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ACC NR: AP6032620

as: the more perfect the crystal, the less pure it is. Increasing the zone refining effectiveness increased the angle of general disorientation of the fragments of macromosaic substructure of the crystals. Very pure molybdenum single crystals were obtained after three passes at medium speeds (1.2—1.8 mm/min). The maximum value of the $\rho_{285K}/\rho_{4.2K}$ ratio was 5000. The respective values for 2 passes and 1 pass were 2200 and 980. V. Y. Startsev and N. V. Volkensteyn are thanked for the electric resistivity measurements. Orig. art. has: 3 figures.

SUB CODE: 11/ SUBM DATE: 10Sep65/ ORIG REF: 003/ OTH REF: 004

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"APPROVED FOR RELEASE: 06/20/2000 CIA-RDP86-00513R001445230003-9

ACC NR: AP7005708 SOURCE CODE: UR/0126/67/023/001/0192/0192

AUTHOR: Romanov, Ye. P.; Smirnov, L. V.

ORG: Institute of Metal Physics, AN SSSR

TITLE: Effect of matrix state on the properties of an alloy with a superconducting disperse phase

SOURCE: Fizika metallov i metallovedeniye, v. 23, no. 1, 1967, 192

TOPIC TAGS: superconductivity, superconducting alloy, zirconium base alloy, niobium, metal heat treatment

ABSTRACT: Heat treatment of the alloy Zr + 4 wt.% Nb can result in segregation of disperse superconducting particles of a Nb-rich phase, with a critical transition temperature T_{cr} that is higher than the T_{cr} of the matrix. Measurements at 4.2°K established that the system of disperse superconducting particles distributed through the normal matrix can pass a sufficiently high superconducting current. However, tests in a magnetic field showed that, despite the dispersity of the segregated phase, the critical current density decreases with increase in intensity of the magnetic field, the critical values of the field being 10-12 kilo-oe. This is due to the effect of the normal-metal environment on the superconductivity of the disperse

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ACC NR: AT7005768

particles (the proximity effect). The state of the alloy with disperse particles in a normal matrix does not quite correspond to the spongy model, which assumes that the basis of the alloy is represented by a superconductor with lower parameters than those of the disperse particles. In this connection it was of interest to investigate the same alloy Zr +4 wt.% Nb under conditions when the matrix also converts to the superconducting state; to this end, it was sufficient to reduce the temperature of measurements to 2°K, considering that the T_{cr} of the normal quenched alloy is 2.5-2.7°K, and to measure critical current density at 2°K as a function of the intensity of a transverse magnetic field. Segregation of disperse particles of the superconducting phase causes a rise in T_{cr} to 8°K. Findings: while in the quenched specimen (quenching from 950°C with subsequent 82% deformation) superconductivity is destroyed at 4 kilo-oe, in the specimen with disperse particles (quenching from 950°C with subsequent 82% deformation and tempering at 550°C) the superconducting state could not be destroyed even in a field of 24 kilo-oe. The critical parameters of superconductivity thus markedly increase as a result of segregation of a disperse superconducting phase with a higher T_{cr}. This also points to the importance of the state of the matrix. The properties corresponding to those predicted by the spongy model occur only on segregation of superconducting particles in a superconducting matrix, whereas their segregation in normal metal does not make it possible to obtain a superconducting material with a very high critical field. Orig. art. has: 1 figure

SUB CODE: 20, ~~13~~ 11/ SUBM DATE: 02Dec66/ ORIG REF: 003/ OTH REF: 001

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"APPROVED FOR RELEASE: 06/20/2000 CIA-RDP86-00513R001445230003-9

L 26646-66 EWT(m)/EPF(n)-2/T/EWP(t) IJP(c) JD/WW/JG

ACC NR: AP5025333 SOURCE CODE: UR/0126/65/020/003/0455/0458

AUTHOR: Romanov, Ye. P.; Smirnov, L. V.; Sadovskiy, V. D.; Volkenshteyn, N. V.

ORG: Institute of Metal Physics, AN SSSR (Institut fiziki metallov AN SSSR)

TITLE: Critical current of the superconductive dispersion phase obtained during aging

SOURCE: Fizika metallov i metallovedeniye, v. 20, no. 3, 1965, 455-458

TOPIC TAGS: martensitic transformation, zirconium base alloy, niobium containing alloy, superconductivity, metal aging, solid solution, plastic deformation, metal heat treatment, current density

ABSTRACT: A nonsuperconductive alloy at 4.2°K was used which could separate a superconductive dispersion phase during the process of thermal treatment or aging. The alloy used was zirconium with 4% niobium. After preparation, superconductivity was obtained even after short thermal treatment at a temperature of 500°C. Maximum critical density is obtained after heating the sample for 2½ hours. Further heating results in a decrease of critical current density. When heating the zirconium-4% niobium alloy a supersaturated niobium α-solid solution is obtained from the stable β-solid solution as a result of martensite transformation.

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L 26646-66

ACC NR: AP5025333

Plastic deformation increases considerably the density of lattice defects, and correspondingly increases the density of separations. It can be assumed that because of the above phenomena, increase of critical current density is observed with increase of the degree of cold deformation. The appearance of superconductivity in the alloy is explained only by the separated phase which is independent of the matrix properties. It can be noted that even a slight phase separation will result in a considerable increase of current density. Orig. art. has: 5 fig.

SUB CODE: 11,20/SUBM DATE: 19Mar65/ ORIG REF: 004/ OTH REF: 008

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"APPROVED FOR RELEASE: 06/20/2000 CIA-RDP86-00513R001445230003-9

ACCESSION NR: AP4028995 S/0126/64/017/003/0375/0378

AUTHOR: Demchuk, I. G.; Kralina, A. A.; Romanov, Ye. P.

TITLE: Growth of filamentary crystals of indium in the alloy indium-magnesium

SOURCE: Fizika metallov i metallovedeniye, vol. 17, no. 3, 1964, 375-378

TOPIC TAGS: indium, magnesium, magnesium-based alloy, indium containing alloy, filamentary crystal, crystal growth, indium oxide

ABSTRACT: In their work, the authors discovered a spontaneous growth of indium filamentary crystals in an indium-magnesium alloy. The assumption is made that these crystals do not grow out of indium oxide, but directly from the indium itself. An extremely unique growth process of indium filament crystals in indium-magnesium alloy is described. The speed of growth and the phase composition of the obtained crystals are determined. The following conclusions are drawn from the described experimental data and the absence of filamentary crystal growth in a vacuum: 1) the growth of the small crystals from the solid phase on the free surface is characterized by the cultivation of material by a diffusion method; 2) the intense growth of filamentary crystals in the case of crack formations is caused by the stresses of the arising and expanding crack. The increase of material occurs from the base of

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ACCESSION NR: AP4028995

the filament. The greatest creep effect should be observed for wires with small cross section stressed along the axis. Orig. art. has: 3 figures

ASSOCIATION: Institut fiziki metallov AN SSSR (Institute of the Physics of Metals, AN SSSR)

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"APPROVED FOR RELEASE: 06/20/2000 CIA-RDP86-00513R001445230003-9

ACCESSION NR: AP4034065 S/0126/64/017/004/0627/0629

AUTHORS: Volkenshteyn, N. V.; Romanov, Ye. P.; Starostina, L. S.; Startsev, V. Ye.

TITLE: Temperature dependence of the electrical conductivity of monocrystalline molybdenum

SOURCE: Fizika metallov i metallovedeniye, v. 17, no. 4, 1964, 627-629

TOPIC TAGS: molybdenum, electric conductivity, monocrystalline molybdenum, polycrystalline molybdenum, cryostat, copper molybdenum thermocouple, phonon, electron electron interaction

ABSTRACT: The authors studied the temperature dependence of monocrystalline Mo having a high degree of purity and a relative electrical resistance on the order of $R_{300\ K}/R_{4.2\ K} > 3500$, where 4.2K stands for liquid helium temperature. Test samples were obtained from a parent material of polycrystalline Mo rods 5 mm in diameter and 150 mm long, having a relative resistance of the order of 40. The approximate chemical composition was: 0.004% Fe, 0.001% Si, 0.0005% Ni, 0.0003% Mn and Al, 0.0002% Ca and Mg, 0.0001% Cu, and 0.0001% Na. Test specimens 4 mm in diameter and 25 mm long were placed in a cryostat. Temperature measurements were made with a dual copper-molybdenum thermocouple. The electrical resistance was

Card 1/3

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ACCESSION NR: AP4034065

measured with a potentiometer set up with a galvanometer of sensitivity 5×10^{-8} volt/mm/m. The data showed that the temperature dependence of the relative resistance was linear at temperatures above 100K. From 40 to 80K it could be well approximated by the formula $\frac{R_T}{R_{0°C}} = \frac{R_0}{R_{0°C}} + aT^2 + bT^5$,

$\frac{R_0}{R_{0°C}} \cong 1.8 \cdot 10^{-4}$; $a \sim 10^{-6}$ град$^{-2}$; $b \sim 10^{-11}$ град$^{-5}$, whereas in the range of 7 to 18K it was found to fit the formula $\frac{R_T}{R_{0°C}} = \frac{R_0}{R_{0°C}} + AT^2$,

$A = 1.5 \cdot 10^{-6}$ град$^{-2}$.

It was inferred from the results that in monocrystalline Mo of high purity the electrical resistance was determined essentially by electron-electron interactions. For the sake of comparison the temperature dependence of the relative resistance of polycrystalline Mo was also plotted and was found to have a minimum at 26K. The authors thank V. A. Novoselov for his help in the experiments. Orig. art. has: 2 figures and 2 formulas.

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L 36627-65 EWT(m)/T/EWP(t)/EWP(b)/EWA(c) Pu-4 IJP(c) JD/JG
ACCESSION NR: AP5002346 S/0126/64/018/006/0888/0894

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AUTHOR: Volkenshteyn, N. V.; Starostina, L. S.; Startsev, V. Ye.; Romanov, Ye. P.

TITLE: Investigation of the temperature dependence of the electrical conductivity of molybdenum and tungsten monocrystals in the low temperature regions

27 27 11

SOURCE: Fizika metallov i metallovedeniye, v. 18, no. 6, 1964, 888-894

TOPIC TAGS: molybdenum, tungsten, monocrystal, polycrystalline molybdenum, polycrystalline tungsten, electrical conductivity, Debye characteristic temperature

ABSTRACT: The temperature dependence of the electrical resistance of high purity molybdenum and tungsten monocrystals and of polycrystalline samples of these metals was measured in the 4.2-300 K temperature range. The crystallographically perfect monocrystals were obtained by zone melting, using electron bombardment heating. The characteristic Debye temperature was calculated for the temperature interval of 10-100 K. The experimental R(T) curves compared favorably with the theoretical Block-Gruneisen and Wilson curves. The effect of

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L 36627-65

ACCESSION NR: AP5002346

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s--d transitions on the temperature dependence of the electrical resistance of these nonferromagnetic transition metals was discussed. "The authors thank Yu. P. Irkhin for helpful discussion and V. A. Novoselov for assistance in the measurements." Orig. art. has: 3 figures and 6 equations

ASSOCIATION: Institut kristallografii AN SSSR (Institute of Crystallography AN SSSR); Institut fiziki metallov AN SSSR (Institute of the Physics of Metals, AN SSSR)

SUBMITTED: 03Apr64 ENCL: 00 SUB CODE: MM

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"APPROVED FOR RELEASE: 06/20/2000 CIA-RDP86-00513R001445230003-9

L 18730-66 EWT(1)/EWT(m)/EWA(d)/EWP(t) IJP(c) JD/GG

ACC NR: AP6005132 SOURCE CODE: UR/0126/66/021/001/0017/0020

AUTHOR: Romanov, Ye. P.; Sadovskiy, V. D.; Volkenshteyn, N. V.; Smirnov, L. V.

