature* 136, 710 20/10/35); cf. *C. A.* 29, 7780[9]. A spectrum of positrons from Ra is given, and is compared with one from a Th active deposit. The spectrum is continuous up to about 1700 e. kv., plus discontinuities at 700 and 1160 e. kv., due to the internal conversion of 2 strong Ra C γ-rays with energies of 1700 and 2200 e. kv. The ratio of positrons to Ra C β-particles is 2.3×10^{-4}. An approx. equal no. of positrons was produced in Pb by Ra C γ-rays from the source. When Pb and Al were irradiated by both γ- and β-rays, most of the pair production was due to Ra C γ-rays. G. M. P.

Private

A.S.T.M. METALLURGICAL LITERATURE CLASSIFICATION

APPROVED FOR RELEASE: 03/20/2001 CIA-RDP86-00513R000101110005-2"

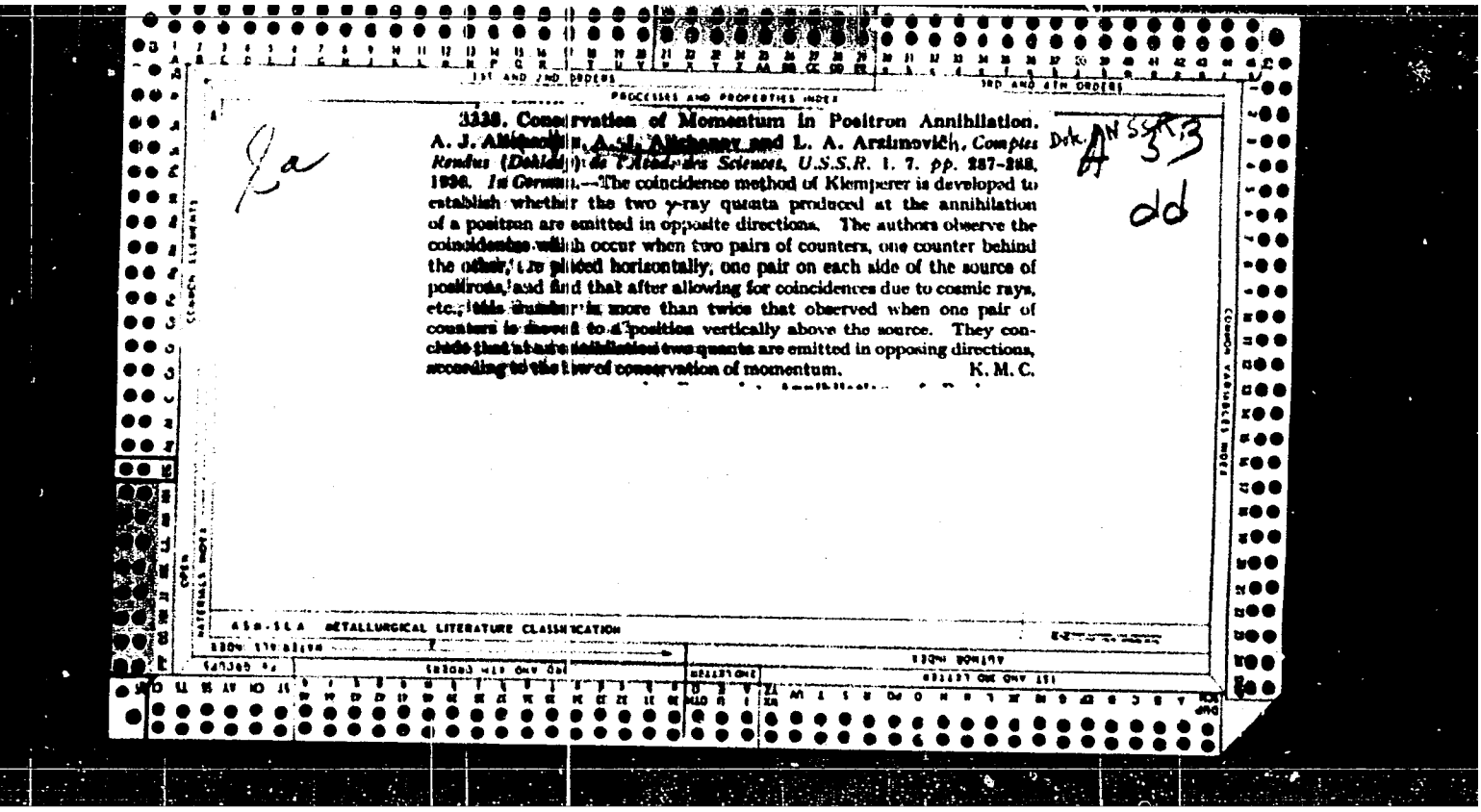
"APPROVED FOR RELEASE: 03/20/2001 CIA-RDP86-00513R000101110005-2

ALIKHANOV, Abram Isaakovich.

"Investigation of Radioactivity," 1936, 1938, and 1940. Cor. Mbr., Acad. of Sci., -1941-. Stalin 2nd Prize, 1940, publs.

APPROVED FOR RELEASE: 03/20/2001 CIA-RDP86-00513R000101110005-2"

"APPROVED FOR RELEASE: 03/20/2001 CIA-RDP86-00513R000101110005-2



PROCESSES AND PROPERTIES INDEX

1st AND 2nd ORDERS

3rd AND 4th ORDERS

3238. Conservation of Momentum in Positron Annihilation. A. J. Alikhanov, A. I. Alikhanov and L. A. Artimovich, *Comptes Rendus (Doklady) de l'Académie des Sciences, U.S.S.R.* 1. 7. pp. 287–288, 1936. *In German.*—The coincidence method of Klemperer is developed to establish whether the two γ-ray quanta produced at the annihilation of a positron are emitted in opposite directions. The authors observe the coincidences which occur when two pairs of counters, one counter behind the other, are placed horizontally, one pair on each side of the source of positrons, and find that after allowing for coincidences due to cosmic rays, etc., this number is more than twice that observed when one pair of counters is moved to a position vertically above the source. They conclude that annihilation two quanta are emitted in opposing directions, according to the law of conservation of momentum. K. M. C.

