"APPROVED FOR RELEASE: 06/15/2000 CIA-RDP86-00513R001341610012-2

L 62677-65

ACCESSION NR: AP5018625

$$\beta_{eff} = \sigma n_0 + \beta_0 + \frac{1}{l} \ln \left\{ 1 - \frac{\sigma n_0}{\sigma n_0 + \beta_0} \left[1 - e^{-(\sigma n_0 + \beta_0) l} \right] \sigma U_0^* \right\}$$

(U^* — total number of photons passing through 1 cm^2 during the time of a light pulse, U_0^* and U_l^* — the value of U^* at the input and output of the sample, respectively, l — length of sample, n_0 — number of active atoms per cubic centimeter, β_0 — nonresonant absorption coefficient, and σ — effective collision cross section for induced transition in the atom). The dependence of the effective absorption coefficient on the intensity was measured experimentally, using a ruby laser operating at the R_1 line as a source, and using pulses of duration 3×10^{-4} sec. The samples were two ruby rods 120 and 77.5 mm, respectively, with orientations 90° and 60° respectively. The measurement results were found to be in good agreement with calculation. The calculated dependence of the effective absorption coefficient on the pump signal also agreed with the measurements. Measurements were also made of the dependence of the coefficient of absorption on the polarization of the light and on the input intensities. It is planned to measure the dependence of β_{eff} on the temperature, frequency, and length of the sample in the

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L 62677-65

ACCESSION NR: AP5018625

5

nearest future. "The authors thank Professor M. L. Ter-Mikaylyan for continuous interest in the work and valuable discussions." Orig. art. has: 5 figures and 11 formulas. [02]

ASSOCIATION: Ob"yedinyennaya radiatsionnaya laboratoriya Yerevanskogo gosudarstvennogo universiteta i AN Armyanskoy SSR (Joint Radiation Laboratory of the Yerevan State University and AN ArmSSR)

SUBMITTED: 03Nov64 44 ENCL: 00 SUB CODE: EC, NP

NO REF SOV: 005 OTHER: 001 ATD PRESS: 4057

Card 3/3

APPROVED FOR RELEASE: 06/15/2000 CIA-RDP86-00513R001341610012-2"

"APPROVED FOR RELEASE: 06/15/2000 CIA-RDP86-00513R001341610012-2

POGOSYAN, R.

USSR/Chemical Technology - Chemical Products and Their Applications - Silicates. Glass. Ceramics. Binders. I-10

Abs Jour : Ref Zhur - Khimiya, No 3, 1957, 9015

Author : Manvelyan, M., Pogosyan, R., and Ter-Karapetyan, S.

Inst :

Title : Penotuf

Orig Pub : Stroit. materily, izdeliya i konstruktsii, 1955, No 5, 34

Abstract : A new construction material, Penotuf [foamtuf], has been prepared by heating Aniysktuf to 1200° and holding it at that temperature for two hours; the raw material is passed through a sieve with 2500 openings per cm. The addition of 20% Aniysk clay increases the expansion temperature range and

Card 1/2

APPROVED FOR RELEASE: 06/15/2000 CIA-RDP86-00513R001341610012-2"

"APPROVED FOR RELEASE: 06/15/2000 CIA-RDP86-00513R001341610012-2

POGOSYAN, R., inzh.

Some characteristics of the adjustment of relay protection using operative a.c. current. Prom.Arm. 6 no.2:44-48 F '63. (MIRA 16:5)

1. Glavnoye upravleniye energetiki i elektrifikatsii pri Sovete Ministrov Armyanskoy SSR.

(Electric protection)

APPROVED FOR RELEASE: 06/15/2000 CIA-RDP86-00513R001341610012-2"

"APPROVED FOR RELEASE: 06/15/2000 CIA-RDP86-00513R001341610012-2

MANVELYAN, M.; POGOSYAN, R.; TER-KARAPETYAN, S.

"Foam tuff." Stroi.mat., izdel.i konstr. 2 no.5:34 My '56.
(MLRA 9:8)

(Armenia--Volcanic ash, tuff, etc.)

APPROVED FOR RELEASE: 06/15/2000 CIA-RDP86-00513R001341610012-2"

"APPROVED FOR RELEASE: 06/15/2000 CIA-RDP86-00513R001341610012-2

POGOSYAN, R., inzh.

Electric 110/35/10 kv. substations without charge batteries.
Prom.Arm. 5 no.8:30-33 Ag '62. (MIRA 15:8)
(Armenia--Electric substations)

APPROVED FOR RELEASE: 06/15/2000 CIA-RDP86-00513R001341610012-2"

"APPROVED FOR RELEASE: 06/15/2000 CIA-RDP86-00513R001341610012-2

POGOSYAN, R., inzh.

New design of the flywheel and semiclutch coupling. Prom.Arm. 5 no.8:38-39 Ag '62. (MIRA 15:8)
(Armenia--Clutches (Machinery))

APPROVED FOR RELEASE: 06/15/2000 CIA-RDP86-00513R001341610012-2"

"APPROVED FOR RELEASE: 06/15/2000 CIA-RDP86-00513R001341610012-2

POGOSYAN, R.G.

Instrument for measuring the depth of the ball trace.
Mashinostroitel' no.9:23 S '64. (MIRA 17:10)

APPROVED FOR RELEASE: 06/15/2000 CIA-RDP86-00513R001341610012-2"

"APPROVED FOR RELEASE: 06/15/2000 CIA-RDP86-00513R001341610012-2

GRIGORYAN, G.T., starshiy nauchnyy sotrudnik; [illegible], A.G., vrach; ADAMYAN, A.G., mladshiy nauchnyy sotrudnik

X-ray therapy of skin cancer of the eyelids and ocular angles with low-voltage irradiation. Vop. rent. i onk. 7:127-130 '62 (MIRA 17:7)

APPROVED FOR RELEASE: 06/15/2000 CIA-RDP86-00513R001341610012-2"

"APPROVED FOR RELEASE: 06/15/2000 CIA-RDP86-00513R001341610012-2

USSR/General Problems of Pathology - Tumors. Human Tumors. U

Abs Jour : Ref Zhur - Biol., No 2, 1959, 8842

Author : Grigoryan, G.T., Pogosyan, R.G.
Inst : -
Title : Experience in the Use of Short-Distance X-Ray Therapy in the Treatment of Pre-Malignant Diseases and Cancer of the Skin and Lip

Orig Pub : Vopr. rentgenol i onkol. T. 2. Yerevan, 1957, 157-162

Abstract : No abstract.

Card 1/1

APPROVED FOR RELEASE: 06/15/2000 CIA-RDP86-00513R001341610012-2"

"APPROVED FOR RELEASE: 06/15/2000 CIA-RDP86-00513R001341610012-2

ACCESSION NR: AP4026384 S/0252/64/038/001/0059/0063

AUTHORS: Fanardzhyan, V. V.; Pogosyan, R. I.; Maloyan, V. A.

TITLE: Potentials in the brain cortex initiated by stimuli on the cerebellum

SOURCE: AN ArmSSR. Doklady*, v. 38, no. 1, 1964, 59-63

TOPIC TAGS: cortex, cerebellum stimulus, electrical activity, bipolar brain stud electrode, electric stimulus, cerebellum core, topographic demarcation, induced potential, thalamus

ABSTRACT: Electrical activity of the cortex induced by means of cerebellum stimulii in lightly anesthetized and unanesthetized cats has been investigated. The electrical activity was monitored through mono- and bipolar brain-stud electrodes. The electric stimuli to the cerebellum core were produced through steel pieces isolated from the bipolar electrode tips (1-mm terminal separation). The results show clear topographic demarcations between the reaction-involved potential and the induced potential. Displacement of the monitoring electrodes from one location to another invariably changed the nature of the recorded electric

Card 1/2

APPROVED FOR RELEASE: 06/15/2000 CIA-RDP86-00513R001341610012-2"

"APPROVED FOR RELEASE: 06/15/2000 CIA-RDP86-00513R001341610012-2

ACCESSION NR: AP4026384

response. Anatomic and physiological investigations substantiate the presence of two cerebellum-brain systems having as the relay switch specified and unspecified structures of the thalamus. Orig. art. has: 5 figures.