ORG: Institute of the Physics of Metals, AN SSSR (Institut fiziki metallov)

TITLE: Disruption of superconductivity in an alloy with a disperse superconducting phase

SOURCE: Fizika metallov i metallovedeniye, v. 21, no. 1, 1966, 17-20

TOPIC TAGS: superconductivity, zirconium alloy, magnetic field, solenoid

ABSTRACT: This is a continuation of a previous investigation (Romanov et al. FMM, 1965, 20, 3) with the difference that it presents certain findings on the disruption of superconductivity in the alloy of Zr with 4% Nb by weight following the decomposition of supersaturated solid solution in a longitudinal magnetic field generated by means of a superconducting solenoid at 4.2°K. The current was introduced at a smoothly increasing rate into the specimens by means of a semiconductor amplifier and the disruption of superconductivity was recorded by means of an automatic-recording millivoltmeter. It is found that for the alloy investigated the transition from superconducting to normal state is abrupt in the absence of the magnetic field and increasingly smooth the greater is the intensity of the magnetic field applied. Plotting of the curves of electric resistance as a function of the current introduced (Fig. 1) revealed that

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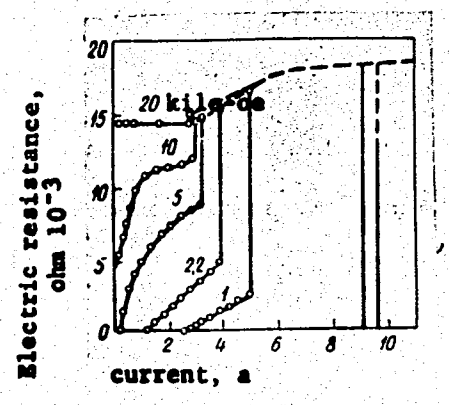

Fig. 1. Resistance as a function of the magnitude of the current introduced in a longitudinal magnetic field, for the alloy Zr + 4% Nb. Deformation 82%, tempering 550°C for 4 hr.

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the disruption of superconductivity occurs over a wide range of the values of the current and magnetic field. Apparently, various sectors of the superconducting circuit differ in the dependence of their critical current on the intensity of the magnetic field. Electric resistance increases with increasing magnetic-field intensity. On the whole, the character of the transition curves indicates that, in the alloy investigated, disruption of superconductivity by current in a longitudinal magnetic field occurs gradually owing to the successive elimination of the superconducting state of individual sectors of the superconducting circuit. Although specimens in fields of the order of 20 kilo-oersteds become markedly heated, some of their sectors still remain in superconducting state. "The authors are indebted to A. Prekul for affording them the opportunity of performing the measurements with the aid of a superconducting solenoid." Orig. art. has: 3 figures.

SUB CODE: 11, 14, 20/ SUBM DATE: 28Jul65/ ORIG REF: 001/ OTH REF: 008

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L 20642-66 EWT(1)/EWT(m)/EWP(w)/EPF(n)-2/T/EWP(t) IJP(c) JD/WW/JG/GG

ACC NR: AP6010405 SOURCE CODE: UR/0126/66/021/003/0388/0395

AUTHOR: Sudareva, S. V.; Buynov, N. N.; Vozilkin, V. A.; Romanov, Ye. P.; Rakin, V.G.

ORG: Institute of Metal Physics, AN UkrSSR (Institut fiziki metallov AN UkrSSR) 38

TITLE: The relationship between the characteristics of superconductivity and structure of zirconium-4% niobium alloy 21 13

SOURCE: Fizika metallov i metallovedeniye, v. 21, no. 3, 1966, 388-395

TOPIC TAGS: zirconium alloy, niobium containing alloy, alloy structure, alloy superconductivity

ABSTRACT: Zirconium-base alloy containing 4% niobium melted from 99.8%-pure zirconium and 99.4%-pure niobium, rolled at 600—700C into bars, homogenized at 1280C for 50 hr, annealed at 1200C and water quenched, aged at 550C for up to 1000 min, and rolled at 550C with a reduction of 93% was tested for the effect of structure on the characteristics of superconductivity. It was found that alloy annealed at 1200C is not superconductive at 4.2K. Aging of annealed alloy at 550C for 15 min brings about a precipitation of the finely dispersed β-phase and the alloy becomes superconductive with a critical current density of 5000 amp/cm^2. The β-phase particles precipitate mainly at the boundaries of the martensitic needles and form a system of superconductive fibers in the nonsuperconductive matrix. Such a structure appears to have a favorable effect on the magnitude of the critical current density. Prolonged aging of annealed alloy has no additional effect on the critical current

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density. Alloy which, after annealing, was rolled at 550C also became superconductive after aging at 550C for 3 hr, but its critical current density was found to be 50,000 amp/cm^2 (one order higher than that of alloy aged without rolling). The structure of alloy in this condition is distinguished by a network of dislocations decorated by rather large (50—100 Å) particles of β-phase and forming a system of superconducting fibers. Such a structure appears to be a specific feature of all niobium-zirconium alloys with high values of critical current density. Orig. art. has: 4 figures. [DV]

SUB CODE: 20, 11/ SUBM DATE: 05Jul65/ ORIG REF: 004/ OTH REF: 008/ ATD PRESS: 4226

Card 2/2 BK

APPROVED FOR RELEASE: 06/20/2000 CIA-RDP86-00513R001445230003-9"

"APPROVED FOR RELEASE: 06/20/2000 CIA-RDP86-00513R001445230003-9

ROMANOV, Ye.P.; SMIRNOV, L.V.; SADOVSKIY, V.D.; VOLKENSHTEYN, N.V.

Critical current of a disperse superconducting phase obtained during aging. Fiz. met. i metalloved. 20 no.3:455-458 S '65. (MIRA 18:11)

1. Institut fiziki metallov AN SSSR.

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"APPROVED FOR RELEASE: 06/20/2000 CIA-RDP86-00513R001445230003-9

MILOSLAVSKIY, A.M., inzh.; ROMANOV, Ye.S., inzh.

Substation with a deep lead-in using isolators in lieu of 6 kv. cutouts. Elek.sta. 32 no.6:85-86 Je '61. (MIRA 14:8)
(Electric substations)

APPROVED FOR RELEASE: 06/20/2000 CIA-RDP86-00513R001445230003-9"

"APPROVED FOR RELEASE: 06/20/2000 CIA-RDP86-00513R001445230003-9

LEBEDEV, Sergey Konstantinovich; ROMANOV, Yevgeniy Samoylovich; SEMAKOV, A.N., red.; KOZHUKHOVA, D.S., red.

[Economic efficiency of lumber hauling and loading equipment] Ekonomicheskaia effektivnost' oborudovaniia dlia trelevki i pogruzki lesa. Arkhangel'sk, Arkhangel'skoe knizhnoe izd-vo, 1959. 139 p. (MIRA 17:11)

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"APPROVED FOR RELEASE: 06/20/2000 CIA-RDP86-00513R001445230003-9

ROMANOV, Yu., mladshiy serzhant

Mine detector operates on ice also. Starsh.-serzh. no.10:15 O '61. (MIRA 15:2)

(Mines, Military)

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"APPROVED FOR RELEASE: 06/20/2000 CIA-RDP86-00513R001445230003-9

ROMANOV, Yu.

The Kingdom of Morocco; economy and foreign trade. Vnesh. torg. 42 no.6:32-36 '62. (MIRA 17:3)

APPROVED FOR RELEASE: 06/20/2000 CIA-RDP86-00513R001445230003-9"

"APPROVED FOR RELEASE: 06/20/2000 CIA-RDP86-00513R001445230003-9

ROMANOV, Yu.

Geographical distribution of U.S.S.R. foreign trade. Vnesh.torg. 30 no.8:41-46 '60. (MIRA 13:8)
(Russia--Commerce)

APPROVED FOR RELEASE: 06/20/2000 CIA-RDP86-00513R001445230003-9"

"APPROVED FOR RELEASE: 06/20/2000 CIA-RDP86-00513R001445230003-9

KETKOVICH, A.; ROMANOV, Yu.

Soviet trade with the members of the Mutual Economic Assistance Council in 1958. Vnesh.torg. 29 no.9:2-8 '59. (MIRA 12:12)

(Russia--Foreign economic relations--Eastern Europe)
(Europe, Eastern--Foreign economic relations--Russia)

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"APPROVED FOR RELEASE: 06/20/2000 CIA-RDP86-00513R001445230003-9

ROMANOV, Yu.

Methodology of calculating indices of the physical volume of the export trade of the U.S.S.R. Vnesh. torg. 30 no.12:42-43 '60. (MIRA 13:12)

(Russia--Commerce)

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"APPROVED FOR RELEASE: 06/20/2000 CIA-RDP86-00513R001445230003-9

ROMANOV, Yu.; YEZHOV, N. (Kishinev); MARKOV, Yu. (Khar'kov); ADESTOV, G. (Gor'kiy); MURIN, N.; MARIKOVSKIY, P. (Alma-Ata); DOROFEYEV, V.

Advice of specialists. Za rul. 20 no.8:18-19 Ag '62. (MIRA 16:6)
(Automobiles)

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"APPROVED FOR RELEASE: 06/20/2000 CIA-RDP86-00513R001445230003-9

ROMANOV, Yu.

Figures tell the story. Vnesh.torg. 30 no.9:37-38 '60. (MIRA 13:9)

(Russia--Commerce)

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Yadernaya geofizika: sbornik statey po ispol'zovaniyu radioaktivnykh izlucheniy i izotopov v geologii nefti (Nuclear Geophysics; Collection of Articles on the Use of Radioactive Radiation and Isotopes in Petroleum Geology) Moscow, Gostoptekhizdat, 1959. 370 p. Errata slip inserted. 4,000 copies printed.

Ed.: F.A. Alekseyev, Professor, Doctor of Geological and Mineralogical Sciences; Exec. Ed.: A.P. Kalanterov; Tech. Ed.: A.S. Polosina.

PURPOSE: This book is intended for petroleum geologists, geophysicists and scientists engaged in geological research who are interested in radiometric techniques of petroleum prospecting.