Dok. AN SSSR 3 3

dd

ASM-SLA METALLURGICAL LITERATURE CLASSIFICATION

APPROVED FOR RELEASE: 03/20/2001 CIA-RDP86-00513R000101110005-2"

"APPROVED FOR RELEASE: 03/20/2001 CIA-RDP86-00513R000101110005-2

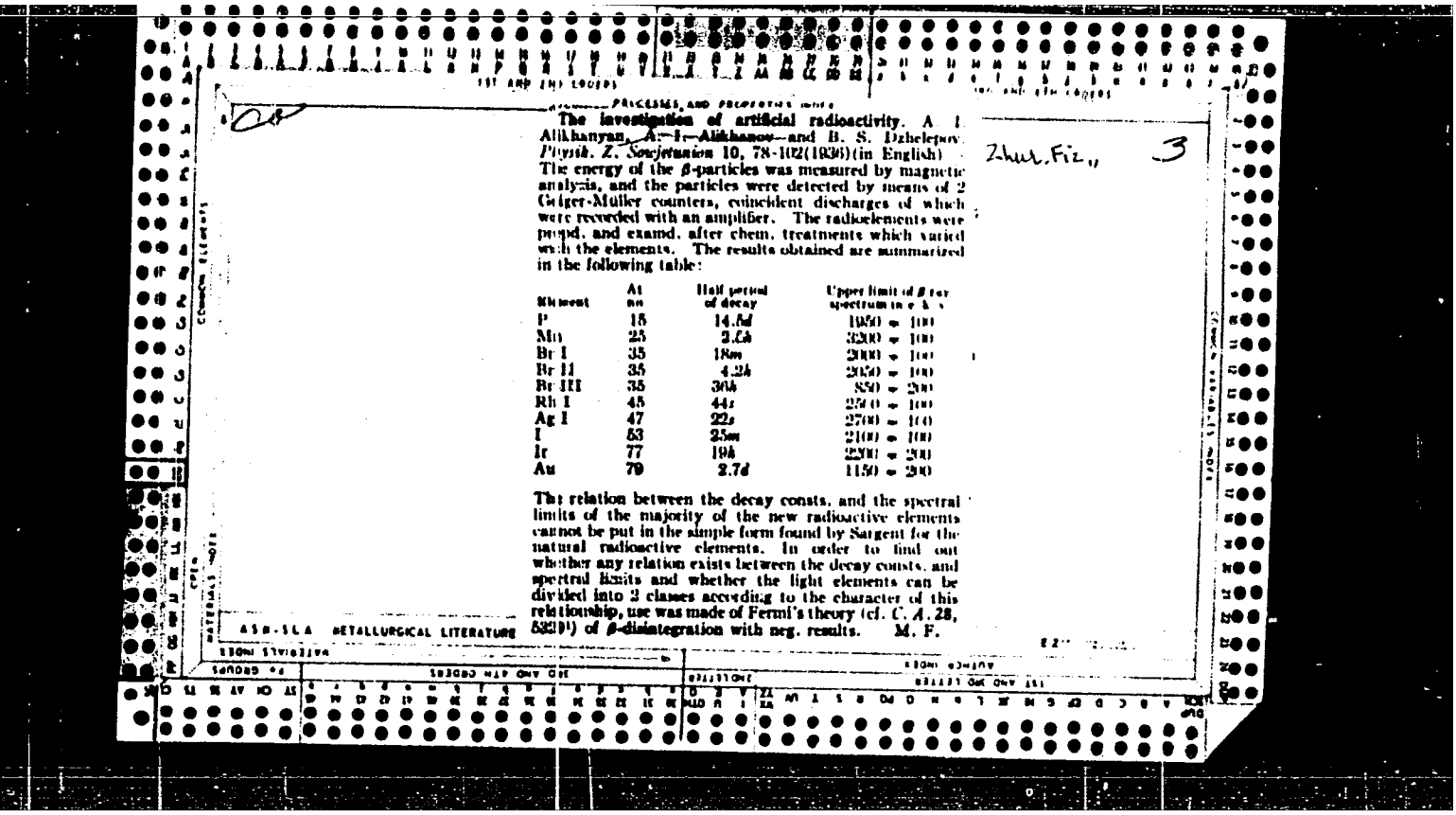
ALIKHANOV, I.A. and ALICHANIAN, A.I., and KOZODAEV, M.S.

"Emission of Positrons by a Radioactive Source," Le Jonrnal de Physique et le Radium, Serie 7, Vol. 7, pp. 163-172, 1936.

Institut Physico Technique de Leningrad

APPROVED FOR RELEASE: 03/20/2001 CIA-RDP86-00513R000101110005-2"

"APPROVED FOR RELEASE: 03/20/2001 CIA-RDP86-00513R000101110005-2



The investigation of artificial radioactivity. A. I. Alikhanyan, A. I. Alikhanow—and B. S. Dzhelepov. *Physik. Z. Sowjetunion* 10, 78-102(1936)(in English). The energy of the β-particles was measured by magnetic analysis, and the particles were detected by means of 2 Geiger-Müller counters, coincident discharges of which were recorded with an amplifier. The radioelements were prepd. and examd. after chem. treatments which varied with the elements. The results obtained are summarized in the following table:

Element	At. no.	Half period of decay	Upper limit of β ray spectrum in e. v.
P	15	14.5d	1050 ± 100
Mn	25	2.6h	3200 ± 100
Br I	35	18m	2000 ± 100
Br II	35	4.2h	2050 ± 100
Br III	35	36h	850 ± 200
Rh I	45	44s	2500 ± 100
Ag I	47	22s	2700 ± 100
I	53	25m	2100 ± 100
Ir	77	19h	2300 ± 200
Au	79	2.7d	1150 ± 200

The relation between the decay consts. and the spectral limits of the majority of the new radioactive elements cannot be put in the simple form found by Sargent for the natural radioactive elements. In order to find out whether any relation exists between the decay consts. and spectral limits and whether the light elements can be divided into 2 classes according to the character of this relationship, use was made of Fermi's theory (cf. *C. A.* **28**, 5239) of β-disintegration with neg. results. M. F.