ASSOCIATION: Institut fiziologii im. akademika L. A. Orbeli, Akademii nauk Armyanskoy SSR (Institute of Physiology, Academy of Sciences, Armenian SSR)

SUBMITTED: 00 DATE ACQ: 16Apr64 ENCL: 00

SUB CODE: AM NO REF SOV: 003 OTHER: 007

Card 2/2

APPROVED FOR RELEASE: 06/15/2000 CIA-RDP86-00513R001341610012-2"

"APPROVED FOR RELEASE: 06/15/2000 CIA-RDP86-00513R001341610012-2

FANARDZYAN, V.V.; POGOSYAN, R.I.

Interrelationship between cerebellar and periperal impulses entering the sensorimotor portion of the cerebral cortex. Dokl. AN Arm. SSR 38 no.3:189-192 '64. (MIRA 17:6)

1. Institut fiziologii im. akademika L.A.Orbeli AN Armyanskoy SSR. Predstavleno chlenom-korrespondentom AN Armyanskoy SSR A.I.Karamyanom.

APPROVED FOR RELEASE: 06/15/2000 CIA-RDP86-00513R001341610012-2"

"APPROVED FOR RELEASE: 06/15/2000 CIA-RDP86-00513R001341610012-2

FANARDZHYAN, V.V.; POGOSYAN, R.I.; MALOYAN, V.A.

Potentials of the cerebral cortex caused by the stimulation of cerebellar nuclei. Dokl. AN Arm.SSR 38 no.1:59-63 '64. (MIRA 17:4)

1. Institut fiziologii im. akademika L.A.Orbeli AN Armyanskoy SSR. Predstavleno chlenom-korrespondentom AN ArmSSR A.I.Karamyanom.

APPROVED FOR RELEASE: 06/15/2000 CIA-RDP86-00513R001341610012-2"

"APPROVED FOR RELEASE: 06/15/2000 CIA-RDP86-00513R001341610012-2

DEMIRCHOGLYAN, G. G.; ALLAKHVERDYAN, M. A.; MELIK-MUS'YAN, A. B.; OGANDZHANYAN, V. G.; POGOSYAN, R. I.; LALAYAN, A. A.; VASILYAN, V. V.

Results of investigating the action of ionizing radiation on the retina and some systems sensitive to light. Radiobiologiia 2 no.3:442-449 '62. (MIRA 15:7)

1. Institut fiziologii imeni akademika L. A. Orbeli AN Armyanskoy SSR, Yerevan.

(RADIATION--PHYSIOLOGICAL EFFECT) (RETINA)

APPROVED FOR RELEASE: 06/15/2000 CIA-RDP86-00513R001341610012-2"

"APPROVED FOR RELEASE: 06/15/2000 CIA-RDP86-00513R001341610012-2

POGOSYAN, R.I.

Sensitivity of skin chromatophores to ionizing radiations.
Biul. eksp. biol. i med. 53 no.2:82-84 F '62. (MIRA 15:3)

1. Predstavlena deystvitel'nym chlenom AMN SSSR A.V. Lebedinskim.

(CHROMATOPHORES)
(SKIN--RADIOGRAPHY)

APPROVED FOR RELEASE: 06/15/2000 CIA-RDP86-00513R001341610012-2"

"APPROVED FOR RELEASE: 06/15/2000 CIA-RDP86-00513R001341610012-2

POGOSYAN, R.I.

Radiosensitivity of earthworms. Radiobiologiia 1 no.3:361-364 '61. (MIRA 14:10)

(RADIATION—PHYSIOLOGICAL EFFECT) (EARTHWORMS)

APPROVED FOR RELEASE: 06/15/2000 CIA-RDP86-00513R001341610012-2"

"APPROVED FOR RELEASE: 06/15/2000 CIA-RDP86-00513R001341610012-2

POGOSYAN, R.I.

Mechanism of the effect of ionizing radiation on the nervous system. Dokl. AN Arm. SSR 33 no.3:139-144 '61.
(MIRA 14:12)

1. Institut fiziologii imeni akademika L.A. Orbeli AN Armyanskoy SSR. Predstavleno chlenom-korrespondent AN Armyanskoy SSR A.M. Aleksanyanom.

(RADIATION--PHYSIOLOGICAL EFFECT)
(NERVOUS SYSTEM)

APPROVED FOR RELEASE: 06/15/2000 CIA-RDP86-00513R001341610012-2"

"APPROVED FOR RELEASE: 06/15/2000 CIA-RDP86-00513R001341610012-2

POGOSYAN, R.I.; TRUNOVA, N.M.; TSYPIN, A.B.

Electric reaction of the retina to γ-rays of Co^{60}. Biul. eksp. biol. i med. 52 no.12:50-53 D '61. (MIRA 14:12)

1. Nauchnyy rukovoditel' - deystvitel'nyy chlen AMN SSSR A.V. Lebedinskiy. Predstavlena deystvitel'nym chlenom AMN SSSR A.V. Lebedinskim.

(RETINA) (GAMMA RAYS--PHYSIOLOGICAL EFFECT) (ELECTROPHYSIOLOGY)

APPROVED FOR RELEASE: 06/15/2000 CIA-RDP86-00513R001341610012-2"

"APPROVED FOR RELEASE: 06/15/2000 CIA-RDP86-00513R001341610012-2

27.1220

39563
S/205/62/002/003/009/015
I015/I215

AUTHOR: Demirchoglyan, G. G., Allakhverdyan, M. A., Melik-Mus'yan, A. B., Ogandzhanyan, V. G., Pogosyan, R. I., Lalayan, A. A., Vasilyan, V. V.

TITLE: The effect of ionizing radiation on the retina and some light-sensitive systems

PERIODICAL: Radiobiologiya, v. 2, no. 3, 1962, 442–449

TEXT: Unlike in other studies, the effect of small radiation doses (10–50r, 125–900r) was here investigated in both acute and chronic experiments (during $1^1/_2$ years). Electroretinography (ERG) was performed with contact-lens-electrodes; intraretinal potentials were recorded with microelectrodes; SH-groups in the retina were determined amperometrically; the absorption spectra of rhodopsin extracted from the retina were established and both morphological and histochemical analyses were carried out. The radiosensitivity of light-sensitive organs in worms, of the compound-eye in insects, and of eyes in vertebrates, were compared. Chronic irradiation with small doses brought about an abnormal functional condition of the retina, and this effect had cumulative characteristics. The light-sensitive (chromatophore reaction) system in the skin of the frog turned out to be non-radiosensitive within the limits of 50–5000r. The studies of O. D. Hug on the direct effect of radiostimulation on tissues are mentioned. The role of SH-groups, included in the proteins of rhodopsin, for the light-sensitivity of the retina is discussed. There are 5 figures.

Card 1/2

APPROVED FOR RELEASE: 06/15/2000 CIA-RDP86-00513R001341610012-2"

"APPROVED FOR RELEASE: 06/15/2000 CIA-RDP86-00513R001341610012-2

The effect of ionizing radiation...

S/205/62/002/003/009/015
I015/I215

ASSOCIATION: Institut fiziologii im. akad. L. A. Orbeli AN ArmSSR Yerevan (Institute of Physiology im. Academican L. A. Orbeli, AS ArSSR) Yerevan

SUBMITTED: September 13, 1960

Card 1/2

APPROVED FOR RELEASE: 06/15/2000 CIA-RDP86-00513R001341610012-2"

"APPROVED FOR RELEASE: 06/15/2000 CIA-RDP86-00513R001341610012-2

L 10585-63

BDS

ACCESSION NR: AP3001454

S/0171/63/016/002/0097/0116

AUTHOR: Krmoyan, T. V.; Pogosyan, R. K.