COVERAGE: The collection contains 28 articles compiled by staff members and aspirants of the Laboratory for Nuclear Geology and Geophysics of the Petroleum Institute (now the Institute for Geology and Mineral Fuel Processing) of the Academy of Sciences USSR, the Laboratory for Radioactive Logging of the All-Union Scientific Research Institute of Geophysics, and the heads of councils for planning research projects for petroleum enterprises. The articles treat new material on radiometric surveying in petroleum geology, describe radiometric instruments (counters, etc.) for registering neutrons and gamma rays, give the results of research with models of rock strata, introduce fundamentals of a new method for effectively utilizing radioactivity in the analysis of rock samples from petroleum-survey bore holes, etc. Problems of method in the study and interpretation of radiometric measurements in bore holes are reviewed, as well as the results of studies in the nonabsorption of tritium in tracing the movement of petroleum and water in a stratum. Finally, a new method of surveying based on measuring the radioactivity of the surface of a prospective petroleum deposit is described. No personalities are mentioned. References accompany each article.

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Bezvanov, R.A. Possibility of the Method of Induced Radioactivity for Quantitative Evaluation of the Petrolific Capacity and Other Characteristics of Strata 105

Blankova, T.N. The Effectiveness of the Methods of Induced Radioactivity of Sodium and Chlorine to Compute the Oil- and Water-Bearing Capacity of Devonian Sandstones 110

Burov, B.M., O.N. Darvoyd, F.Ts. Denisik, B.P. Odinokov, and V.G. Suberbinskiy. Utilization of Epithermal Neutrons in the Neutron-Neutron Method (NNM) of Evaluating the Porosity of Sand and Carbonate Collectors 121

Alekseyev, F.A., S.A. Denisik, L.V. Miller, and V.P. Odinokov. The Use of Gamma-Ray Spectrometry to Investigate Bore Holes 134

Guberman, Sh. A. Gamma-Ray Spectroscopy of Natural and Artificial Radioactive Isotopes Under Bore Hole Conditions 146

Odinokov, V.P., S.A. Denisik, and Yu. S. Shimelevich. Determination of the Point of Water-Petroleum Contact From Data Obtained Using the Neutron Gamma Method With Scintillation Counters (NGM-LS) and the Neutron-Neutron Method Based on Thermal Neutrons (NNM-T) 154

Blankov, Ye.B. Separation of the Radiation of Different Elements During the Investigation of Petroleum-Survey Bore Holes by the Method of Induced Radioactivity of Sodium and Chlorine 170

Dvorkin, I.L., and R.A. Bezvanov. The Use of Scintillation Counters to Count Slow Neutrons in Petroleum Survey Bore Holes 187

Zolotov, A.V. Distribution of Slow Neutrons in a Homogeneous Medium 195

Oulin, Yu.A. Influence of the Conditions of Measuring Upon Evaluating the Porosity of Rock According to Data Obtained by the Neutron Gamma Method 201

Rudnev, O.V. Development of New Types of Radiometric Apparatus for Use in Petroleum Survey Operations 222

Telev, L.Z. The Problem of Determining the Point of Water-Petroleum Contact Under Conditions of Cased Wells in Carbonate Deposits 228

Leyrunskaya, D.I., and E. Ye. Gauer. Analysis of Rock Based on Neutron-Induced Activity 238

Alekseyev, F.A., V.I. Yermakov, and V.A. Filonov. The Problem of Radium and Uranium Content in Oil-Field Waters 252

Yermakov, V.I., A.I. Laubenbath, M.G. Ovanesov, Yu. A. Romanov, and L.N. Skosyreva. Results of Investigations of Natural Gamma Fields in Oil-Bearing Regions, Using Aerial and Ground Radiometric Survey Methods 264

Romanov, Yu. A.

APPROVED FOR RELEASE: 06/20/2000 CIA-RDP86-00513R001445230003-9"

"APPROVED FOR RELEASE: 06/20/2000 CIA-RDP86-00513R001445230003-9

TYURYAKOV, B. I. ROMANOV, Yu. A.

Tyuryakov, B. I., Romanov, Yu. A., Lamanov, V. I., Simplification of formulas for calculating refraction distances of echo-sounding at sea, Tr. Leningr. gidrometeorol. in-ta (Works of the Leningrad Hydrometeorological Institute), No 5-6, 1956, p 146-159; (RZhGeofiz 8/57-7685)

APPROVED FOR RELEASE: 06/20/2000 CIA-RDP86-00513R001445230003-9"

"APPROVED FOR RELEASE: 06/20/2000 CIA-RDP86-00513R001445230003-9

ROMANOV, Yu.A.

Plasma oscillations in a solid body with p-n junction. Fiz. tver. tela 5 no.10:2988-2990 O '63. (MIRA 16:11)

1. Gor'kovskiy issledovatel'skiy fiziko-tekhnicheskiy institut.

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B156/B112

26.2242
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AUTHOR: Romanov, Yu. A.

TITLE: Accurate solutions to the one-velocity kinetic equation, and their use for calculating diffusion problems (improved diffusion method)

PERIODICAL: Referativnyy zhurnal. Matematika, no. 6, 1962, 96, abstract 6B407 (Sb. "Issled. kritich. parametrov reaktorn. sistem". M., Gosatomizdat, 1960, 3-26)

TEXT: The one-velocity transfer equation with an isotropic indicatrix is examined. The asymptotic solutions for an infinite homogeneous medium, which satisfy the diffusion equation at a certain distance from the boundaries, are studied. The solution to the transfer equation for two semi-infinite media in contact with each other is examined. The solution to the transfer equation for a sphere is studied in detail. The application of the algorithm to the case of multi-layer two-dimensional and spherical problems for media with constant complete particle free path lengths is given. For this purpose, an asymptotic particle density

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"APPROVED FOR RELEASE: 06/20/2000 CIA-RDP86-00513R001445230003-9

MAKHOVKO, V.V.; ROMANOV, Yu.A.

Symposium on cell division and regeneration of endocrine glands. Arkh. anat., gist. i embr. 43 no.11:119-121 N '62. (MIRA 17:8)

1. Adres avtorov: Moskva-177, ul. Pogodina, 6, biologicheskiy korpus 2-go Moskovskogo gosudarstvennogo meditsinskogo instituta imeni Lenina, kafedra obshchey biologii.

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S/056/61/040/001/013/037
B102/B204

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AUTHORS: Romanov, Yu. A., Filippov, G. F.

TITLE: The interaction between currents of fast electrons and longitudinal plasma waves

PERIODICAL: Zhurnal eksperimental'noy i teoreticheskoy fiziki, v. 40, no. 1, 1961, 123-132

TEXT: The present paper is a consequence of an experimental study by M. D. Gabovich and L. L. Pasechnik (Ref. 1), in which the anomalous electron scattering effects occurring in the interaction of fast electron beam and plasma had been determined. A. A. Vlasov, as well as Bohm and Gross have already attempted to interpret the results obtained by Gabovich and Pasechnik by assuming a modulation of the electron beam. It is, however, a fact that the random fluctuations increased by the electron beam are longitudinal plasma waves. Their group velocity is in the direction of the beam, and in a semi-infinite plasma without any reflecting surfaces, such waves are not able to induce a sufficient modulation of the beam. By explaining the anomalies in the interaction of plasma and electron beam it

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suffices to assume an instability of the electron beam in the plasma. The slight disturbances at the entrance of the beam grow exponentially with the distance from the boundary, and at a distance of about 1 cm, their amplitude is high enough to cause the anomalous scattering of the beam. The theory of the growth of these oscillations has been developed by Yu. L. Klimontovich and Kahn. Above all the results obtained by Klimontovich are utilizing the present paper. The authors here obtain analogous equations of motion as he did, but they have a wider range of application. They hold also if the plasma oscillations are not in thermal equilibrium, and if the electron distribution function deviates from that of Maxwell. In the following, it is possible to obtain equations suitable for analyzing the non-exponential stage of the intensity growth with time of the plasma waves under the action of electron currents of any velocity distribution. It is found on this occasion that with slowing down of the beam strong scattering occurs in the latter, in the course of which electrons with velocities greater or smaller than the mean initial velocity, occur. These equations go over into the aforementioned equations of motion in application to the electron fluxes with large velocity spreads. The accuracy of these equations is checked on a basis of a concrete example. In the equations ob-

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MAKHOVKO, V.V., prof., red.; TEREZA, S.I., prof., red.; LIOZNER, L.D., prof., red.; STROGANOVA, Ye.V., kand. biol. nauk, red.; ROMANOV, Yu.A., red.

[Materials from the Symposium on Cell Division and the Regeneration of the Endocrine Glands] Materialy Simpoziuma po kletochnomu deleniiu i regeneratsii zhelez vnutrennei sekretsii, 1962. Moskva, Mosk. ob-vo anatomov, gistologov i embroiologov, 1962. 61 p. (MIRA 15:5)

1. Simpozium po kletochnomu deleniyu i regeneratsii zhelez vnutrenney sekretsii, 1962. 2. Zaveduyushchiy kafedroy obshchey biologii 2-go Moskovskogo gosudarstvennogo meditsinskogo instituta im. N.I.Pirogova (for Makhovko). 3. Kafedra parazitologii i zoologii Moskovskogo tekhnologicheskogo instituta myasnoy i molochnoy promyshlennosti (for Tereza). 4. Zaveduyushchiy Laboratorii rosta i razvitiya instituta eksperimental'noy biologii Akademii meditsinskikh nauk SSSR (for Liozner). 5. Otdel morfologii Vsesoyuznogo Instituta eksperimental'noy endokrinologii (for Stroganova). 6. Kafedra obshchey biologii 2-go Moskovskogo gosudarstvennogo meditsinskogo instituta im. N.I.Pirogova (for Romanov).
(CELL DIVISION (BIOLOGY)) (ENDOCRINE GLANDS)
(REGENERATION (BIOLOGY))

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PHASE I BOOK EXPLOITATION SOV/5537

Panasenkova, Ye. I., ed.

Issledovaniya kriticheskikh parametrov reaktornykh sistem; sbornik statey (Study of Critical Parameters of Reactor Systems; Collection of Articles) Moscow, Gosatomizdat, 1960. 117 p. Errata slip inserted. 3,600 copies printed.

Tech. Ed.: N.A. Vlasova.

PURPOSE: This collection of articles is intended for nuclear physicists and engineers of nuclear power plants.

COVERAGE: The book contains previously unpublished original articles concerned with the theoretical calculation of neutron fluxes and of critical parameters (critical masses and volumes) of various reactor systems: uranium-graphite, uranium-beryllium, and water mixtures of uranium and plutonium. Individual articles present tables and graphs used in the determination of the dependence of critical parameters on the relative concentration and the character of the fissionable material and the moderator, as well as on fuel enrichment for a wide range of neutron energy spectra. The following are mentioned: P.A. Gavrilov (scientific editor of the collection), and S.I. Sokolov, L.N. Spakhova, A. Ya. Ryumina, R.P. Roschina and V.S. Vladimirov (compilers of Table 1, table of values of coefficients k, D_0 and τ). References accompany individual articles.