Zhur. Fiz., 3

ASM-SLA METALLURGICAL LITERATURE

APPROVED FOR RELEASE: 03/20/2001 CIA-RDP86-00513R000101110005-2"

"APPROVED FOR RELEASE: 03/20/2001 CIA-RDP86-00513R000101110005-2

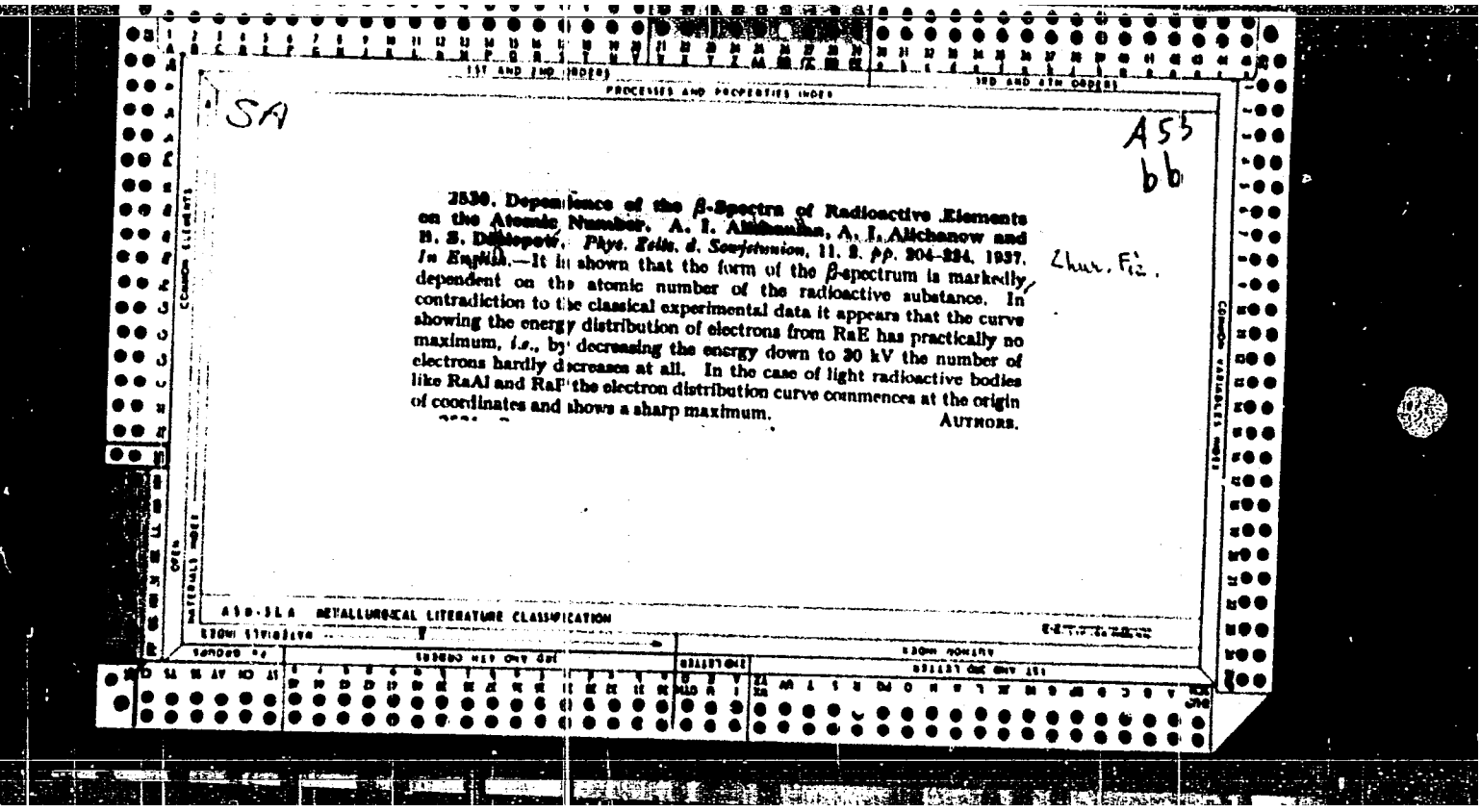
ALIKHANOV, A.I. ALICHANIAN, A.I., and DVELEPOV, B.S.

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

Physical-Technical Institute, Leningrad.

APPROVED FOR RELEASE: 03/20/2001 CIA-RDP86-00513R000101110005-2"

"APPROVED FOR RELEASE: 03/20/2001 CIA-RDP86-00513R000101110005-2



PROCESSES AND PROPERTIES INDEX

SA

A55
bb

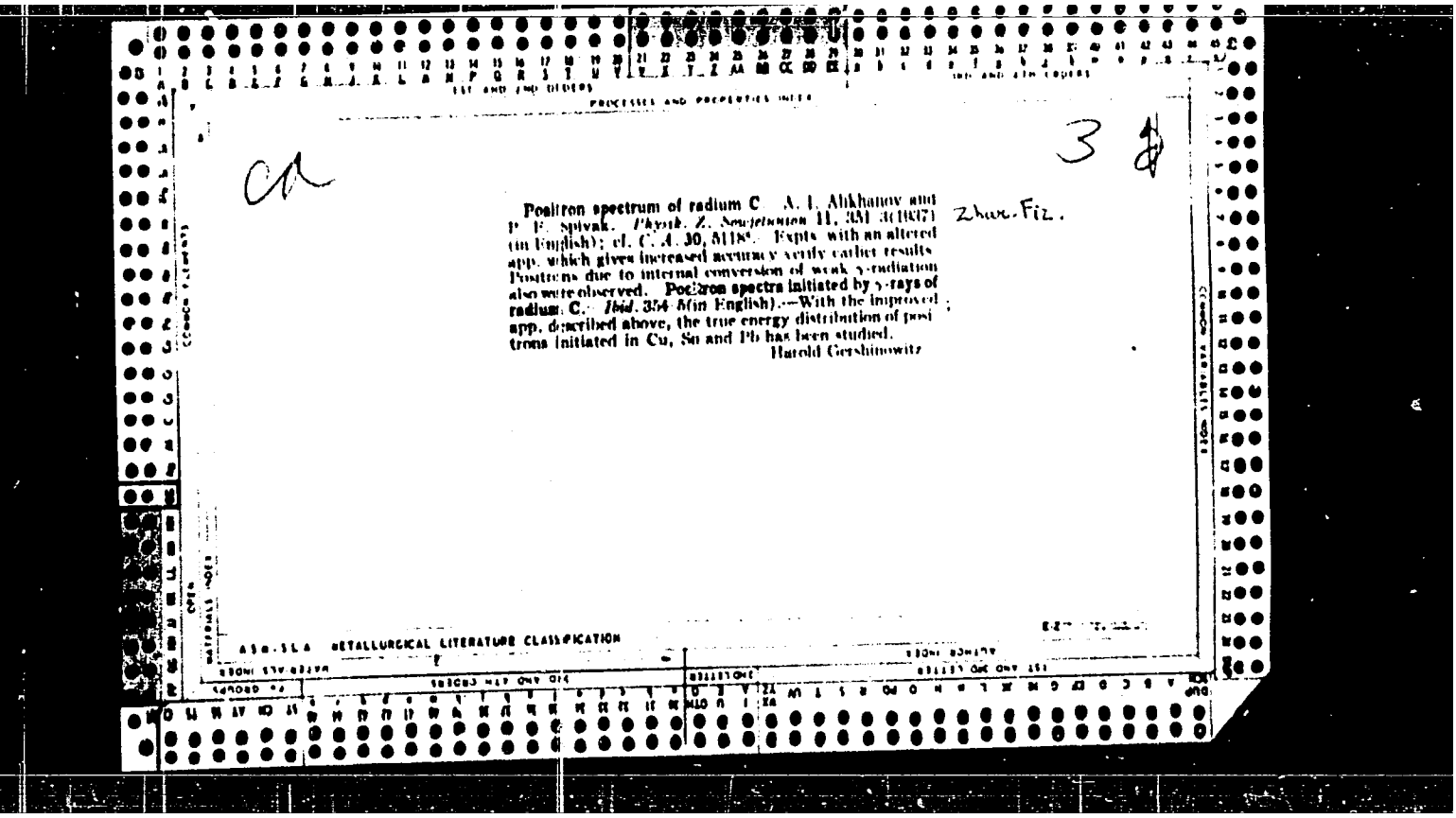
2530. Dependence of the β-Spectra of Radioactive Elements on the Atomic Number. A. I. Alikhanka, A. I. Alichanow and B. S. Dzhelepov. *Phys. Zeits. d. Sowjetunion*, 11. 2. pp. 204–224. 1937. *In English.*—It is shown that the form of the β-spectrum is markedly dependent on the atomic number of the radioactive substance. In contradiction to the classical experimental data it appears that the curve showing the energy distribution of electrons from RaE has practically no maximum, *i.e.*, by decreasing the energy down to 30 kV the number of electrons hardly decreases at all. In the case of light radioactive bodies like RaAl and RaF the electron distribution curve commences at the origin of coordinates and shows a sharp maximum. AUTHORS.