TITLE: Investigation of the mechanism if retarding water-evaporation with a monolayer of 1-hexadecanol

45

SOURCE: AN ArmSSR. Izv. Khimicheskiye nauki, v. 16, no. 2, 1963, 97-116

TOPIC TAGS: mechanism, retarding water evaporation, permeability, depressor

ABSTRACT: The effect of temperature on the evaporation of water across the monolayer was studied by the Langmuir-Schaefer method in the 12-60 degree interval using samples of regular and of recrystallized 1-hexadecanol. The apparent regular and irregular character of the permeability was explained by the transition of the hexadecanol between the Beta and the sub Alpha phases, whereby interaction with water is increased. The OH-group is submerged and spreading of the monolayer is facilitated; recrystallization causes phase transition at lower temperature. The strength of the interaction between adjacent monolayer molecules, and the interaction of the monolayer with water, and its spreading properties jointly determine the height of the energy barrier. The necessary orderliness of the monolayer can be obtained for instance with the aid of plasticizers which can orient

Card 1/2

APPROVED FOR RELEASE: 06/15/2000 CIA-RDP86-00513R001341610012-2"

"APPROVED FOR RELEASE: 06/15/2000 CIA-RDP86-00513R001341610012-2

L 10585-63

ACCESSION NR: AP3001454

the depressor molecules into a stable impermeable membrane. Orig. art. has: 19 equations, 4 figures, and 3 tables

ASSOCIATION: Institut organicheskoy khimii akademii nauk Arm. SSR (Institute of Organic Chemistry, Academy of Sciences Armenian SSR)

SUBMITTED: 23Feb63 DATE ACQD: 14Jun63 ENCL: 00

SUB CODE: 00 NO REF SOV: 008 OTHER: 028

Card 2/2

APPROVED FOR RELEASE: 06/15/2000 CIA-RDP86-00513R001341610012-2"

"APPROVED FOR RELEASE: 06/15/2000 CIA-RDP86-00513R001341610012-2

L 10585-63 BDS

ACCESSION NR: AP3001454 S/0171/63/016/002/0097/0116

AUTHOR: Krmoyan, T. V.; Pogosyan, R. K.

45

TITLE: Investigation of the mechanism if retarding water-evaporation with a monolayer of 1-hexadecanol

SOURCE: AN ArmSSR. Izv. Khimicheskiye nauki, v. 16, no. 2, 1963, 97-116

TOPIC TAGS: mechanism, retarding water evaporation, permeability, depressor

ABSTRACT: The effect of temperature on the evaporation of water across the monolayer was studied by the Langmuir-Schaefer method in the 12-60 degree interval using samples of regular and of recrystallized 1-hexadecanol. The apparent regular and irregular character of the permeability was explained by the transition of the hexadecanol between the Beta and the sub Alpha phases, whereby interaction with water is increased. The OH-group is submerged and spreading of the monolayer is facilitated; recrystallization causes phase transition at lower temperature. The strength of the interaction between adjacent monolayer molecules, and the interaction of the monolayer with water, and its spreading properties jointly determine the height of the energy barrier. The necessary orderliness of the monolayer can be obtained for instance with the aid of plasticizers which can orient

Card 1/2

APPROVED FOR RELEASE: 06/15/2000 CIA-RDP86-00513R001341610012-2"

"APPROVED FOR RELEASE: 06/15/2000 CIA-RDP86-00513R001341610012-2

APPROVED FOR RELEASE: 06/15/2000 CIA-RDP86-00513R001341610012-2"

"APPROVED FOR RELEASE: 06/15/2000 CIA-RDP86-00513R001341610012-2

L 10585-63

ACCESSION NR: AP3001454

the depressor molecules into a stable impermeable membrane. Orig. art. has: 19 equations, 4 figures, and 3 tables

ASSOCIATION: Institut organicheskoy khimii akademii nauk Arm. SSR (Institute of Organic Chemistry, Academy of Sciences Armenian SSR)

SUBMITTED: 23Feb63 DATE ACQD: 14Jun63 ENCL: 00

SUB CODE: 00 NO REF SOV: 008 OTHER: 028

Card 2/2

APPROVED FOR RELEASE: 06/15/2000 CIA-RDP86-00513R001341610012-2"

"APPROVED FOR RELEASE: 06/15/2000 CIA-RDP86-00513R001341610012-2

Conditions for preparation of highly acid-resistant material from volcanic tufa. M. G. Manvelyan, A. A. Trchunyan, and R. P. Pogosyan. *Doklady Akad. Nauk Armyan. S.S.R.* 19, 13-17(1954)(in Russian).—A specimen of tufa contg. 64.83% SiO_2, 18.2% Al_2O_3, and small amts. of oxides of Ti, Fe, Mn, Ca, Mg, Na, and K shows a great increase in acid resistance (HCl, HNO_3, H_2SO_4) after a treatment consisting of particulation to pass a sieve with 4900 meshes per sq. cm., pressing into small artifacts, and calcining at 950-1120°. This treatment gives a product with a glazed and uniform structure, which is app. 3x. 100% more dense than the starting material. If the powd. material is first treated with 1-6% aq. NaOH and pressed at 100-250 kg./sq. cm., the results are comparable with those obtained without NaOH addn. and pressing at 450-550 kg./sq. cm. The water absorbability of the final products is but 0.001 of that possessed by the starting material, while the compression strength reaches 3000 kg./sq. cm. The most acid-resistant products are obtained through the use of 1% NaOH addn.; higher amts. of NaOH reduce acid resistance slightly.

G. M. Kosolapoff

APPROVED FOR RELEASE: 06/15/2000 CIA-RDP86-00513R001341610012-2"

"APPROVED FOR RELEASE: 06/15/2000 CIA-RDP86-00513R001341610012-2

POGOSYAN, R. P.

Foamed tuff. M. G. Manvelyan, R. P. Pogosyan, and S. Ter-Karapetyan. *Stroitel. Materialy* 2, No. 6, 34 (1956). Foamed tuff with the apparent sp. gr. of 0.55–0.85 and crushing strength of 25–40 kg./sq. cm. is made by grinding natural tuff to 50 mesh and heating it at 1200° for 2 hrs. A fully porous mass is produced with uniform pore diameter. The latter can be controlled by temp. and time of final heating. I. D. Gat

Matla 3

APPROVED FOR RELEASE: 06/15/2000 CIA-RDP86-00513R001341610012-2"

"APPROVED FOR RELEASE: 06/15/2000 CIA-RDP86-00513R001341610012-2

POGOSYAN, R.P.

3

The glazing of ware with tufa. M. G. Manvelyan, R. P. Pogosyan, and S. A. Ter-Karapetyan. *Stekla i Keram.* 12, No. 1, 16-17(1955).—A white glaze for elec. insulators is made with a frit composed of tufa, chalk, feldspar, quartz sand, zircon, dolomite, borax, and ZnO (proportions not specified). A slip of 40-2° Be. is applied and fired to 1100° without preliminary drying. It forms a white coating that completely hides the body color, does not crack or chip, and conforms with the linear expansion of the body.

H. L. Olin

MT

APPROVED FOR RELEASE: 06/15/2000 CIA-RDP86-00513R001341610012-2"

"APPROVED FOR RELEASE: 06/15/2000 CIA-RDP86-00513R001341610012-2

DARBINYAN, M.V.; SHEKOYAN, S.G.; POGOSYAN, R.U.

Investigation of the methods employed in the treatment of dolomites. Report No.3: Reaction of dolomite with gypsum carbonic acid. Izv.AN Arm.SSR Khim.nauki 13 no.1:17-24 '60. (MIRA 13:7)

1. Yerevanskiy gosudarstvennyy universitet, Kafedra analiticheskoy khimii.
(Dolomite) (Gypsum) (Carbon dioxide)

APPROVED FOR RELEASE: 06/15/2000 CIA-RDP86-00513R001341610012-2"

"APPROVED FOR RELEASE: 06/15/2000 CIA-RDP86-00513R001341610012-2

POGOSYAN, S.A.

Variation of hybrid tomato plants under the influence of a mentor [with summary in English]. Izv.AN Arm.SSR.Est.nauki no.2:3-14 '47. (MLRA 9:8)

1. Institut genetiki Akademii nauk Arm.SSR.
(Tomatoes) (Hybridization, Vegetable)

APPROVED FOR RELEASE: 06/15/2000 CIA-RDP86-00513R001341610012-2"

"APPROVED FOR RELEASE: 06/15/2000 CIA-RDP86-00513R001341610012-2

POGOSYAN, S.A.

Variability in grape seedlings. Izv.AN Arm.SSR.Biol.i sel'khoz. nauki. 2 no.1:15-31 '49. (MLRA 9:8)

1. Institut genetiki i selektsii rasteniy Akademii nauk Armyanskoy SSR.

(ARMENIA--VITICULTURE)

APPROVED FOR RELEASE: 06/15/2000 CIA-RDP86-00513R001341610012-2"

"APPROVED FOR RELEASE: 06/15/2000 CIA-RDP86-00513R001341610012-2

POGOSYAN, S.A.