TABLE OF CONTENTS:

Romanov, Yu. A. Exact Solutions of the Single-Velocity Kinetic Equation and Their Use in Solving Diffusion Problems (the Perfected Diffusion Method) 3

Marchuk, G.I., and V.P. Kochergin. The Approximation Method of Calculating the Critical Masses of Reactors With an Infinite Reflector 27

Rumyantsev, G. Ya. The Use of Even Approximations in the Method of Spherical Harmonics 34

Marchuk, G.I., G.A. Ilyasova, V. Ye. Kolesov, V.P. Kochergin, L.I. Kuznetsova, and Ye. I. Pogudalina. Critical Masses of Uranium-Graphite Reactors 39

Marchuk, G.I., G.A. Ilyasova, V. Ye. Kolesov, V.P. Kochergin, L.I. Kuznetsova, and Ye. I. Pogudalina. Critical Masses of Uranium-Beryllium Reactors 52

Marchuk, G.I., G.A. Ilyasova, V. Ye. Kolesov, V.P. Kochergin, L.I. Kuznetsova, and Ye. I. Pogudalina. Critical Masses of Aqueous Mixtures of Compounds of Uranium and Plutonium 57

Zagrafov, V.G., Interaction of Systems of a Fissionable Substance in a Scattering Medium 74

Kamyev, A.V., B.G. Dubovskiy, V.V. Vavilov, G.A. Popov, Yu.D. Palamarchuk, and S.P. Ivanov. Experimental Study of the Interaction Effects of Two Subcritical Reactors 101

Marchuk, G.I., B.G. Dubovskiy, V.V. Smelov, and Z.E. Milyutina. The Design of Sectionalized Nuclear Plants 107

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Card 3/3

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"APPROVED FOR RELEASE: 06/20/2000 CIA-RDP86-00513R001445230003-9

ROMANOV, Yu.A.

Attenuation of plasmon at absolute zero. Zhur. eksp. i teor. fiz. 39 no.3:662-665 S '60. (MIRA 13:10)

1. Gor'kovskiy fiziko-tekhnicheskiy institut.
(Plasma (Ionized gases)

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AFONIN, V.I.; KOPOSOV, I.A.; ROMANOV, Yu.A.; CHERNYAYEVA, V.G.

Surface radiometric surveying in the lower Volga Valley and Ciscaucasia. Geol. nefti 1 no.6:48-52 Je '57. (MIRA 10:8)
(Volga Valley--Petroleum geology)
(Caucasus, Northern--Petroleum geology)
(Gamma rays)

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168T65

ROMANOV, Yu. A.

USSR/Nuclear Physics - New Technique Jul 50
Moments, Magnetic

"Magnetic Moments of Nuclei," Yu. A. Romanov, Phys Inst imeni P. N. Lebedev, Acad Sci USSR

"Zhur Eksper i Teoret Fiz" Vol XX, No 7, pp 577-583

Discusses hypothesis by which part of magnetic moment is due to inertialess exchange currents arising in nucleus which are similar in properties to currents of superconductivity. Cites M. G. Mayer in "Phys Rev" No 74, 235, 1948. Submitted 10 Jan 50.

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APPROVED FOR RELEASE: 06/20/2000 CIA-RDP86-00513R001445230003-9"

"APPROVED FOR RELEASE: 06/20/2000 CIA-RDP86-00513R001445230003-9

ROMANOV, Yu.A.

Clinical characteristics and outcome of infectious hepatitis occurring contemporaneously with pregnancy. Vop. okh. mat. i det. 6 no.3:71-74 Mr '61. (MIRA 14:10)

1. Iz bol'nitsy imeni S.P.Botkina v Leningrade (glavnyy vrach M.M. Figurina, nauchnyy rukovoditel' - prof. Ye.S.Gurevich).
(HEPATITIS, INFECTIOUS) (PREGNANCY, COMPLICATIONS OF)

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"APPROVED FOR RELEASE: 06/20/2000 CIA-RDP86-00513R001445230003-9

ROMANOV, Yu.A. (Moskva)

Some data on the biological action on the organism of therapeutic doses of radioactive iodine under experimental conditions. Probl.endok.i gorm. 7 no.3:22-30 '61. (MIRA 14:10)

1. Iz kafedry obshchey biologii (zav. - prof. V.V. Makhovko) II Moskovskogo gosudarstvennogo meditsinskogo instituta imeni N.I. Pirogova (dir. - dotsent M.G. Sirotkina).
(IODINE--ISOTOPES)

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24.6900

AUTHORS: Romanov, Yu. A., Chernavskiy, D. S.

TITLE: Multiple Production of Particles in Jets by Peripheral Collisions

PERIODICAL: Zhurnal eksperimental'noy i teoreticheskoy fiziki, 1960, Vol. 38, No. 4, pp. 1132-1139

TEXT: The authors study the peripheral collision of nucleons of high energies ($E_{lab} > 10^{12}$ ev). In the first section of the present paper the peripheral collisions are discussed according to Weizsäcker and Williams. As is known, this enables a classification of the peripheral collisions to be made, and the characteristic properties of the different interaction types to be described. The four variants of the peripheral interaction of two nucleons considered here are: the one-meson interaction, the virtual single $\pi\pi$ interaction, the two-meson interaction, and the double interaction of virtual π mesons. The one-meson interaction is discussed in detail according to Weizsäcker-Williams. In the second section of the

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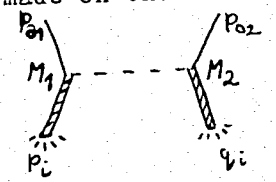
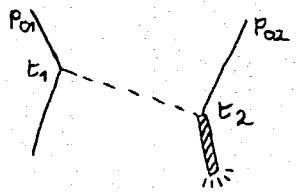
paper, the perturbation theoretical calculation of one-meson collision is made on the basis of the Feynman graph shown in Fig. 1. Here p_{o1} and p_{o2}



are the momenta of the free nucleons, q_i and p_i the momenta of the secondary particles, and M_1 and M_2 the masses of the excited intermediate states. It turns out that the calculation on the basis of the Feynman graph is not completely equivalent to the method of calculation mentioned in the introduction. The Feynman graph shown in Fig. 2 corresponds better to the Weizsäcker-Williams method. In the following, the remaining three variants of the peripheral interaction shown in Feynman graphs in Figs. 3-5 are discussed. The prediction of the



number of secondary particles and their angular distribution is treated, taking into consideration the theory of Fermi-Landau and Heisenberg. Finally, it is briefly discussed as to how the peripheral meson field of a nucleon manifests itself during the collision with a nucleus. This problem has been already

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Multiple Production of Particles in Jets by Peripheral Collisions

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treated by one of the authors (Ref. 5) and here simply the results are quoted. I. I. Gurevich, A. P. Mishakova, B. A. Nikol'skiy, Zh. S. Takibayev, and L. V. Surkova are mentioned (Ref. 13). The authors thank Professor Ye. L. Feynberg and his colleagues for making available their data. There are 7 figures and 13 references: 7 Soviet, 1 Italian, and 4 US.

ASSOCIATION: Fizicheskiy institut im. P. N. Lebedeva Akademii nauk SSSR (Institute of Physics imeni P. N. Lebedev of the Academy of Sciences, USSR)

SUBMITTED: May 25, 1959

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B004/B060

24,5600 (1035, 1055, 1114)

AUTHOR: Romanov, Yu. A.

TITLE: The Damping of Plasmon at Absolute Zero

PERIODICAL: Zhurnal eksperimental'noy i teoreticheskoy fiziki, 1960, Vol. 39, No. 3 (9), pp. 662-665

TEXT: The author proves that a phonon interaction of electrons gives rise to a variation in frequency and to a damping of plasmon (in the isotropic model of a solid body). Starting from the Green function of the photon: $D_{\mu\nu}(x - x') = i\langle T(A_\mu(x)A_\nu(x'))\rangle$ (1), where $\mu, \nu = 1,2,3,4$; $A_\mu(x)$ are the operators of the electromagnetic field in the Heisenberg representation, the dispersion equation $\vec{k}^2 - P(\vec{k},\omega) = 0$ (4) is obtained here, and equation (5) is written down for the polarization operator P. It follows from the well-known dispersion relation $\omega^2 = \omega_0^2 + v_0^2 k^2$ (8) that there occurs no damping of plasmon in the case

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The Damping of Plasmon at Absolute Zero

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of small k. Fröhlich's Hamiltonian is written down for the phonon interaction of electrons giving rise to damping:

$H_{int} = \sum_{q<q_m} \alpha_q a^+_{\vec{p}+\vec{q}} a_{\vec{p}} (b_{\vec{q}} + b^+_{-\vec{q}})$ (10), where $a^+_{\vec{p}}(a_{\vec{p}})$ and $b^+_{\vec{q}}(b_{\vec{q}})$ are the operators of formation (or annihilation) of an electron or phonon, respectively; $\alpha_q^2 = \lambda_0 \pi^2 \omega_q^0 / p_0$; $\omega_q^0 = c_0 q$; $\lambda_0 \lesssim 1$, q_m is the maximum momentum of the phonon, c_0 is the sound velocity. $P(\vec{k},\omega)$ is calculated in first perturbation theory approximation (Fig. 1). Equation (12) is written down for the imaginary part $\mathrm{Im}P_1(\vec{k},\omega)$ (Fig. 2), and equation (13) is obtained for the damping coefficient γ. As may be seen from Fig. 1, damping due to the decay of a plasmon into an electron and a hole with emission of a phonon is possible. This effect differs from the effect of damping described by Landau which is caused by the reverse Vavilov-Cherenkov effect. The author mentions a paper by A. B. Migdal (Ref. 7),

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"APPROVED FOR RELEASE: 06/20/2000 CIA-RDP86-00513R001445230003-9

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The Damping of Plasmon at Absolute Zero

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B004/B060

and thanks D. S. Chernavskiy for having formulated the problem and for advice, as well as Ye. S. Fradkin for discussions. There are 2 figures and 7 references: 6 Soviet and 2 US.

ASSOCIATION: Gor'kovskiy fiziko-tekhnicheskiy institut (Gor'kiy Institute of Physics and Technology)

SUBMITTED: March 24, 1960

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"APPROVED FOR RELEASE: 06/20/2000 CIA-RDP86-00513R001445230003-9

ACCESSION NR: AP4039724 S/0141/64/007/002/0242/0250

AUTHOR: Romanov, Yu. A.

TITLE: Electromagnetic waves in a half-space plasma

SOURCE: IVUZ. Radiofizika, v. 7, no. 2, 1964, 242-250

TOPIC TAGS: plasma electromagnetic wave, plasma oscillation, surface wave, Boltzmann equation, electron radiation

ABSTRACT: Taking issue with the results of H. Kanazawa (Progr. Theor. Phys. v. 26, 851, 1961), who obtained the energy spectrum of plasma oscillations, including surface plasmons in metal films, the author investigates by the kinetic-equation method the energy spectrum of a half-space plasma, assuming specular reflection of the electrons from the plasma boundary. It is indicated that Kanazawa's solutions do not satisfy the proper boundary conditions and do not allow for the delay in the interaction. The author takes account of this delay as well as of the spatial dispersion. If the delay and dispersion are neglected, the present results go over into the ear-

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ACCESSION NR: AP4039724

lier results by others. The excitation of plasma surface waves by slow electrons is also considered. A high value is obtained for the probability of excitation of surface plasmons, showing that these plasmons play an important role in phenomena occurring when an electron passes through the plasma boundary. Future articles will deal with electromagnetic waves in a plasma slab and with concrete examples of the effect of transverse plasmons. "In conclusion I am grateful to V. L. Ginzburg for interest in the work." Orig. art. has: 40 formulas.