Zhur. Fiz.

A53-5LA METALLURGICAL LITERATURE CLASSIFICATION

APPROVED FOR RELEASE: 03/20/2001 CIA-RDP86-00513R000101110005-2"

"APPROVED FOR RELEASE: 03/20/2001 CIA-RDP86-00513R000101110005-2



Positron spectrum of radium C. A. I. Alikhanov and P. F. Spivak. *Physik. Z. Sowjetunion* 11, 331-3 (1937) (in English); cf. C. A. 30, 8118⁸. Expts. with an altered app. which gives increased accuracy verify earlier results. Positrons due to internal conversion of weak γ-radiation also were observed. **Positron spectra initiated by γ-rays of radium C.** *Ibid.* 354-8 (in English).—With the improved app. described above, the true energy distribution of positrons initiated in Cu, Sn and Pb has been studied.

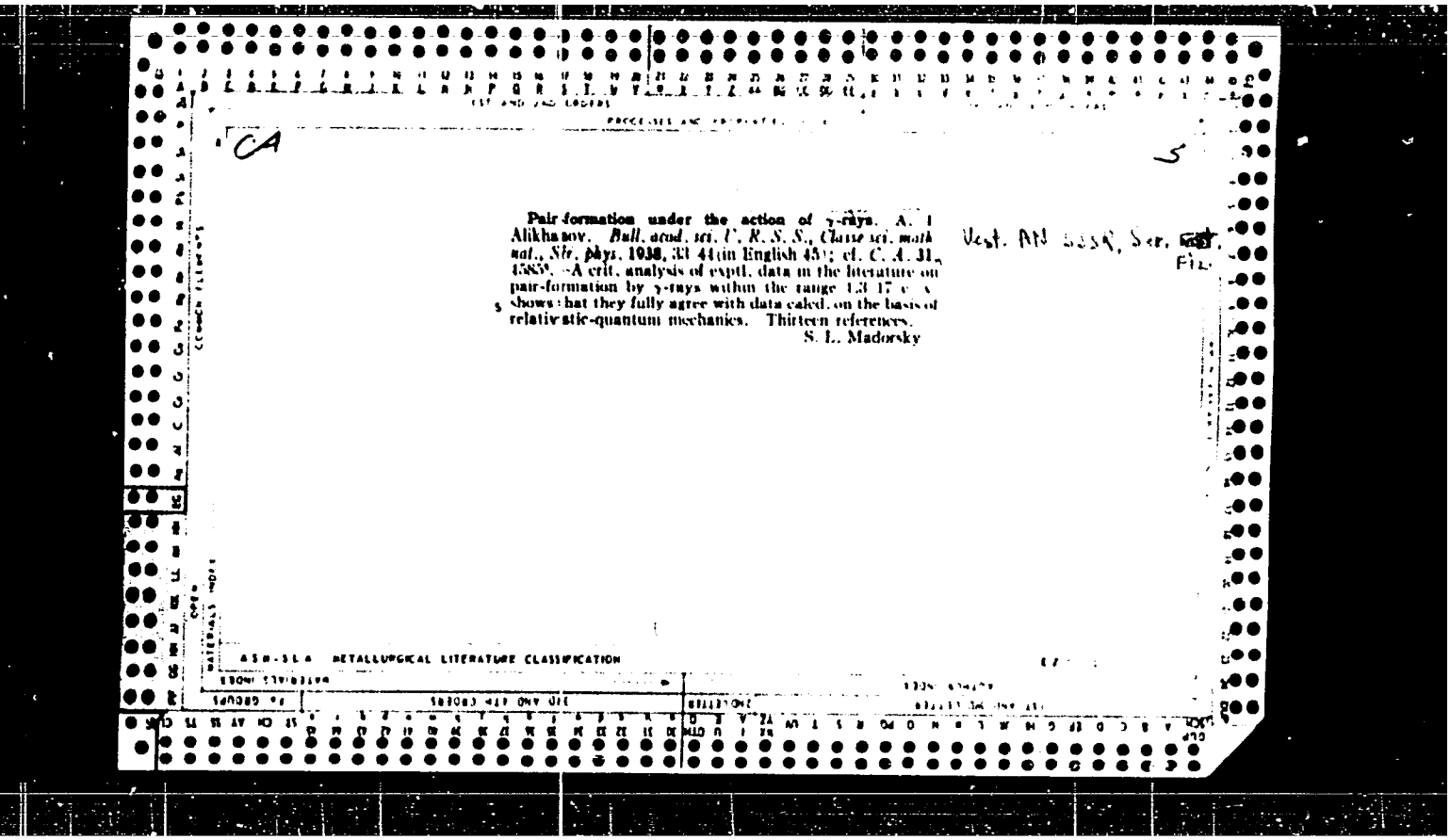
Harold Gershinowitz

Zhur. Fiz.