Variability of hybrid grape seedlings under the effect of a mentor. Izv.AN Arm.SSR.Biol.i sel'khoz.nauki. 2 no.5:415-432 '49.(MLRA 9:8)

1. Institut vinogradarstva i vinodeliya Akademii nauk Armyanskoy SSR.
(ARMENIA--VITICULTURE)

APPROVED FOR RELEASE: 06/15/2000 CIA-RDP86-00513R001341610012-2"

"APPROVED FOR RELEASE: 06/15/2000 CIA-RDP86-00513R001341610012-2

POGOSYAN, S.A.

Formation of the capacity for early ripening and vitality in grape seedlings. Izv.AN Arm.SSR.Biol.i sel'khoz.nauki. 5 no.1:3-19 '52.

1. Institut vinodeliya i vinogradarstva Ministerstva pishchevoy promyshlennosti Armyanskoy SSR.
(Armenia--Viticulture)

APPROVED FOR RELEASE: 06/15/2000 CIA-RDP86-00513R001341610012-2"

"APPROVED FOR RELEASE: 06/15/2000 CIA-RDP86-00513R001341610012-2

POGOSYAN, S. A.

"The Nature of Seed Plants of Old Varieties of Root-Propagated Grapes and Their Hybrids." Dr Agr Sci, Acad Sci Armenian SSR, Yerevan, 1953. (RZhBiol, No 7, Dec 54)

Survey of Scientific and Technical Dissertations Defended at USSR Higher Educational Institutions (12)
SO: Sum. No. 556, 24 Jun 55

APPROVED FOR RELEASE: 06/15/2000 CIA-RDP86-00513R001341610012-2"

"APPROVED FOR RELEASE: 06/15/2000 CIA-RDP86-00513R001341610012-2

POGOSYAN, S.A.

Local grape varieties of Armenia as a starting material for breeding work [in Armenian with summary in Russian]. Izv.An Arm.SSR.Biol.i sel'khoz.nauki 6 no.11:3-15 '53. (MLRA 9:8)
(Armenia--Grapes--Varieties)

APPROVED FOR RELEASE: 06/15/2000 CIA-RDP86-00513R001341610012-2"

"APPROVED FOR RELEASE: 06/15/2000 CIA-RDP86-00513R001341610012-2

POGOSYAN, S.A.; GRDZELYAN, G.P., otvetstvennyy redaktor; TATEVOSYAN, S.A. redaktor izdatel'stva; KAPLANYAN, M.A., tekhnicheskiy redaktor

[The nature of seed bearers of old varieties of ungrafted grapevines and their hybrids] O prirode semennykh rastenii starodavnikh sortov kornesobstvennogo vinograda i ikh gibridov. Erevan, Izd-vo Akademii nauk Armianskoi SSR, 1955. 197 p. (MIRA 9:9)
(Grapes)

APPROVED FOR RELEASE: 06/15/2000 CIA-RDP86-00513R001341610012-2"

"APPROVED FOR RELEASE: 06/15/2000 CIA-RDP86-00513R001341610012-2

POGOSYAN S. A.

USSR/Cultivated Plants. Fruits. Berries. H

Abs Jour : Ref Zhur-Biol., No 15, 1958, 68378

Author : Pogosyan, S. A., Khachatryan, S. S., ~~Sarkisyan, V. V.~~

Inst : Arm SSR Institute of Viniculture, Wine Production, and Fructiculture. Arm SSR Ministry of Agriculture.

Title : New Commercial Grape Strains Selected by the Institute of Viniculture of the Ministry of Agriculture.

Orig Pub : Byul. nauchno-tekhn. inform. Arm. n.-i. In-ta vinogradarstva, vinodeliya i pladovodstva, 1957, No 1, 5-8

Abstract : The Institute possesses a grape selection fund consisting of 15,000 of the best seedlings of 120 choice new and valuable strains. In 1954,

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VERMISHYAN, A.M.; kand.sel'skokhoz.nauk; DILANYAN, G.Kh.; SANAGYAN, M.B.; KAZARYAN, Ye.S., kand.sel'skokhoz.nauk, otv.red.; ARARATYAN, A.G., zasluzh.deyatel' nauki, red.; GRDZELYAN, G.P., dotsent, red.; POGOSYAN, S.A., doktor biolog.nauk; DALIYELYAN, G., red.izd-va; ATOYAN, S., red.izd-va; KUZANYAN, M., red.izd-va; KHACHATRYAN, S., tekhn.red.

[Fruits of Armenia] Plody Armenii. Erevan, Armianskoe gos.izd-vo. Vol.1. [Stone fruit; local varieties] Kostochkovye porody; mestnye sorta. 1958. 243 p. (MIRA 12:7)
(Armenia--Fruit)

APPROVED FOR RELEASE: 06/15/2000 CIA-RDP86-00513R001341610012-2"

"APPROVED FOR RELEASE: 06/15/2000 CIA-RDP86-00513R001341610012-2

POGOSYAN , S.A., doktor sel'skokhozyaystvennykh nauk

Selecting parental plants for developing wine grape varieties in southern Armenia. Agrobiologiia no.1:91-99 Ja-F '59. (MIRA 12:4)

1. Institut vinogradarstva vinodeliya i plodovodstva Ministerstva sel'skogo khozyaystva Armyanskoy SSR, g.Yerevan.
(Armenia--Viticulture)

APPROVED FOR RELEASE: 06/15/2000 CIA-RDP86-00513R001341610012-2"

"APPROVED FOR RELEASE: 06/15/2000 CIA-RDP86-00513R001341610012-2

POGOSYAN, S.A.; KHACHATRYAN, S.S., kand.biolog.nauk

Developing frost-resistant grape varieties in the southern part of the U.S.S.R. Agrobiologiia no.6:852-860 N-D '59. (MIRA 13:4)

1. Institut vinogradarstva i plodovodstva Armyanskoy SSR, Yerevan. 2. Chlen-korrespondent Vsesoyuznoy akademii sel'skokhozyaystvennykh nauk imeni Lenina (for Pogosyan).
(Grapes--Varieties) (Plants--Frost resistance)

APPROVED FOR RELEASE: 06/15/2000 CIA-RDP86-00513R001341610012-2"

"APPROVED FOR RELEASE: 06/15/2000 CIA-RDP86-00513R001341610012-2

POGOSYAN, S.A.

Grape breeding in the U.S.S.R. Agrobiologiia no.5:789-796 S-O'63. (MIRA 17:5)

1. Chlen-korrespondent Vsesoyuznoy Akademii sel'skokhozyaystvennykh nauk imeni Lenina. Armyanskiy nauchno-issledovatel'skiy institut vinogradarstva, vinodeliya i plodovodstva, Yerevan.

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"APPROVED FOR RELEASE: 06/15/2000 CIA-RDP86-00513R001341610012-2

POGOSYAN, S.A.

AVAKYAN, V.M.; BADALYAN, G.O.; DRAMPYAN, F.S.; POGOSYAN, S.A.

Normal levels of arterial pressure in the population of Armenia. Terap. arkh. 29 no.8:36-42 '57. (MIRA 11:4)

1. Iz propedevticheskoy terapevticheskoy kliniki (zav.-deystvitel'nyy chlen AMN SSSR prof. L.A.Oganesyan) i fakul'tetskoy i gospital'noy terapevticheskikh klinik (zav.-dotsent V.M.Avakyan) Sanitarno-gigiyenicheskogo fakul'teta Yerevanskogo meditsinskogo instituta.
(BLOOD PRESSURE,
normal levels in Armenians (Rus)

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"APPROVED FOR RELEASE: 06/15/2000 CIA-RDP86-00513R001341610012-2

POGOSYAN, S.G.

Further observations on the use of fubromegan in the treatment of peptic ulcer. Zhur. eksp. i klin. med. 5 no.2:70-73 '65. (MIRA 19:1)

APPROVED FOR RELEASE: 06/15/2000 CIA-RDP86-00513R001341610012-2"

"APPROVED FOR RELEASE: 06/15/2000 CIA-RDP86-00513R001341610012-2

POGOSYAN, SH. G.