ASSOCIATION: Nauchno issledovatel'skiy radiofizicheskiy institut pri Gor'kovskom universitete (Scientific Research Radiophysics Institute at the Gor'kiy University)

SUBMITTED: 03Jun63 DATE ACQ: 19Jun64 ENCL: 00

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"APPROVED FOR RELEASE: 06/20/2000 CIA-RDP86-00513R001445230003-9

ROMANOV, Yu.A.; FILIPPOV, G.F.

Interaction of beams of fast electrons with longitudinal plasma beams. Zhur. eksp. i teor. fiz. 40 no.1:123-132 Ja '61. (MIRA 14:6)

(Electrons) (Plasma (Ionized gases))

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"APPROVED FOR RELEASE: 06/20/2000 CIA-RDP86-00513R001445230003-9

ROMANOV, Yu.A.; FILIPPOV, G.F.

Interaction of beams of fast electrons with longitudinal plasma beams. Zhur. eksp. i teor. fiz. 40 no.1:123-132 Ja '61. (MIRA 14:6)

(Electrons) (Plasma (Ionized gases))

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"APPROVED FOR RELEASE: 06/20/2000 CIA-RDP86-00513R001445230003-9

ROMANOV, Yu.A.

Characteristics of the course of Botkin's disease in pregnancy and during lactation. Sov. med. 25 no.5:33-37 My '61. (MIRA 14:6)

1. Iz Bol'nitsy imeni S.P.Botkina v Leningrade (glavnyy vrach M.M.Figurina, nauchnyy rukovoditel' - prof. Ye.S.Gurevich).
(HEPATITIS, INFECTIOUS) (PREGNANCY, COMPLICATIONS OF)
(PUERPERIUM)

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ACC NR: AP5028353 UR/0362/65/001/011/1141/1150 28

44,55

AUTHOR: Romanova, N. A.; Romanov, Yu. A. 44,55 B

ORG: Institute of Oceanology AN SSSR (Institut okeanologii AN SSR) 44,55

TITLE: Barometric pressure gradients in equatorial regions

SOURCE: AN SSSR. Izvestiya. Fizika atmosfery i okeana, v. 1, no. 11, 1965, 1141-1150 12,44,55

TOPIC TAGS: atmospheric pressure, wind profile, oceanography

ABSTRACT: The article is based on observations made during the International Geophysical Year (1958). The observation stations were chosen in pairs so that the distance between them would be about 500 kilometers and so that the pressure difference between the stations would be characteristic of either the longitudinal or latitudinal components of the pressure gradient at the equator or in equatorial latitudes up to 25°. (See Fig. 1)

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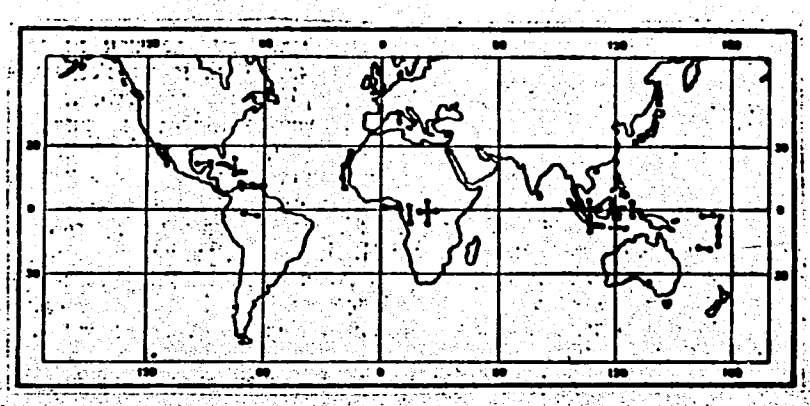

Fig. 1. Distribution of stations.

In all, 22 pairs of stations were selected and 25,351 paired observations were made. Nine pairs of stations were on the equator, of which 4 pairs were longitudinal (in the belt 2.5°N-2.5°S) and 5 pairs latitudinal, and made 9,756 observations. The remaining 13 pairs were in equatorial latitudes from 5 to 25° inclusive and made 15,595 observations. The gradients were calculated by the following formula:

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ACC NR: AP5028353

$$A = \frac{\sqrt{b}}{l} = \frac{\sqrt{(P_1 - P_2)^2 - (\bar{P}_1 - \bar{P}_2)^2}}{l},$$

where A is the standard; l is the distance between stations; b is a structural function; P_1 and P_2 are standard values of the pressure; $\bar{P}_1$ and $\bar{P}_2$ are average climatographic values for the same stations. Calculated results are exhibited in a series of figures and tables. Results show that at the equator and up to a latitude of 5°, the standard pressure gradient is 1.8-1.9 x 10^{-7} (MTO system). With increasing distance from the equator, this value increases and, at latitude 25° reaches 3.9 x 10^{-7} (in the middle latitudes it is 8 x 10^{-7}). Comparison of these values with the order of magnitude of the inertial term shows that, in the solution of various problems in wind dynamics at the equator, the inertial force must be taken into account right up to a latitude of 25°. Orig. art. has: 4 figures and 6 tables.

SUB CODE: ES/ SUBM DATE: 15May65/ ORIG REF: 009

OTH REF: 000

Card 3/3

APPROVED FOR RELEASE: 06/20/2000 CIA-RDP86-00513R001445230003-9"

"APPROVED FOR RELEASE: 06/20/2000 CIA-RDP86-00513R001445230003-9

L 22177-65 EEC(b)-2/EWT(1)/EWT(m)/EWP(t)/EWP(b)/T AFWL/ASDA-5/ESDD(p)/ESDT IJP(C)
GG/JD
ACCESSION NR: AP5001836 S/0056/64/047/006/2119/2133

AUTHOR: Romanov, Yu. A.

TITLE: Theory of characteristic losses in thin films

SOURCE: Zhurnal eksperimental'noy i teoreticheskoy fiziki, v. 47, no. 6, 1964, 2119-2133

TOPIC TAGS: thin film, energy loss, plasmon, transition loss, plasma particle interaction

ABSTRACT: The energy losses of a fast charged particle moving through a plasma layer are computed by quantum field theory, with a particular aim at determining the energy losses due to excitation of surface plasmons, which have not been investigated hitherto. The stopping power of a plasma layer is expressed in terms of an electromagnetic field correlation function, which is simply related to the retarded Green's function. Only Coulomb interaction between particles is taken into account in the analysis. An expression is thus derived for the charged-particle losses due to excitation of both volume and surface plasmons (collective losses) and also those due to binary collisions at the surface and within the

Card 1/2

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L 22177-65

ACCESSION NR: AP5001836

layer. The dependence of the plasmon spectrum on the thickness in thin films is analyzed, and it is shown that this dependence is due to the quantum nature of the electrons in the film, and specifically to the discreteness of the electron momentum, which is more important than the discreteness in the plasmon wave vector. The author discusses also surface plasmons in a plasma with diffuse boundaries, where an important role is played by the surface-plasmon damping due to transfer of energy from surface plasmons to volume plasmons in regions where the latter can exist. Orig. art. has: 74 formulas.

ASSOCIATION: Fiziko-tekhnicheskiy institut Gor'kovskogo gosudarstvennogo universiteta (Physicotechnical Institute, Gor'kiy State University).

SUBMITTED: 04Apr64 ENCL: 00

SUB CODE: SS, ME NR REF SOV: 013 OTHER: 007

Card 2/2

APPROVED FOR RELEASE: 06/20/2000 CIA-RDP86-00513R001445230003-9"

"APPROVED FOR RELEASE: 06/20/2000 CIA-RDP86-00513R001445230003-9

L 25279-65 EWT(1)/EWG(k)/EWT(m)/EPA(sp)-2/EPA(w)-2/EEC(t)/T/EWP(t)/EEC(b)-2/EWP(b)/EWA(m)-2 Po-4/Pz-6/Pab-10 IJP(c) GG/AT/JD

ACCESSION NR: AP5002314 S/0141/64/007/005/0828/0837

58
57
B

AUTHOR: Romanov, Yu. A.

TITLE: Plasma waves in films

SOURCE: IVUZ. Radiofizika, v. 7, no. 5, 1964, 828-837

TOPIC TAGS: plasma wave, thin film, plasmon, energy spectrum, transition radiation

ABSTRACT: The energy spectrum of a plasma layer is determined, using the kinetic-equation method with allowance for spatial dispersion as well as for the interaction delay. The plasma layer is assumed to be bounded on both sides by a non-absorbing dielectric medium, and the boundary conditions call for specular reflection of the electrons from the plasma surface. The dispersion relations derived for the surface plasmons differ greatly from the analogous results of Kanazawa (Progr. Theor. Phys. v. 26, 851, 1961), owing to the fact that Kanazawa did not impose any limitations on the electromagnetic field of the quasi-particles, having derived his dispersion relations for plane waves. By taking account of the interaction delay, it is shown that in the case of sufficiently thin films the main

18

Card 1/2

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"APPROVED FOR RELEASE: 06/20/2000 CIA-RDP86-00513R001445230003-9

L 25279-65

ACCESSION NR: AP5002314

contribution to the transition radiation is made not by surface plasmons but by the so-called normal optical plasmons, which constitute outgoing nonspectral waves that exist only in sufficiently thin films. Thus, two effective transition radiation channels exist in thin films, resulting from the excitation and subsequent de-excitation of normal and tangential optical plasmons. The probability of optical-plasmon excitation is estimated and it is deduced that the transition radiation intensity decreases rapidly with increasing film thickness in the region close to the plasma frequency. The radiation due to the de-excitation of the tangential optical plasmon is brought about essentially when the exciting electron is situated outside the film. At present there are neither accurate estimates nor experimental data on this type of radiation, but it is surmised that it can be observed in semiconducting films having a high dielectric constant. Orig. art. has: 2 figures and 33 formulas. [02]

ASSOCIATION: Gor'kovskiy nauchno-issledovatel'skiy fiziko-tekhnicheskiy institut (Gorkiy Scientific Research Physicotechnical Institute)

SUBMITTED: 05Sep63 ENCL: 00 SUB CODE: ME, SS

NO REF SOV: 003 OTHER: 008 ATD PRESS: 3181

Card 2/2

APPROVED FOR RELEASE: 06/20/2000 CIA-RDP86-00513R001445230003-9"

"APPROVED FOR RELEASE: 06/20/2000 CIA-RDP86-00513R001445230003-9

ROMANOV, YU. A.

3(9) SOV/10-59-3-28/32

AUTHORS: Karavayeva, V.I. and Romanov, Yu.A.