A50-SLA METALLURGICAL LITERATURE CLASSIFICATION

APPROVED FOR RELEASE: 03/20/2001 CIA-RDP86-00513R000101110005-2"

"APPROVED FOR RELEASE: 03/20/2001 CIA-RDP86-00513R000101110005-2



CA

S

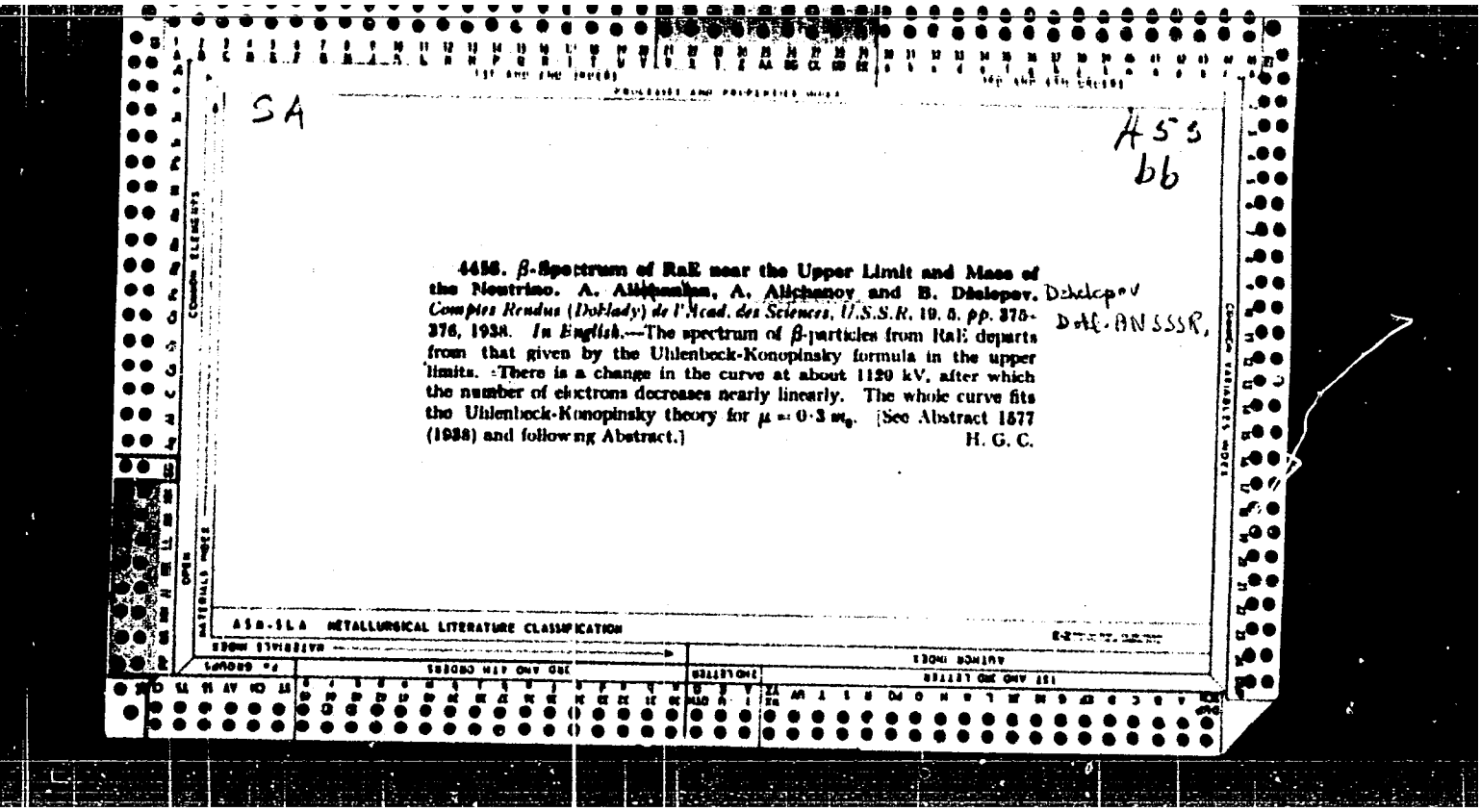
Pair formation under the action of γ-rays. A. I Alikhanov. *Bull. acad. sci. U. R. S. S., Classe sci. math nat., Sér. phys.* **1938**, 33 44 (in English 45); cf. *C. A.* 31, 4585⁹. —A crit. analysis of exptl. data in the literature on pair-formation by γ-rays within the range 1.3 17 e. v shows that they fully agree with data calcd. on the basis of relativistic-quantum mechanics. Thirteen references.
S. L. Madorsky

Uzst. AN SSSR, Ser. fiz.

ASM-SLA METALLURGICAL LITERATURE CLASSIFICATION

APPROVED FOR RELEASE: 03/20/2001 CIA-RDP86-00513R000101110005-2"