USSR / Farm Animals. Sheep and Goats.

Q-3

Abs Jour : Ref Zhur - Biol., No 14, 1958, No 64489

Author : Martirosyan, M. O.; Pogosyan, Sh. G.

Inst : Armenian Scientific Research Institute of Animal Husbandry and Veterinary Medicine.

Title : The Influence of Different Periods of Milking on the Production of Crossbred Sheep

Orig Pub : Byul. nauchno-tekhn. inform. Arm. n.-i. in-ta zhivotnovodstva i veterinarii, 1957, No. 1, 14-17

Abstract : The experiment was conducted on 100 experimental and 200 control fine-wool-coarse-wool hybrid ewes of the kolkhoz imeni Kuybyshev of the Idzhevan Rayon of the Armenian SSR. The milking of ewes of the control group was carried out at a fixed period from 10 May (from 40th-45th day of age of lambs) through 20 August (until the weaning of lambs from the ewes), and the milking of the experimental group - from

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"APPROVED FOR RELEASE: 06/15/2000 CIA-RDP86-00513R001341610012-2

Name: POGOSYAN, Serop Pogosovich

Dissertation: Enslavement of the Peasantry and Peasant Movements in Armenia in the 9th to 13th Centuries

Degree: Doc Historical Sci

Affiliation: [not indicated]

Defense Date, Place: 7 Jul 55, Council of the Yerevan State U imeni Molotov

Certification Date: 28 Apr 56

Source: BMVO 4/57

APPROVED FOR RELEASE: 06/15/2000 CIA-RDP86-00513R001341610012-2"

"APPROVED FOR RELEASE: 06/15/2000 CIA-RDP86-00513R001341610012-2

POGOSYAN, Ya.M.; YEGIYAN, K.A.; POGOSYAN, T.A.

Effect of the directional dispersion of anisotropy on the behavior of thin ferromagnetic films. Fiz. met. i metalloved. 17 no.2:212-216 F '64. (MIRA 17:2)

APPROVED FOR RELEASE: 06/15/2000 CIA-RDP86-00513R001341610012-2"

"APPROVED FOR RELEASE: 06/15/2000 CIA-RDP86-00513R001341610012-2

ACCESSION NR: AP4017353 S/0126/64/017/002/0212/0216

AUTHOR: Pogosyan, Ya. M.; Yegiyan, K.A.; Pogosyan, T. A.

TITLE: Effect of anisotropy direction dispersion on the behavior of thin ferromagnetic films

SOURCE: Fizika metallov i metallovedeniye, v. 17, no. 2, 1964, 212-216

TOPIC TAGS: ferromagnetism, ferromagnetic film, magnetization direction, nickel alloy, iron containing alloy, molybdenum containing alloy, magnetism, hysteresis loop

ABSTRACT: A multitide of new properties has been discovered in thin ferromagnetic films which cannot be explained by a simple theory of coherent rotation and which may arise from factors such as the dispersion of axial direction of the magnetization. To investigate the residual magnetization which results from inhibitedly directed film saturation, the authors undertook a magnetomicroscopic study of 800-1400 Å, disk-shaped films, 10 mm in diameter, obtained by sublimation of an alloy consisting of Ni (79%), Fe(17%) and Mo(4%) at 300 C in a $2 \cdot 10^{-5}$ mm Hg vacuum in the presence of a 40-oe magnetic field. The study showed that the films develop an inhibitedly directed rectangular hysteresis loop and possess a residual magnetization state stable enough to offset

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ACCESSION NR: AP4017353

subsequent reapplication of the field, which generates a new phase and steps up its growth. Orig. art. has: 4 figures.

ASSOCIATION: None

SUBMITTED: 12Feb63 DATE ACQ: 18Mar64 ENCL: 00

SUB CODE: ML, PH NO REF SOV: 001 OTHER: 010

Card 2/2

APPROVED FOR RELEASE: 06/15/2000 CIA-RDP86-00513R001341610012-2"

"APPROVED FOR RELEASE: 06/15/2000 CIA-RDP86-00513R001341610012-2

ACCESSION NR: AP4026811

S/0022/64/017/001/0131/0136

AUTHORS: Trchunyan, A. A.; Pogosyan, Ya. M.; Yegiyan, K. A.; Pogosyan, T. A.

TITLE: Equipment for simultaneous investigation of ferromagnetic films using the magneto-optical method of Kerr and the Akulov-Bitter method

SOURCE: AN ArmSSR. Izv. Seriya fiziko-matematicheskikh nauk, v. 17, no. 1, 1964, 131-136

TOPIC TAGS: ferromagnetic film, magneto-optical method, powder pattern, metallographic microscope, magnetic field, Helmholtz coil

ABSTRACT: The equipment for simultaneously studying ferromagnetic films using the magneto-optical method of Kerr and the powder patterns of Akulov-Bitter has been described and several photographs of specimens with different magnification are included. The equipment consists of two basic components; an instrument for magneto-optical observations and a metallographic microscope MIM-8 with some minor modifications to observe the Akulov-Bitter patterns. Photographs of the general setup and a detailed diagram for the optical system are presented. The advantage of the system described lies in the possibility of observing the same portion of

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"APPROVED FOR RELEASE: 06/15/2000 CIA-RDP86-00513R001341610012-2

ACCESSION NR: AP4026811

the film by both methods in a magnetic field generated by the same Helmholtz coil, under identical conditions suitable for a comparative study. Several examples of films studied by this method are outlined briefly. Orig. art. has: 6 figures.

ASSOCIATION: none

SUBMITTED: 21Jun63 DATE ACQ: 16Apr64 ENCL: 00

SUB CODE: PH NO REF SOV: 000 OTHER: 008

Card 2/2

APPROVED FOR RELEASE: 06/15/2000 CIA-RDP86-00513R001341610012-2"

"APPROVED FOR RELEASE: 06/15/2000 CIA-RDP86-00513R001341610012-2

TRCHUNYAN, A.A.; POGOSYAN, Ya.M.; YEGIYAN, K.A.; POGOSYAN, T.A.

Apparatus for the simultaneous study of ferromagnetic films by Kerr's magneto-optical method and the Akulov - Bitter method. Izv. AN Arm. SSR.Ser.fiz.-mat.nauk 17 no.1:131-136 '64.

(MIRA 17:3)

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"APPROVED FOR RELEASE: 06/15/2000 CIA-RDP86-00513R001341610012-2

S/069/60/022/03/10/019
B004/B007

AUTHORS: Kiselev, A. V., Pogosyan, T. A.

TITLE: The Theory of the Corpuscular Structure of Xerogels. 1. The Preparation of Silica Gels From Large Globules With Varying Number of Contacts and Their Investigation by the Adsorption Method

PERIODICAL: Kolloidnyy zhurnal, 1960, Vol. 22, No. 3, pp. 314 - 322

TEXT: The theory of the corpuscular structure of xerogels was developed by A. V. Kiselev in Refs. 1-5. Accordingly, the skeleton of xerogels consists of primary particles, which are spherical in the case of silica gels. The authors aim at producing brines with particles of such a size that their shape may be determined by means of an electron microscope, and that their behavior in the process brine - hydrogel - xerogel may be followed. The present paper describes the production of such brines and gels and the investigation of their adsorption properties. The brines were prepared by exchanging the sodium ion for the hydrogen ions in solutions of sodium silicate by means of the КУ-1 (KU-1) cation ex-

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"APPROVED FOR RELEASE: 06/15/2000 CIA-RDP86-00513R001341610012-2

The Theory of the Corpuscular Structure of Xerogels. 1. The Preparation of Silica Gels From Large Globules With Varying Number of Contacts and Their Investigation by the Adsorption Method

S/069/60/022/03/10/019
B004/B007

changer. A description is given of the formation of germs in the silicic acid solution stabilized by alkali by means of heating, the addition of fresh silicic acid, and the formation of hydrogel by a small addition of HCl. The xerogels were obtained by drying at 110-120°C. Fig. 1 shows the methanol adsorption on eight xerogel samples which had been produced at various pH. The smallest specific surface was found in the case of xerogel obtained at pH=10.7 so that for the further experiments only brines with pH=10.7 were used. For the purpose of avoiding a structural change, the water was sublimated from the hydrogels in a vacuum according to N. M. Kamakin (Ref. 12). Then, the hydrogels were dried at 110-120°C. The adsorption isothermal lines for methanol- and benzene vapors were determined by means of an apparatus with a quartz spring scale (Fig. 2). The design of this apparatus had been begun by L. N. Soboleva (deceased). It was located in a ТСП-4 (TSP-4) thermostat developed by G. G. Muttik in the authors' laboratory. Fig. 3 shows the benzene-adsorption isothermal lines for four silicahydrogels at 20°C, 150°C, and for the xerogels produced therefrom at 150°C. The