TITLE: The First Moscow-City Meeting of Young Scientists on Problems of Oceanology

PERIODICAL: Izvestiya Akademii nauk SSSR, Seriya geograficheskaya, 1959, Nr 3, pp 149-150 (USSR)

ABSTRACT: The first Moscow-city meeting of young oceanologists was held on 21 to 23 October 1958. The meeting, commemorating the 40-th anniversary of the VLKSM, was organized by the IOAN (Institut okeanologii AN SSSR - Institute of Oceanology Attached to the AS USSR), the MGI AN SSSR (Morskoy gidrofizicheskiy institut AN SSSR - Hydrophysical Marine Institute Attached to the AS USSR), the TsIP (Tsentral'nyy institut prognozov - Central Prognosis Institute) and the GOIN (Gosudarstvennyy okeanograficheskiy institut - State Institute of Oceanography). Twenty-two different lectures on hydrology, marine chemistry, dynamics of marine waters, marine technology and meteorology were heard. Among others the following outstanding oceanologists took part at the meeting:

Card 1/4

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"APPROVED FOR RELEASE: 06/20/2000 CIA-RDP86-00513R001445230003-9

SOV/10-59-3-28/32

The First Moscow-City Meeting of Young Scientists on Problems of Oceanology

Academician V.V. Shuleykin, Prof. A.D. Dobrovol'skiy, Prof. V.I. Grabovskiy, Prof. A.G. Kolesnikov and Prof. B.A. Skopintsev. V.A. Bubnov (MGI) reported on the results of the 22-nd voyage of the research vessel "Vityaz'". V.M. Gruzinov (MGI) lectured on some questions concerning hydroacoustics of the Indian Ocean. Yu.A. Ivanov and B.A. Tareyev (IOAN), basing their information on common principles governing the theory of marine streams, explained that the Antarctic-divergency zone 3 carries interrupted, mesh-like characters. S.A. Kitaygorodskiy (IOAN) analyzed the process of turbulent intermixing in the upper layer of a stabilized stratified sea from the standpoint of a semi-empirical theory of turbulence. T.Ya. Sekerzh-Zen'kovich (MGI) reported on some solutions of the problems concerning the advance of the free tide wave in a channel of changing depth. A.S. Stavrovskiy (MGI) lectured on his research concerning the problem of the advance of waves at the boundary of an elastic semispace if wave movement is caused by the waves of a liquid in a basin with a spasmodic changing

Card 2/4

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"APPROVED FOR RELEASE: 06/20/2000 CIA-RDP86-00513R001445230003-9

SOV/10-59-3-28/32

The First Moscow-City Meeting of Young Scientists on Problems of Oceanology

depth. The title of the lecture delivered by R.N. Samuseva (MGI) was "The Problem of the Final-Amplitude Waves Arising on a Free Surface and on the Frontier Between 2 Liquids of Different Densities". Yu.A. Anikin (MGI) described his own new apparatus for measuring wind-pressure above sea waves under natural conditions. L.I. Ikonnikova (GOIN) reported on the principles which govern the composition of wave and wind characteristics over the Caspian Sea. F.A. Gubin (MGI) and V.N. Ivanenkov (IOAN) reported on their studies concerning the hydrochemistry of the Western and Antarctic areas of the Indian Ocean. M.S. Serdobov (IOAN) lectured on "Strontium 90 in the Sea". V.F. Shapkina (TsIP) expounded her method of forecasting water temperatures in the Sea of Japan, the forecast being valid for about 1 month. K.F. Ugarova (TsIP) submitted a classification of jet currents and information on the iterating character of the jet currents at different seasons over the Eurasian territory, and gave an account on her calculations showing the role

Card 3/4

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"APPROVED FOR RELEASE: 06/20/2000 CIA-RDP86-00513R001445230003-9

SOV/10-59-3-28/32

The First Moscow-City Meeting of Young Scientists on Problems of Oceanology

of advection and vertical air movements during the tropospheric temperature changes within the sphere of the current. I.A. Shishkova (TsIP) lectured on the method for determining local acceleration and their practical application in forecasting the trajectories of air particles. Fair prognoses, valid for about 12 hours, were achieved. V.G. Samarin (MGI) discussed methodological bases for wave-recording by means of photo-recorders with slotted apertures of A.A. Ivanov, recording being done from the board of a rocking vessel of the "Mikhail Lomonosov" type. Yu.A. Vel'mozhnaya (MGI) spoke on her successful experiments in the practical use of the ITR-2 interferometers for establishing salinity of sea water. I. Belyayev (GOIN) reported on the level conditions of the Terek river estuary. V.N. Mikhaylov (GOIN) lectured on his research concerning the contact forms of a river flow with a water basin. All papers are to be published during 1959. Such meetings will be convened every year.

Card 4/4

APPROVED FOR RELEASE: 06/20/2000 CIA-RDP86-00513R001445230003-9"

"APPROVED FOR RELEASE: 06/20/2000 CIA-RDP86-00513R001445230003-9

ROMANOV, Yu.A.

Transformation of surface wind on the shores of the Sea of Japan north of 41° N. Trudy Inst. okean. 57:9-15 '62. (MIRA 16:10)

APPROVED FOR RELEASE: 06/20/2000 CIA-RDP86-00513R001445230003-9"

"APPROVED FOR RELEASE: 06/20/2000 CIA-RDP86-00513R001445230003-9

ROMANOV, Yu.A.

Accuracy of determining the wind field over the sea from the isobaric field. Okeanologiia 2 no.1:139-143 '62. (MIRA 15:2)

1. Institut okeanologii AN SSSR.
(Winds) (Meteorology, Maritime)

APPROVED FOR RELEASE: 06/20/2000 CIA-RDP86-00513R001445230003-9"

"APPROVED FOR RELEASE: 06/20/2000 CIA-RDP86-00513R001445230003-9

ROMANOV, Yu.A.

Maps of prevailing and resultant wind, turbulence and divergence of resultant wind over the Pacific Ocean. Trudy Inst. okean. 72:94-105 '63. (MIRA 17:8)

APPROVED FOR RELEASE: 06/20/2000 CIA-RDP86-00513R001445230003-9"

"APPROVED FOR RELEASE: 06/20/2000 CIA-RDP86-00513R001445230003-9

ROMANOVA, N.A.; ROMANOV, Yu.A.

Pressure gradients in the equatorial latitudes. Izv. AN SSSR, Fiz. atm. i okeana 1 no.11:1141-1150 N '65. (MIRA 18:12)

1. Institut okeanologii AN SSSR. Submitted May 15, 1965.

APPROVED FOR RELEASE: 06/20/2000 CIA-RDP86-00513R001445230003-9"

"APPROVED FOR RELEASE: 06/20/2000 CIA-RDP86-00513R001445230003-9

KASAVINA, B.S.; ROMANOV, Yu.A.; KOL'CHINSKAYA, T.A.

Effect of lidase on the function and proliferation of the thyroid gland. Dokl. AN SSSR 165 no.3:725-728 N '65. (MIRA 18:11)

1. Vsesoyuznyy institut eksperimental'noy endokrinologii AMN SSSR i Vtoroy Moskovskiy gosudarstvennyy meditsinskiy institut im. N.I. Pirogova. Submitted February 20, 1965.

APPROVED FOR RELEASE: 06/20/2000 CIA-RDP86-00513R001445230003-9"

"APPROVED FOR RELEASE: 06/20/2000 CIA-RDP86-00513R001445230003-9

ACC NR: AT7003620 (N) SOURCE CODE: UR/3090/66/000/015/0069/0087

AUTHOR: Luk'yanov, V. V.; Romanov, Yu. A.

ORG: none

TITLE: Inversion layers in the lower troposphere over the Indian Ocean

SOURCE: AN SSSR. Mezhduvedomstvennyy geofizicheskiy komitet. X razdel programmy MGG: Okeanologiya. Sbornik statey, no. 15, 1966. Okeanologicheskiye issledovaniya, 69-87

TOPIC TAGS: WIND, ATMOSPHERIC HUMIDITY, marine meteorology, ~~hydrographic survey~~, meteorology, oceanography, ocean property, TROPOSPHERE, TEMPERATURE INVERSION / INDIAN OCEAN

ABSTRACT: The article analyzes the aerological data of the five Indian Ocean surveys. A diagram is given which shows the routes of five Soviet expeditions during the summer and winter monsoon seasons in the Indian Ocean. Characteristics of inversion layers during the winter and summer monsoon are represented on eight diagrams. A longitudinal section of the relative humidity from 12°S lat. to 3°N lat. is shown. Maps of some features of the inversion layers in the lower troposphere during the summer and winter monsoon are drawn for the tropical part of the Indian Ocean. There is a discussion of the cause of the inversion layers and the relation of these inversions to the region of divergence and convergence of the surface winds. The results are com-

Card 1/2 UDC: none

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"APPROVED FOR RELEASE: 06/20/2000 CIA-RDP86-00513R001445230003-9

ACC NR: AT7003620

pared with data obtained in the Atlantic and Pacific Oceans by other authors. Orig. art. has: 4 figures and 1 table. [BA]

SUB CODE: 08/ SUBM DATE: none/ ORIG REF: 013/ OTH REF: 013

Card 2/2

APPROVED FOR RELEASE: 06/20/2000 CIA-RDP86-00513R001445230003-9"

"APPROVED FOR RELEASE: 06/20/2000 CIA-RDP86-00513R001445230003-9

ACC NR: AT7003621 SOURCE CODE: UR/3090/66/000/015/0088/0111

AUTHOR: Romanov, Yu. A.

ORG: none

TITLE: Predominant and resultant surface winds over the Pacific Ocean

SOURCE: AN SSSR. Mezhduvedomstvennyy geofizicheskiy komitet. X razdel programmy MGG: Okeanologiya. Sbornik statey, no. 15, 1966. Okeanologicheskiye issledovaniya, 88-111

TOPIC TAGS: marine meteorology, wind direction, ~~surface wind~~, oceanography, ~~meteorology, atmospheric study~~, WIND PROFILE, ATMOSPHERIC PRESSURE/ PACIFIC OCEAN

ABSTRACT: A study was conducted of the seasonal variation of wind patterns over the Pacific Ocean. Maps prepared in the Institute of Oceanology were used. They show atmospheric pressure and the predominant and resultant surface wind over the Pacific Ocean for January, April, July, and October. The distribution of resultant winds and atmospheric pressure zones are compared. The relationship between wind and pressure gradients near the equator is discussed. Orig. art. has: 8 figures and 4 tables. [BA]

SUB CODE: 08/ SUBM DATE: none / ORIG REF: 014

Card 1/1

APPROVED FOR RELEASE: 06/20/2000 CIA-RDP86-00513R001445230003-9"

"APPROVED FOR RELEASE: 06/20/2000 CIA-RDP86-00513R001445230003-9

L 18535-66 EWT(1)/ETC(f)/EPF(n)-2/EWG(m) IJP(c) AT

ACC NR: AP6002305 SOURCE CODE: UR/0141/65/008/006/1203/1212

AUTHOR: Romanov, Yu. A.