"APPROVED FOR RELEASE: 03/20/2001 CIA-RDP86-00513R000101110005-2



SA

A53
bb

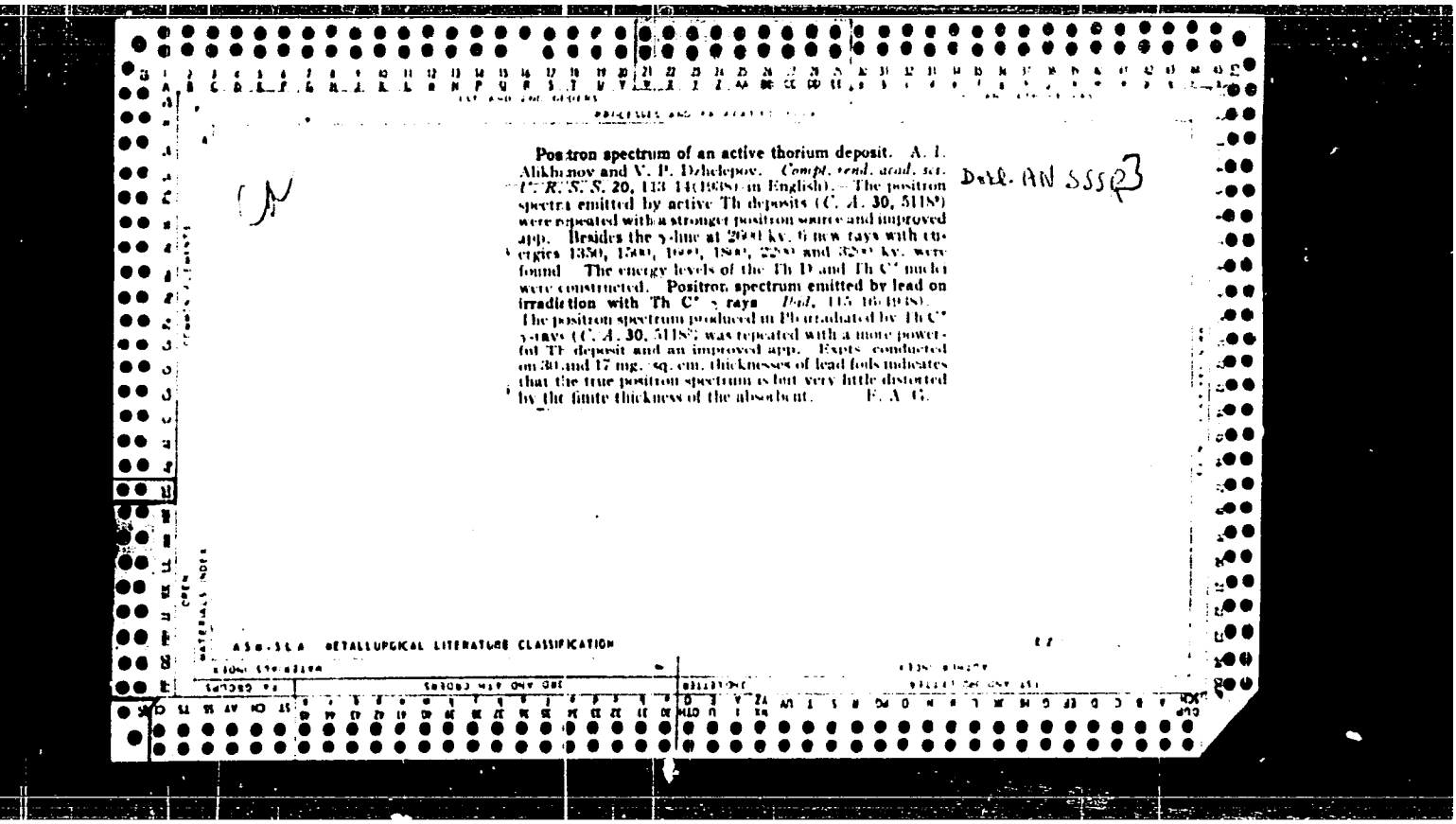
4456. β-Spectrum of RaE near the Upper Limit and Mass of the Neutrino. A. Alikhanian, A. Alichanov and B. Dzelepov. Dzhelepov
Comptes Rendus (Doklady) de l'Acad. des Sciences, U.S.S.R. 19. 5. pp. 375-376, 1938. *In English.*—The spectrum of β-particles from RaE departs from that given by the Uhlenbeck-Konopinsky formula in the upper limits. There is a change in the curve at about 1120 kV, after which the number of electrons decreases nearly linearly. The whole curve fits the Uhlenbeck-Konopinsky theory for $\mu = 0{\cdot}3\ m_0$. [See Abstract 1577 (1938) and following Abstract.] H. G. C.

Dokl. AN SSSR,

ASM-SLA METALLURGICAL LITERATURE CLASSIFICATION

APPROVED FOR RELEASE: 03/20/2001 CIA-RDP86-00513R000101110005-2"

"APPROVED FOR RELEASE: 03/20/2001 CIA-RDP86-00513R000101110005-2



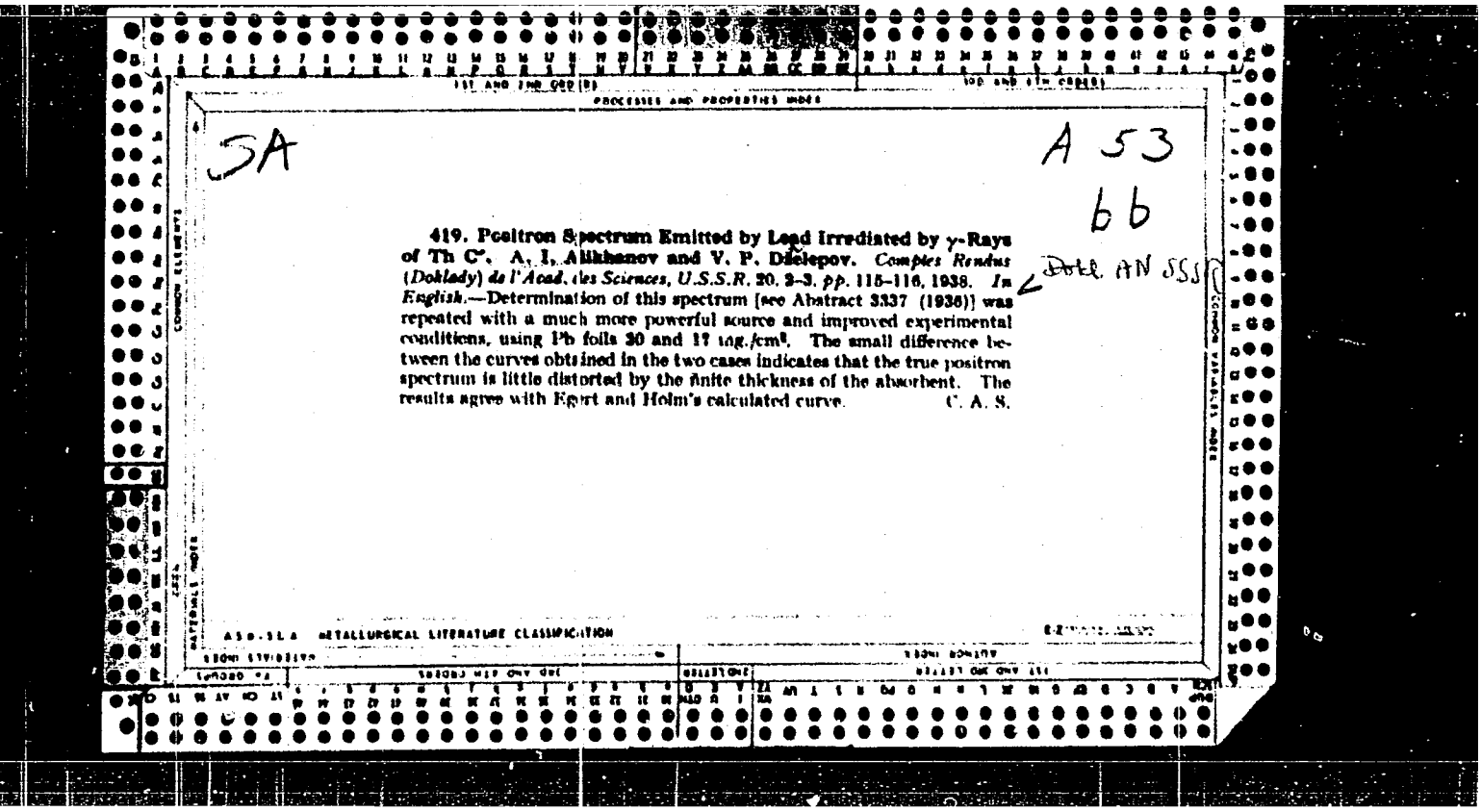
Positron spectrum of an active thorium deposit. A. I. Alikhanov and V. P. Dzhelepov. *Compt. rend. acad. sci. U.R.S.S.* **20**, 113-14(1938) (in English).—The positron spectra emitted by active Th deposits (*C. A.* **30**, 5118[9]) were repeated with a stronger positron source and improved app. Besides the γ-line at 2601 kv., 6 new rays with energies 1350, 1580, 1691, 1880, 2250 and 3250 kv. were found. The energy levels of the Th D and Th C'' nuclei were constructed. **Positron spectrum emitted by lead on irradiation with Th C'' γ rays.** *Ibid.*, 115-16(1938). The positron spectrum produced in Pb irradiated by Th C'' γ-rays (*C. A.* **30**, 5118[8]) was repeated with a more powerful Th deposit and an improved app. Expts. conducted on 30 and 17 mg. sq. cm. thicknesses of lead foils indicates that the true positron spectrum is but very little distorted by the finite thickness of the absorbent. F. A. G.