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"APPROVED FOR RELEASE: 06/15/2000 CIA-RDP86-00513R001341610012-2

S/069/60/022/03/10/019
B004/B007

The Theory of the Corpuscular Structure of Xerogels. 1. The Preparation of Silica Gels From Large Globules With Varying Number of Contacts and Their Investigation by the Adsorption Method

specific surface was determined by B. G. Aristov by means of nitrogen adsorption at low temperatures. A table contains these values as well as the pore diameters and the number of contacts which, on the average, was 2.5. Fig. 4 shows that the specific surface had not been changed by drying. During transition from hydrogel to xerogel merely a contraction of the pores occurs (Fig. 5). The samples obtained were homogeneously coarse-pored with a particle diameter of about 300 A. The benzene-adsorption isothermal lines of silica gels are compared in Fig. 6 with those of quartz and further with the data for KCK-2 (KSK-2) silica gel obtained in the laboratory of the authors by Yu. A. El'tekov and D. P. Poshkus. Results of measurement show good agreement. Only at the stage of poly-molecular adsorption and capillary condensation does the influence exerted by the packings of different densities become noticeable. There are 6 figures, 1 table, and 23 references: 18 Soviet and 5 English.

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APPROVED FOR RELEASE: 06/15/2000 CIA-RDP86-00513R001341610012-2"

"APPROVED FOR RELEASE: 06/15/2000 CIA-RDP86-00513R001341610012-2

The Theory of the Corpuscular Structure of Xerogels. 1. The Preparation of Silica Gels From Large Globules With Varying Number of Contacts and Their Investigation by the Adsorption Method

S/069/60/022/03/10/019
B004/B007

ASSOCIATION: Moskovskiy universitet im. M. V. Lomonosova, Laboratoriya adsorbtsii (Moscow University imeni M. V. Lomonosov, Laboratory of Adsorption). Institut fizicheskoy khimii AN SSSR, Moskva (Institute of Physical Chemistry of the AS USSR, Moscow)

SUBMITTED: March 19, 1959

Card 4/4

APPROVED FOR RELEASE: 06/15/2000 CIA-RDP86-00513R001341610012-2"

"APPROVED FOR RELEASE: 06/15/2000 CIA-RDP86-00513R001341610012-2

L 29251-66

ACC NR: AP6019313

SOURCE CODE: UR/0240/65/000/007/0003/0009

AUTHOR: Pogosyan, U. G.

ORG: Institute of General and Communal Hygiene im. A. N. Sysin, AMN SSSR, Moscow (Institut obshchey i kommynal'noy gigiyeny AMN SSSR)

19
B

TITLE: Combined effects on man of low concentrations of acetone and phenol in the atmosphere

SOURCE: Gigiyena i sanitariya, no. 7, 1965, 3-9

TOPIC TAGS: acetone, phenol, man, toxicology

ABSTRACT: Inhalation of a mixture containing acetone and phenol produced in human subjects a summation of the effects of each of the substances when administered individually. The criteria for judging the effects was the action on the sense of smell, photosensitivity, and electric activity of the brain. Concentrations of the two substances 10 times greater than the recommended one-time maximum permissible concentration of the combination caused changes in motor chronaxy of antagonistic muscles, cholinesterase activity, elevation in the level of coproporphyrin and certain vitamins in the urine. Concentrations of the mixture in the recommended one-time maximum permissible amount were innocuous.

The one-time total concentration of acetone and phenol when both are present in the atmosphere simultaneously, expressed in fractions of the maximum permissible concentration, should not exceed 1.0 for each substance when present by itself. The average daily maximum permissible concentration of the two substances when both are present in the air should be the same as the maximum one-time concentration. Orig. art. has: 4 figures and 3 tables. [JPRS]

SUB CODE: 06 / SUBM DATE: 11Jan65 / ORIG REF: 003

Card 1/1

UDC: 613.632:[577.6:661.727.4]

APPROVED FOR RELEASE: 06/15/2000 CIA-RDP86-00513R001341610012-2"

"APPROVED FOR RELEASE: 06/15/2000 CIA-RDP86-00513R001341610012-2

POGOSYAN, V.

Truck body of larger dimensions is needed. Avt. transp. 34 no.6: 30 Je '56. (MLRA 9:9)

(Motortrucks--Bodies)

APPROVED FOR RELEASE: 06/15/2000 CIA-RDP86-00513R001341610012-2"

"APPROVED FOR RELEASE: 06/15/2000 CIA-RDP86-00513R001341610012-2

POGOSYAN, V.; POSTEL'NIKOV, S.; SOKOLOV, B.

Information. Avt. transp. 42 no.8:55-58 Ag '64.

(MIRA 17:10)

APPROVED FOR RELEASE: 06/15/2000 CIA-RDP86-00513R001341610012-2"

"APPROVED FOR RELEASE: 06/15/2000 CIA-RDP86-00513R001341610012-2

TETEVOSYAN, B.N.; POGOSYAN, V.A.

New species of fungi on fruit and berry plants of the Armenian S.S.R. Izv. AN Arm. SSR. Biol. nauki 18 no.6:43-52 Je '65. (MIRA 18:9)

1. Kafedra botaniki biologicheskogo fakul'teta Yerevanskogo universiteta i kafedra biologii Armyanskogo pedagogicheskogo instituta imeni Abovyana.

APPROVED FOR RELEASE: 06/15/2000 CIA-RDP86-00513R001341610012-2"

"APPROVED FOR RELEASE: 06/15/2000 CIA-RDP86-00513R001341610012-2

KAMENEV, I.V. (Moskva); POGOSYAN, V.A. (Moskva)

Propagation of electromagnetic waves in an inhomogeneous plasma.
PMTF no.1:94-98 Ja-F '64. (MIRA 17:4)

APPROVED FOR RELEASE: 06/15/2000 CIA-RDP86-00513R001341610012-2"

"APPROVED FOR RELEASE: 06/15/2000 CIA-RDP86-00513R001341610012-2

KAMENEV, I.V.; POGOSYAN, V.A. (Moskva)

Diffusion theory of moving striae. PMTF no. 6:134-137 N-D '63. (MIRA 17:7)

APPROVED FOR RELEASE: 06/15/2000 CIA-RDP86-00513R001341610012-2"

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L 53644-65 EWT(1)/EPF(n)-2/EWG(m)/EPA(w)-2 Pz-6/Po-4/Pab-10/Pi-4 IJP(c) WW/AT

ACCESSION NR: AP5013366 UR/0207/65/000/002/0023/0029

AUTHORS: Golovanivskiy, K. S. (Moscow); Pogosyan, V. A. (Moscow)

59
57
B

TITLE: On plasma polarization in an electric field

21

SOURCE: Zhurnal prikladnoy mekhaniki i tekhnicheskoy fiziki, no. 2, 1965, 23-29

TOPIC TAGS: plasma polarization, electric field, electron density, ion density, linearized theory, approximation method, velocity distribution

ABSTRACT: The electrostatic polarization of a plasma in an external electric field was investigated analytically. A plane layer of homogeneous, two-component, partially ionized plasma is considered with thickness d bounded by impermeable dielectric walls at $x = 0$ and $x = d$. At time $t = 0$ a homogeneous electric field E is applied along x external to the plasma. At this point the plasma sets into motion, v_e and v_p, for each type of particles (electrons and ions), and the corresponding electron and ion densities in the originally neutral plasma take on new distributions n_e and n_p. The governing linearized differential equations describing these motions are given by

$$\frac{\partial^2 v_e}{\partial t^2} + \nu_e \frac{\partial v_e}{\partial t} - w_e^2 \frac{\partial^2 v_e}{\partial x^2} = -\omega_e^2 (v_e - v_p)$$

$$\frac{\partial^2 v_p}{\partial t^2} + \nu_p \frac{\partial v_p}{\partial t} - w_p^2 \frac{\partial^2 v_p}{\partial x^2} = \omega_p^2 (v_e - v_p)$$