ORG: Gor'kiy State University (Gor'kovskiy gosudarstvennyy universitet)

TITLE: Collective losses in anisotropic crystals

SOURCE: IVUZ. Radiofizika, v. 8, no. 6, 1965, 1203-1212

TOPIC TAGS: semiconductor plasma, anisotropic plasma, single crystal

ABSTRACT: The peculiarities of collective losses in anisotropic plasma layers are theoretically clarified, by considering the probability of particle transition, plasma dielectric constant, and plasmon energy spectrum. Specifically, it is shown that: (1) The losses due to excitation of volume plasmons have an angular anisotropy in cubic crystals; (2) Because the combined momentum of the flying particle and the excited volume plasmon varies, the collective losses are characterized by the energy

Card 1/2

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L 18535-66
ACC NR: AP6002305

background that has small peaks at $\omega \approx \omega_{\parallel}$, where $\omega_{\parallel}$ is the frequency of a plasmon whose wave vector is aligned along the principal optical axis in a single-axis crystal; (3) Two branches of surface plasmons exist in the anisotropic plasma layer;

UDC: 533.951

these branches are located below the corresponding volume-plasmon branches; (4) The losses due to surface plasmons in sufficiently thin layers strongly depend on the electron-scattering angle. Experimental verification of the above theoretical relations is urged. Orig. art. has: 2 figures and 35 formulas.

SUB CODE: 20 / SUBM DATE: 26Jan65 / ORIG REF: 007 / OTH REF: 002

Card 2/2

APPROVED FOR RELEASE: 06/20/2000 CIA-RDP86-00513R001445230003-9"

"APPROVED FOR RELEASE: 06/20/2000 CIA-RDP86-00513R001445230003-9

ROMANOV, Yu.A.

Mean velocities of wind over the Pacific Ocean. Izv. AN SSSR. Ser. geog. no. 1:88-92 Ja-F '66 (MIRA 19:2)

1. Institut okeanologii AN SSSR.

APPROVED FOR RELEASE: 06/20/2000 CIA-RDP86-00513R001445230003-9"

"APPROVED FOR RELEASE: 06/20/2000 CIA-RDP86-00513R001445230003-9

ROMANOV, D.A.

Plasma waves in films. Izv. vys. ucheb. zav.; radiofiz. 7 no.5: 828-832 '64. (MIRA 18:2)

1. Gor'kovskiy nauchno-issledovatel'skiy fiziko-tekhnicheskiy institut.

APPROVED FOR RELEASE: 06/20/2000 CIA-RDP86-00513R001445230003-9"

"APPROVED FOR RELEASE: 06/20/2000 CIA-RDP86-00513R001445230003-9

ROMANOV, Yu.A.

Relation of surface wind and pressure at the equator. Okeanologiia 4 no.6:954-961 '64. (MIRA 18:2)

1. Institut okeanologii AN SSSR.

APPROVED FOR RELEASE: 06/20/2000 CIA-RDP86-00513R001445230003-9"

"APPROVED FOR RELEASE: 06/20/2000 CIA-RDP86-00513R001445230003-9

ROMANOV, Yu.A.

Epidemic hepatitis (Botkin's disease) during pregnancy and lactation. Trudy LPMI 30:218-232 '63. (MIRA 18:3)

1. Bol'nitsa imeni Botkina v Leningrade (glavnyy vrach M.M.Figurina, nauchnyy rukoveditel' prof. Ye.S.Gurevich) i kafedra infektsionnykh bolezney (zav. prof. Ye.S.Gurevich) Leningradskogo pediatricheskogo meditsinskogo instituta (rektor dotsent Ye.P.Semenova).

APPROVED FOR RELEASE: 06/20/2000 CIA-RDP86-00513R001445230003-9"

"APPROVED FOR RELEASE: 06/20/2000 CIA-RDP86-00513R001445230003-9

ROMANOV, Yu.A.

Theory of characteristic losses in thin films. Zhur.eksp. i teor.fiz. 47 no.6:2119-2133 D '64. (MIRA 18:2)

1. Fiziko-tekhnicheskiy institut Gor'kovskogo gosudarstvennogo universiteta.

APPROVED FOR RELEASE: 06/20/2000 CIA-RDP86-00513R001445230003-9"

"APPROVED FOR RELEASE: 06/20/2000 CIA-RDP86-00513R001445230003-9

L 51407-65 EWT(1)/EPF(n)-2/EWG(m)/EPA(w)-2 Pz-6/Po-4/Pab-10/Pi-4 IJP(c)
WW/AT

ACCESSION NR: AP5010696 UR/0181/65/007/004/0970/0974

49
48
B

AUTHOR: Romanov, Yu. A.

TITLE: Low-frequency surface waves in a two-component plasma 21

SOURCE: Fizika tverdogo tela, v. 7, no. 4, 1965, 970-974

TOPIC TAGS: plasma wave, plasmon, surface wave, two component plasma, low frequency plasmon

ABSTRACT: The theory of surface waves in a single-component plasma, developed by the author in earlier papers (FTT v. 5, 2988, 1963; Radiofizika v. 7, 242, 1964; ZhETF v. 47, 2119, 1964) is extended to include low-frequency surface plasmons in the case of a two-component plasma, such as an electron-hole or electron-ion plasma. This is claimed to be the first published analysis of these plasmons. The energy spectrum is derived from Maxwell's equations and the kinetic equation, using the continuity of the tangential components of the electromagnetic field and the condition for specular reflection of the carriers from the plasma boundary as boundary conditions. The calculations show that the low-frequency waves, for not too small wave vectors, are quite similar to the high-frequency surface waves treated

Card 1/2

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L 51407-65

ACCESSION NR: AP5010696

in the earlier article, and should also be rapidly excited by fast electrons. There are still no experimental data to confirm this conclusion, and it is pointed out that convenient materials for this purpose are semiconductors and semi-metals in which the electrons and holes have greatly differing effective masses (indium antimonide or bismuth). Orig. art. has: 21 formulas.

ASSOCIATION: Gor'kovskiy gosudarstvennyy universitet (Gor'kiy State University)

SUBMITTED: 15Jul64 ENCL: 00 SUB CODE: ME, SS

NR REF SOV: 002 OTHER: 001

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Card 2/2

APPROVED FOR RELEASE: 06/20/2000 CIA-RDP86-00513R001445230003-9"

"APPROVED FOR RELEASE: 06/20/2000 CIA-RDP86-00513R001445230003-9

ROMANOV, Yu.A.

Electromagnetic waves in a semibounded plasma. Izv. vys. ucheb. zav. radiofiz. 7 no.2:242-250 '64 (MIRA 18:1)

1. Nauchno-issledovatel'skiy fiziko-tekhnicheskiy institut pri Gor'kovskom universitete.

APPROVED FOR RELEASE: 06/20/2000 CIA-RDP86-00513R001445230003-9"

"APPROVED FOR RELEASE: 06/20/2000 CIA-RDP86-00513R001445230003-9

LITVIN, G.S., ROMANOV, YU. D.

Regarding the Problem of Study of Conditioned Motor Reactions in Decompression Chamber

VOYENNO-MEDITSINSKIY ZHURNAL (Military Medical Journal), no. 2, February 1955, p. 56

APPROVED FOR RELEASE: 06/20/2000 CIA-RDP86-00513R001445230003-9"

"APPROVED FOR RELEASE: 06/20/2000 CIA-RDP86-00513R001445230003-9

ROMANOV, Yu. D., mayor med. sluzhby

Organization of a department for functional diagnosis at a garrison hospital. Voen.-med. zhur no.5:76-79 My '57 (MIRA 12:7)
(GASTROINTESTINAL DISEASES, diagnosis,
funct. diag. department in military hosp. (Rus))

APPROVED FOR RELEASE: 06/20/2000 CIA-RDP86-00513R001445230003-9"

"APPROVED FOR RELEASE: 06/20/2000 CIA-RDP86-00513R001445230003-9

ROMANOV, Yu.D.

ROMANOV, Yu.D., mayor meditsinskoy sluzhby

Results of dynamic observations in arterial hypotension in young adults. Voen.-med.zhur. no.8:47-53 Ag '57. (MIRA 10:12)
(HYPOTENSION, physiology,
dynamic observations in young adults (Rus))

APPROVED FOR RELEASE: 06/20/2000 CIA-RDP86-00513R001445230003-9"

"APPROVED FOR RELEASE: 06/20/2000 CIA-RDP86-00513R001445230003-9

ROMANOV, Yu.D. kand.med.nauk

Observations on the capillaroscopic picture in hypertension and hypotension. Klin.med. 36 no.8:39-45 Ag '58 (MIRA 11:9)

1. Iz Kazanskogo voyennogo gospiralya i pervoy kafedry terapii (zav. - zaslyzhenyy deyatel' nauki Tatarskoy ASSR prof. L.M. Rakhlin) Kazanskogo instituta usovershenstvovaniya vrachey imeni V.I. Lenina.

(HYPERTENSION, physiol.
capillarscopy (Rus))
(HYPOTENSION, physiol.
same (Rus))
(SKIN, blood supply
capillaroscopy in hypertension & hypotension (Rus))

APPROVED FOR RELEASE: 06/20/2000 CIA-RDP86-00513R001445230003-9"

"APPROVED FOR RELEASE: 06/20/2000 CIA-RDP86-00513R001445230003-9

VORONOV, Ye.L., polkovnik meditsinskoy sluzhby; ROMANOV, Yu.D., kand.med. nauk, mayor meditsinskoy sluzhby

Portable apparatus for oxygen therapy. Voen.med.zhur. no.3:78-79 '59. (MIRA 12:6)

(OXYGEN, ther. use
portable appar. for garrison hosp. (Rus))
(MEDICINE, MILITARY AND NAVAL
portable appar. for oxygen ther. in garrison hosp. (Rus))

APPROVED FOR RELEASE: 06/20/2000 CIA-RDP86-00513R001445230003-9"

"APPROVED FOR RELEASE: 06/20/2000 CIA-RDP86-00513R001445230003-9

ROMANOV, Yu.D. (Kazan')

On the individual dosage of cytiton in determining the velocity of blood flow. Klin.med. 37 no.8:141-142 Ag '59. (MIRA 12:11)

1. Iz Kazanskogo voyennogo gospitalya (nach. M.V.Klemenkov) i kafedry gospital'noy terapii No.1 (nach. - chlen-korrespondent AMN SSSR prof. N.S.Molchanov) Voyenno-meditsinskoy ordena Lenina akademii im. S.M.Kirova.

(ALKALOIDS, pharmacol.)
(BLOOD CIRCULATION, pharmacol.)

APPROVED FOR RELEASE: 06/20/2000 CIA-RDP86-00513R001445230003-9"

"APPROVED FOR RELEASE: 06/20/2000 CIA-RDP86-00513R001445230003-9

PUKIN, A.M.; ROMANOV, Yu.D., kand.med.nauk

Method of using underwater intestinal lavage under other than health resort conditions. Kaz.med.zhur. 40 no.3:20-23 My-Je '59. (MIRA 12:11)

1. Iz Kazanskogo voyennogo gospitalya (nachal'nik - M.V.Klemenkov).
(INTESTINES--DISEASES)
(HYDROTHERAPY)

APPROVED FOR RELEASE: 06/20/2000 CIA-RDP86-00513R001445230003-9"

"APPROVED FOR RELEASE: 06/20/2000 CIA-RDP86-00513R001445230003-9

BOGOYAVLENSKIY, V.F. (Kazan'); ROMANOV, Yu.D. (Kazan')

All-Union Conference on the Study of Gas Exchange. Kaz. med. zhur. no.6:76-78 N-D '60. (MIRA 13:12)

(RESPIRATION--CONGRESSES)

APPROVED FOR RELEASE: 06/20/2000 CIA-RDP86-00513R001445230003-9"

"APPROVED FOR RELEASE: 06/20/2000 CIA-RDP86-00513R001445230003-9

SHPAKOV, I.M., red.; ABDRAKHMANOV, M.I., red.; BABICHEV, R.I., inzh., red.; BOGOYAVLENSKIY, V.F., red.; VALITOV, Z.G., red.; ROMANOV, Yu.D., red.; SAYFULLIN, S.Sh., red.; ZAYNULLIN, I.Kh., tekhn. red.