Dekl. AN SSSR

A.S.M.-S.L.A. METALLURGICAL LITERATURE CLASSIFICATION

APPROVED FOR RELEASE: 03/20/2001 CIA-RDP86-00513R000101110005-2"

"APPROVED FOR RELEASE: 03/20/2001 CIA-RDP86-00513R000101110005-2



5A

A 53

bb

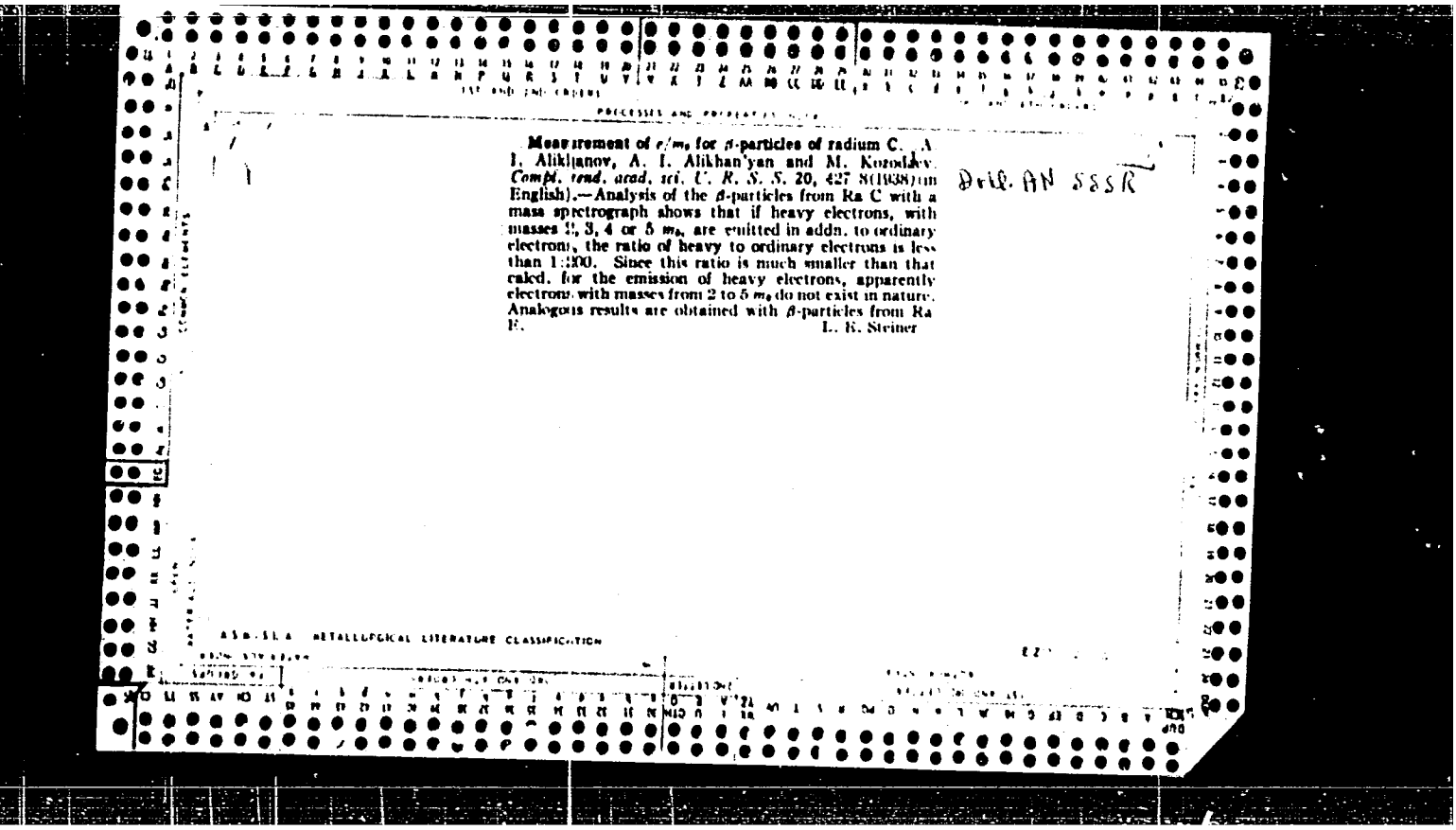
Dokl. AN SSSR

419. Positron Spectrum Emitted by Lead Irradiated by γ-Rays of Th C″. A. I. Alikhanov and V. P. Dzelepov. *Comptes Rendus (Doklady) de l'Acad. des Sciences, U.S.S.R.* 20, 3–3, *pp.* 115–116, 1938. *In English.*—Determination of this spectrum [see Abstract 3337 (1936)] was repeated with a much more powerful source and improved experimental conditions, using Pb foils 30 and 17 mg./cm². The small difference between the curves obtained in the two cases indicates that the true positron spectrum is little distorted by the finite thickness of the absorbent. The results agree with Egert and Holm's calculated curve. C. A. S.