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where

$$w_e^2 = \frac{\varkappa T_e}{m}, \quad w_p^2 = \frac{\varkappa T_p}{M}, \quad \omega_e^2 = \frac{4\pi e^2 N}{m}, \quad \omega_p^2 = \frac{4\pi^2 e N}{M},$$

The boundary conditions are given by

$$v_e(0, t) = v_p(0, t) = 0, \; v_e(d, t) = v_p(d, t) = 0$$

$$v_e(x, 0) = v_p(x, 0) = 0, \quad \left.\frac{\partial v_e}{\partial t}\right|_{t=0} = -\frac{eE_0}{m}, \quad \left.\frac{\partial v_p}{\partial t}\right|_{t=0} = \frac{eE_0}{M},$$

and as initial conditions the mean particle velocities are assumed to be zero in the neutral plasma. The solutions for v_e and v_p are expressed in the form

$$v_e(x, t) = \sum_{q=1} \varphi_q(t) \sin\frac{q\pi x}{d}, \qquad v_p(x, t) = \sum_{q=1} \psi_q(t) \sin\frac{q\pi x}{d},$$

and the method of Fubini is used to determine the coefficients (see F. G. Tricomi, Differential equations, Blackie and son limited, 1961). A similar solution for the density distribution n leads to (after some simplifications)

$$n_e(x, \infty) = \frac{E_0 d}{e\pi^3 h_e^2} \sum_{k=0} \frac{1}{(2k+1)^3} \cos\frac{(2k+1)\pi x}{d}$$

$$n_p(x, \infty) = -\frac{E_0 d}{e\pi^3 h_p^2} \sum_{k=0} \frac{1}{(2k+1)^3} \cos\frac{(2k+1)\pi x}{d},$$

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ACCESSION NR: AP5013366

2

The corresponding expressions for the velocities yield

$$v_e(x,t) = -\sum_{k=0} \frac{4eE_0}{(2k+1)\pi m}\left[\frac{\exp(-{}^1/_2\nu_e t)\sin\delta_e t}{\delta_e} - \frac{m/M\exp(-{}^1/_2\nu_p t)\sin\delta_p t}{\delta_p(2k+1)^2\pi^2(h_d/d)^2+1}\right]\sin\frac{(2k+1)\pi x}{d}$$

$$v_p(x,t) = \sum_{k=0} \frac{4eE_0\sin\delta_p t}{(2k+1)\pi m\delta_p}\left[1 - \frac{1}{(2k+1)^2\pi^2(h_d/d)^2+1}\right]\sin\frac{(2k+1)\pi x}{d}.$$

These results show that the sudden application of an electric field to an otherwise quiescent plasma generates very complex motions between the ions and the electrons. The density distribution for ions for three initial distributions is shown graphically (see Fig. 1 on the Enclosure) where T_p = 1000K and T_e = 100 000K. It is also shown that the ratio n_p/n_e is of the order T_e/T_p for polarized plasma. "The author is deeply grateful to G. A. Lyubimov and S. A. Regirer for their valuable discussions." Orig. art. has: 40 equations and 2 figures.

ASSOCIATION: none

SUBMITTED: 28Dec64 ENCL: 01 SUB CODE: EM, ME

NO REF SOV: 001 OTHER: 001

Card 3/4

APPROVED FOR RELEASE: 06/15/2000 CIA-RDP86-00513R001341610012-2"

"APPROVED FOR RELEASE: 06/15/2000 CIA-RDP86-00513R001341610012-2

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ACCESSION NR: AP5013366

ENCLOSURE: 01

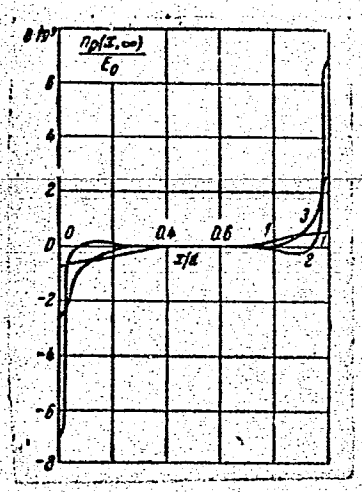

Fig. 1

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"APPROVED FOR RELEASE: 06/15/2000 CIA-RDP86-00513R001341610012-2

ACCESSION NR: AP4022653

S/0207/64/000/001/0094/0098

AUTHORS: Kamenev, I. V. (Moscow); Pogosyan, V. A. (Moscow)

TITLE: Propagation of electromagnetic waves through an inhomogeneous plasma

SOURCE: Zhurnal priklad. mekhan. i tekhn. fiz., no. 1, 1964, 94-98

TOPIC TAGS: electromagnetic wave, plasma, inhomogeneous plasma, electromagnetic wave propagation, transmission coefficient, reflection coefficient

ABSTRACT: An integral equation is found for the propagation of electromagnetic waves through a waveguide(with ideally conducting walls) filled with a nondissipating plasma nonuniform along the waveguide axis (z). If in the region $0 \leqslant z \leqslant L$ the concentration of charged particle is given by

$$N(z) = N_0 [1 + \varkappa f(\nu z)], \quad \varkappa < 1, \quad |f(\nu z)| < 1$$

then

$$U(z) = c_1 e^{ikz} + c_2 e^{-ikz} + \frac{q}{2ik} e^{ikz} \int_0^z e^{-ikz'} f(\nu z') u(z') dz' +$$

$$+ \frac{q}{2ik} e^{-ikz} \int_z^L e^{ikz'} f(\nu z') u(z') dz', \quad q = k^2 \varkappa \xi$$

1/3

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APPROVED FOR RELEASE: 06/15/2000 CIA-RDP86-00513R001341610012-2"

"APPROVED FOR RELEASE: 06/15/2000 CIA-RDP86-00513R001341610012-2

ACCESSION NR: AP4022653

k^0 is the constant of wave propagation in free space and k is the constant in the waveguide filled with a uniform (N_0) plasma. Constant k is given by

$$k = \left[\frac{\omega^2}{c^2}\left(1 - \frac{\omega_p^2}{\omega^2}\right) - \gamma^2\right]^{1/2},$$

where ω is the angular frequency of the propagating wave, the plasma frequency -

$$\omega_p = \left(\frac{4\pi e^2 N_0}{m}\right)^{1/2}$$

and

$$\gamma^2 = \left(\frac{m\pi}{a}\right)^2 + \left(\frac{n\pi}{b}\right)^2 (m, n = 0, 1, 2, \ldots);$$

a and b are the dimensions of the waveguide. Outside the inhomogeneous region where the plasma is uniform, $f(\nu z) \equiv 0$. Then, assuming an incident wave of unit amplitude,

$$U^{(0)}(z) = \begin{cases} e^{ikz} + Re^{-ikz} & (-\infty < z \leqslant 0) \\ Te^{ikz} & (L \leqslant z < +\infty); \end{cases}$$

where the reflection and transmission coefficients, R and T respectively, are given by

$$R = \frac{q}{2ik}\int_0^L e^{ikz'} f(\nu z')\, U(z')\, dz', \qquad T = 1 + \frac{q}{2ik}\int_0^L e^{-ikz'} f(\nu z')\, U(z')\, dz'.$$

In the case of special interest where the plasma inhomogeneity $f(\nu z) = \cos \nu' z$ an

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ACCESSION NR: AP4022653

approximate solution for U(z) is found to be

$$U(z) = \left(\frac{q/\nu}{q/2\nu - (k - \nu/2)}\right)^{1/2} \exp\left[-\sqrt{\left(\frac{q}{2\nu}\right)^2 - \left(k - \frac{\nu}{2}\right)^2}\, z\right] \times$$
$$\times \left\{\cos\left(\frac{\nu z}{2} + \theta_0\right) + \frac{q}{2}\,\frac{\cos(3\nu z/2 + \theta_0)}{k^2 - (\nu + k)^2}\right\};$$

where

$$\operatorname{arc\,tg}\left\{\frac{q/2\nu - (k - \nu/2)}{q/2\nu + (k - \nu/2)}\right\}^{1/2} = \theta_0 = \text{const}.$$

This solution is also applicable when the plasma inhomogeneity is given by a continuous periodic function. In practice, only the first few harmonics of the Fourier series expansion need be considered to give results which describe the observed phenomenon with sufficient accuracy. An involved expression for the reflection coefficient is also found by the direct substitution of U(z) into the equation for R. "The authors are grateful to S. A. Regirer for a number of useful remarks." Orig. art. has: 55 equations.