[New devices for making gas analyses and automatically regulating the temperature of various media] Novye pribory gazovogo analiza i avtomaticheskogo regulirovaniia temperatury razlichnykh sred. Kazan', 1961. 169 p. (MIRA 15:7)

1. Tatar A.S.S.R. Samostoyatel'noye konstruktorsko-tekhnologicheskoye byuro po proyektirovaniyu meditsinskikh i fiziologicheskikh priborov. 2. Glavnyy inzhener Samostoyatel'nogo konstruktorsko-tekhnologicheskogo byuro po proyektirovaniyu meditsinskikh i fizologicheskikh priborov (for Abdrakhmanov).
(Scientific apparatus and instruments) (Thermostat)

APPROVED FOR RELEASE: 06/20/2000 CIA-RDP86-00513R001445230003-9"

"APPROVED FOR RELEASE: 06/20/2000 CIA-RDP86-00513R001445230003-9

RAKHLIN, L.M., prof., red.; ABDRAKHMANOV, M.I., zam. red.; ROMANOV, Yu.D., red.; VALITOV, Z.G., red.; SAYFULLIN, S.Sh., red.; ZAYNULLIN, I.Kh., tekhn. red.

[Transactions of the Joint Conference of Designers, Physiologists and Physicians. Dedicated to the Methods of Studying Gas Exchange under Normal and Pathological Conditions] Trudy Sovmestnoy konferentsii konstruktorov, fiziologov i vrachei, posviashchennoi metodam izucheniia gazovogo obmena pri fiziologicheskikh i patologicheskikh sostoianiiakh, 1960. Pod red. L.M.Rakhlina. Kazan', Tatsovnarkhoz, 1961. 183 p. (MIRA 15:7)

1. Sovmestnaya konferentsiya konstruktorov, fiziologov i vrachey, posvyashchennaya metodam izucheniya gazovogo obmena pri fiziologicheskikh i patologicheskikh sostoyaniyakh, 1960. 2. Samostoyatel'noye konstruktorsko-tekhnologicheskoye byuro po proyektirovaniyu meditsinskikh i fiziologicheskikh priborov, Kazan' (for Abdrakhmanov).
(RESPIRATION)

APPROVED FOR RELEASE: 06/20/2000 CIA-RDP86-00513R001445230003-9"

"APPROVED FOR RELEASE: 06/20/2000 CIA-RDP86-00513R001445230003-9

ROMANOV, Yu.D., kand.med. nauk; SVERDLOV, B.D.

Infrared photography as a method of detection of the deep collateral vessels of the anterior abdominal wall in disorders of portal circulation. Terap. arkh. 35 no.1:30-34 Ja'63. (MIRA 16:9)

1. Iz 1-y kafedry terapii (zav. - prof. L.M.Rakhlin) Kazanskogo gosudarstvennogo instituta dlya usovershenstvovaniya vrachey imeni Lenina.
(ABDOMEN--BLOOD SUPPLY) (PHOTOGRAPHY, INFRARED)
(PORTAL HYPERTENSION)

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"APPROVED FOR RELEASE: 06/20/2000 CIA-RDP86-00513R001445230003-9

ROMANOV, Yu.D., kand.med. nauk; ZYABBAROV, A.A., kand.med. nauk; RUSETSKIY, I.I., prof.; ANDREYEV, V.P., dotsent

In the scientific medical societies of the Tatar A.S.S.R.
Kaz.med. zhur. 4:94-97 Jl-Ag'63 (MIRA 17:2)

1. Sekretar' Obshchestva terapevtov Tatarskoy ASSR (for Romanov). 2. Sekretar' Obshchestva rentgenologov i radiologov Tatarskoy ASSR (for Zyabbarov). 3. Predsedatel' Obshchestva nevropatologov i psikhiatrov Tatarskoy ASSR (for Rusetskiy). 4. Sekretar' Obshchestva nevropatologov i psikhiatrov Tatarskoy ASSR (for Andreyev).

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"APPROVED FOR RELEASE: 06/20/2000 CIA-RDP86-00513R001445230003-9

ROMANOV, Yu.M.

Distribution of woodcock in Moscow Province and some features of its spring ecology. Ornitologiia no.6:96-100 '63.
(MIRA 17:6)

APPROVED FOR RELEASE: 06/20/2000 CIA-RDP86-00513R001445230003-9"

"APPROVED FOR RELEASE: 06/20/2000 CIA-RDP86-00513R001445230003-9

DMITRIYEV, V.N.; DRAPCHINSKIY, L.V.; PETRZHAK, K.A.; ROMANOV, Yu.F.

Comparative characteristics of triple fission of uranium and plutonium. Atom. energ. 14 no.6:574-575 Je '63. (MIRA 16:7)
(Nuclear fission) (Uranium) (Plutonium)

APPROVED FOR RELEASE: 06/20/2000 CIA-RDP86-00513R001445230003-9"

"APPROVED FOR RELEASE: 06/20/2000 CIA-RDP86-00513R001445230003-9

DMITRIYEV, V.N.; PETRZHAK, K.A.; ROMANOV, Yu.F.

Kinetic energy of fragments and α-particles in triple fission of U^{235}. Atom. energ. 15 no.1:6-11 Jl '63. (MIRA 16:8)
(Uranium isotopes) (Nuclear fission)

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"APPROVED FOR RELEASE: 06/20/2000 CIA-RDP86-00513R001445230003-9

L 11137-63 EPF(n)-2/EWT(m)/BDS--AFFTC/ASD/SSD--Pu-4--DM

ACCESSION NR: AP3002264 S/0089/63/014/006/0574/0575

AUTHOR: Dmitriyev, V. N.; Drapchinskiy, L. V.; Petrzhak, K. A.; Romanov, Yu. F.

TITLE: Comparative characteristics of triple fission of uranium and plutonium

SOURCE: Atomnaya energiya, v. 14, no. 6, 1963, 574-575

TOPIC TAGS: triple fission, uranium, plutonium

ABSTRACT: The purpose of the work was obtaining sufficient data concerning the energy distribution of fission fragments of U sup 238, U sup 235, and Pu sup 239 by slow neutrons. Twenty thousand events of triple fission of the first, 15,000 events of the second, and 12,000 of the third nucleus were recorded. The apparatus used was described in Zhurn. eksper. i teoret. fiz., v. 39, 1960, 556. The data are plotted with E sub 1/E sub 2 as abscissa, E sub 1 + E sub 2 as ordinate, for each value of the relative frequency of fission; thus, the "contour diagram" is obtained. The diagrams are similar for all three nuclei. Figure 1 (see Enclosures) shows the results for U sup 238. The solid lines are for triple fission, and the broken lines are for double fission. Discussion of the result is presented. The latter indicate the same nature of fissions in all three nuclei. Orig. art. has: 2 figures and 1 table.

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"APPROVED FOR RELEASE: 06/20/2000 CIA-RDP86-00513R001445230003-9

L 14938-63 EWT(m)/BDS AFFTC/ASD DM

ACCESSION NR: AP3003968 S/0089/63/015/001/0006/0011

55

AUTHORS: Dmitriyev, V. N.; Petrzhak, K. A.; Romanov, Yu. F.

19

TITLE: Kinetic energy of fragments and Alpha-particle in triple fission of U sup 235

SOURCE: Atomnaya energiya, v. 15, no. 1, 1963, 6-11

TOPIC TAGS: triple fission, U sup 235, energy of fission fragments

ABSTRACT: The connection between the kinetic energy of fragments and the energy of the long-range Alpha particles in a triple fission is essential in the theory of the latter. In the present work, the authors measured the energy distribution of the fragments of triple fission, the average energy of Alpha particles being 10.6, 16.4, 20.3, and 24.0 mev. It was found that the total average energy of the fragments does not depend on the Alpha particle energy when the latter is greater than 15 mev; it does depend on it for less energetic Alphas. The work was performed by using the reactor of the Leningrad Physico-Technical Institute, AN SSSR. Orig. art. has: 4 figures and 2 tables.

ASSOCIATION: none

SUBMITTED: 23Aug63 DATE ACQ: 08Aug63 ENCL: 00

SUB CODE: PH NO REF SOV: 004 OTHER: 001

Card 1/1

APPROVED FOR RELEASE: 06/20/2000 CIA-RDP86-00513R001445230003-9"

"APPROVED FOR RELEASE: 06/20/2000 CIA-RDP86-00513R001445230003-9

DMITRIYEV, V.N.; DRAPCHINSKIY, L.V.; PETRZHAK, K.A.; ROMANOV, Yu.F.

Measuring the energy of two pair fission fragments. Prib.i tekh. eksp. 7 no.1:94-96 Ja-F '62. (MIRA 15:3)

1. Radiyevyy institut AN SSSR.
(Nuclear fission)

APPROVED FOR RELEASE: 06/20/2000 CIA-RDP86-00513R001445230003-9"

"APPROVED FOR RELEASE: 06/20/2000 CIA-RDP86-00513R001445230003-9

BAK, M.A.; ROMANOV, Yu.F.; PCHELINTSEVA, G.M., red.; VLASOVA, N.A., tekhn.red.

[Neutron] Neitron. Moskva, Izd-vo Gos.komiteta Soveta ministrov SSSR po ispol'zovaniiu atomnoi energii, 1960. 80 p. (MIRA 13:11)

(Neutrons)

APPROVED FOR RELEASE: 06/20/2000 CIA-RDP86-00513R001445230003-9"

"APPROVED FOR RELEASE: 06/20/2000 CIA-RDP86-00513R001445230003-9

S/120/62/000/001/020/061
E140/E463

21.6000

AUTHORS: Dmitriyev, V.N., Drapchinskiy, L.V., Petrzhak, K.A., Romanov, Yu.F.

TITLE: Measurement of conjugate fission fragment energies

PERIODICAL: Pribory i tekhnika eksperimenta, no.1, 1962, 94-96

TEXT: In studying energy evolution in the fission of heavy nuclei, the energies of the fission fragments must be measured. The authors use a method of photographic recording from the screen of a CRT, where the two axes correspond to the energies of two conjugate fission fragments. Up to 80 events are photographed on one frame, from which they are transferred to millimetric paper manually (using a projection technique). Ten thousand points can be plotted in 8 man hours. A control experiment was run to test the symmetry of the two channels, which was found satisfactory to within experimental error. There are 2 figures.

B

ASSOCIATION: Radiyevyy institut AN SSSR (Radium Institute AS USSR)

SUBMITTED: June 7, 1961

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