A 53.5 L A METALLURGICAL LITERATURE CLASSIFICATION

APPROVED FOR RELEASE: 03/20/2001 CIA-RDP86-00513R000101110005-2"

"APPROVED FOR RELEASE: 03/20/2001 CIA-RDP86-00513R000101110005-2



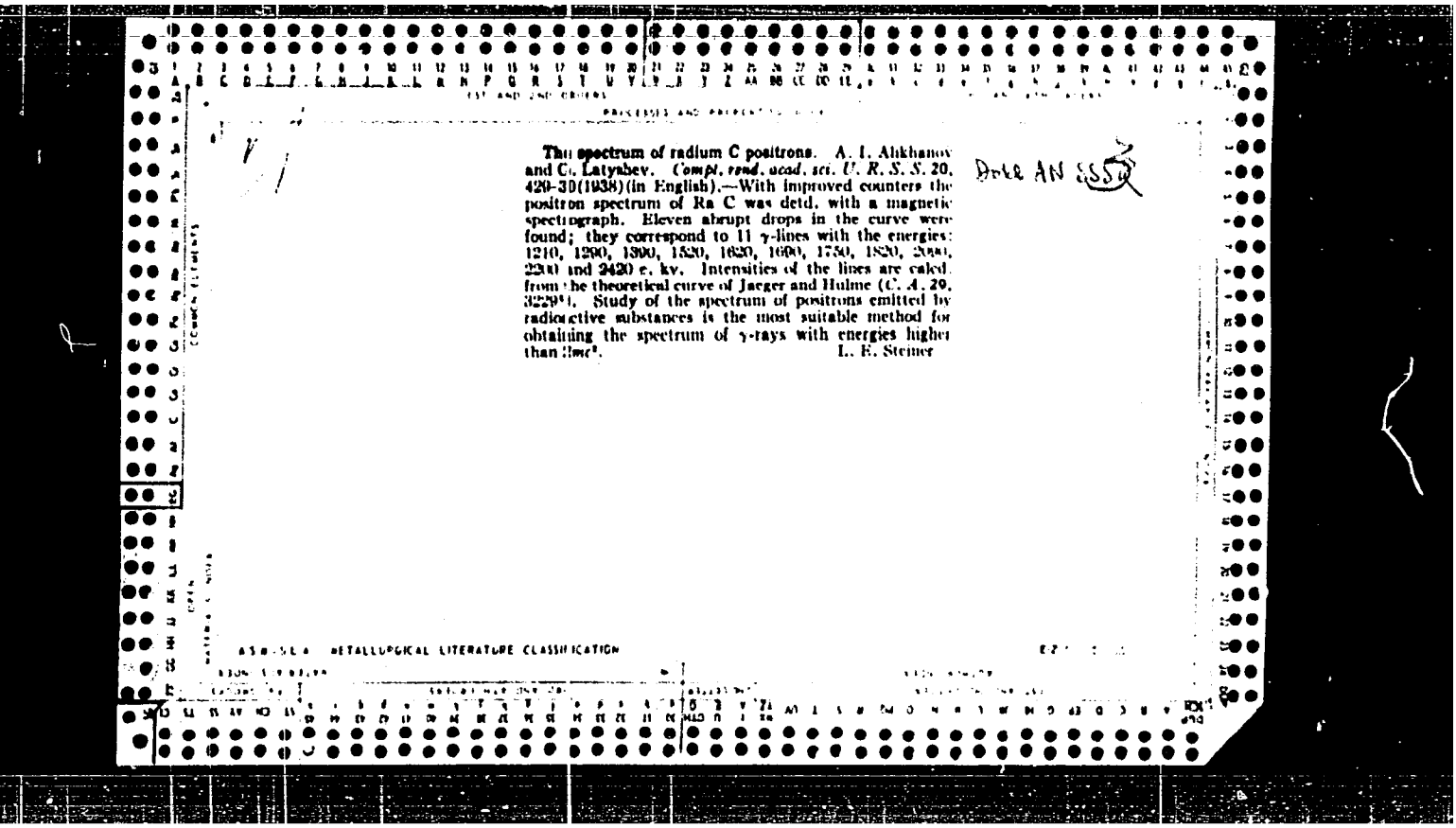
Measurement of e/m_0 for β-particles of radium C. A. I. Alikhanov, A. I. Alikhan'yan and M. Kozodaev. *Compt. rend. acad. sci. U. R. S. S.* 20, 427-8(1938)(in English).—Analysis of the β-particles from Ra C with a mass spectrograph shows that if heavy electrons, with masses 2, 3, 4 or 5 m_0, are emitted in addn. to ordinary electrons, the ratio of heavy to ordinary electrons is less than 1:200. Since this ratio is much smaller than that calcd. for the emission of heavy electrons, apparently electrons with masses from 2 to 5 m_0 do not exist in nature. Analogous results are obtained with β-particles from Ra E. L. R. Steiner

Phil. AN SSSR

A.S.M.-S.L.A. METALLURGICAL LITERATURE CLASSIFICATION

APPROVED FOR RELEASE: 03/20/2001 CIA-RDP86-00513R000101110005-2"

"APPROVED FOR RELEASE: 03/20/2001 CIA-RDP86-00513R000101110005-2



The spectrum of radium C positrons. A. I. Alikhanov and C. Latynbev. *Compt. rend. acad. sci. U. R. S. S.* 20, 429-30(1938)(in English).—With improved counters the positron spectrum of Ra C was detd. with a magnetic spectrograph. Eleven abrupt drops in the curve were found; they correspond to 11 γ-lines with the energies: 1210, 1290, 1300, 1520, 1620, 1690, 1750, 1820, 2080, 2300 and 2420 e. kv. Intensities of the lines are calcd. from the theoretical curve of Jaeger and Hulme (*C. A.* 29, 3229[9]). Study of the spectrum of positrons emitted by radioactive substances is the most suitable method for obtaining the spectrum of γ-rays with energies higher than $2mc^2$. L. E. Steiner

Dole AN 5553

APPROVED FOR RELEASE: 03/20/2001 CIA-RDP86-00513R000101110005-2"