ASSOCIATION: none

SUBMITTED: 17Oct63 DATE ACQ: 08Apr64 ENCL: 00
SUB CODE: PH NO REF SOV: 005 OTHER: 002

3/3

Card

APPROVED FOR RELEASE: 06/15/2000 CIA-RDP86-00513R001341610012-2"

"APPROVED FOR RELEASE: 06/15/2000 CIA-RDP86-00513R001341610012-2

L 23097-66 EWT(1)/ETC(f)/EPF(n)-2/EWG(m) IJP(c) AT

ACC NR: AP6007078 UR/0057/66/036/002/0297/0303

55

B

AUTHOR: Golovanivskiy, K.S.; Pogosyan, V.A.

ORG: Friendship of Nations University im. Patrice Lumumba, Moscow (Universitet druzhby narodov)

TITLE: Some properties of a plasma capacitor

SOURCE: Zhurnal tekhnicheskoy fiziki, v. 36, no. 2, 1966, 297-303

TOPIC TAGS: plasma diagnostics, capacitor, transient current, Langmuir frequency, Debye length

ABSTRACT: The authors calculate the response of a plane capacitor partly filled with plasma to the sudden application of a potential which is thereafter maintained constant, and they suggest that the resulting equations may prove useful for plasma diagnostics. The plasma layer is assumed to be centered between the capacitor plates and to be insulated from them by nonconducting dielectric. The calculations are based on expressions for the electron and ion densities in the plasma as functions of position and time derived in an earlier paper by the authors (PMTF, No.2, 1965). These expressions were derived in a "small signal approximation" (the exact nature of this approximation is not revealed). Expressions are derived in a straightforward way for the potential distribution within the capacitor and the current through it. These expressions have the form of infinite series of which only the first term is signi-

UDC: 533.9

Card 1/2

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L 23097-66

ACC NR: AP6007078

ficant if the electron and ion Debye radii are small compared with the thickness of plasma layer. The final equation for the transient current is the sum of two terms of which the first (second) decays exponentially with a time constant equal to twice the reciprocal of the ion (electron) collision frequency and oscillates with a frequency close to the ion (electron) Langmuir frequency. By observing the transient current with an oscilloscope, therefore, one can obtain the collision and Langmuir frequencies of the plasma, provided the time constant of the external circuit is small compared with the reciprocal of the Langmuir frequency. The additional steady state capacity of the capacitor due to the presence of the plasma depends only on geometric factors and the two Debye radii in the plasma. If the electron temperature of the plasma is much higher than the ion temperature, one can directly determine the electron Debye radius by measuring the capacity of the capacitor after the transient has decayed. Orig. art. has: 20 formulas and 1 figure.

SUB CODE: 09 SUBM DATE: 10Feb65 ORIG. REF: 001 OTH REF: 005

Card 2/2 ULR

APPROVED FOR RELEASE: 06/15/2000 CIA-RDP86-00513R001341610012-2"

"APPROVED FOR RELEASE: 06/15/2000 CIA-RDP86-00513R001341610012-2

LEONOV, G.S. (Moskva); POGOSYAN, V.A. (Moskva)

Theory of weak diffusion waves. PMTF no.5:18-23 '63.
(MIRA 16:11)

APPROVED FOR RELEASE: 06/15/2000 CIA-RDP86-00513R001341610012-2"

"APPROVED FOR RELEASE: 06/15/2000 CIA-RDP86-00513R001341610012-2

GOLOVANIVSKIY, K.S. (Moskva); POGOSYAN, V.A. (Moskva)

Polarization of a plasma in an electric field. PMTF no.2:23-29 Mr-Ap '65. (MIRA 18:7)

APPROVED FOR RELEASE: 06/15/2000 CIA-RDP86-00513R001341610012-2"

"APPROVED FOR RELEASE: 06/15/2000 CIA-RDP86-00513R001341610012-2

L 1399-66

ACCESSION NR: AP5018546 UR/0298/65/018/006/0043/0052

AUTHOR: Teterevnikova-Babayan, D. N.; Pogosyan, V. A.

18
B

TITLE: Newly discovered fungus species on fruit and berry plants in Armenian SSR

SOURCE: AN ArmSSR. Izvestiya. Biologicheskiye nauki, v. 18, no. 6, 1965, 43-52

TOPIC TAGS: fungus, horticulture, plant disease control

ABSTRACT: Systematic studies of fruit and berry plant fungi in Armenia were conducted by the botany departments of the institutions with which the authors are associated. The majority of the fungi found are harmful to either fruit, leaf, or shoots of the plant. A brief description of each fungus is given and also the place and date of discovery. Seven fungus species were found for the apple, four for the plum, and eighteen for other fruit and berry plants. Two secondary fungal parasites Cicinnobulus cotoneus Pass. and Tuberculina vinosa Sacc. require further study as possible biological weapons against their hosts Podosphaera leucotricha Salm. and

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ACCESSION NR: AP5018546

Gymnosporangium juniperinum. During the wet season in August and September the number of fungi species found together on a plant increased, thereby intensifying plant damage. Identification of these various fungi species should be helpful in developing effective plant disease control measures for fruit and berry plants in Armenian SSR. Orig. art. has: 6 figures.

ASSOCIATION: Kafedra botaniki biologicheskogo fakul'teta Yerevanskogo universiteta (Botany Department of the Biology Division of Erevan University); Kafedra biologii Arm. pedagogicheskogo instituta im. Kh. Abovyana (Biology Department of the Armenian Pedagogic Institute)

SUBMITTED: 04Nov64 ENCL: 00 SUB CODE: LS

NR REF SOV: 005 OTHER: 002

Card 2/2

APPROVED FOR RELEASE: 06/15/2000 CIA-RDP86-00513R001341610012-2"

"APPROVED FOR RELEASE: 06/15/2000 CIA-RDP86-00513R001341610012-2

POGOSYAN, V.B.

Simplified designs of curved metal forms for concreting hydraulic tunnels. Suggested by V.B. Pogosian. Rats. predl. no. 43:3 '59. (MIRA 14:1)

(Tunneling)

APPROVED FOR RELEASE: 06/15/2000 CIA-RDP86-00513R001341610012-2"

"APPROVED FOR RELEASE: 06/15/2000 CIA-RDP86-00513R001341610012-2

POGOSYAN, V.S.

Investigation of wheat in the Ararat Plain and Kamo District obtained from irradiated seeds. Izv.AN Arm.SSR.Biol.nauki 15 no.9:75-82 S '62. (MIRA 15:11)

(ARMENIA—WHEAT) (PLANTS, EFFECT OF RADIATION ON)

APPROVED FOR RELEASE: 06/15/2000 CIA-RDP86-00513R001341610012-2"

"APPROVED FOR RELEASE: 06/15/2000 CIA-RDP86-00513R001341610012-2

POGOSYAN, V.S.

Study of the chemical composition of corn plants grown from irradiated seeds under different climatic conditions. Izv. AN Arm. SSR. Biol. nauki 16 no.10:41-50 O'63 (MIRA 16:12)

APPROVED FOR RELEASE: 06/15/2000 CIA-RDP86-00513R001341610012-2"

"APPROVED FOR RELEASE: 06/15/2000 CIA-RDP86-00513R001341610012-2

POGOSYAN, V.S.

Effect of gamma rays on the course of fertilization of corn.
Izv. AN Arm. SSR. Biol. nauki 17 no.12:19-28 D '64.
(MIRA 18:3)

APPROVED FOR RELEASE: 06/15/2000 CIA-RDP86-00513R001341610012-2"

"APPROVED FOR RELEASE: 06/15/2000 CIA-RDP86-00513R001341610012-2

POGOSYAN, V.S.

Process of microgametogenesis and viability of the pollen in irradiated wheat plants. Izv. AN Arm. SSR Biol. nauki 17 no.9: 59-71 S '64 (MIRA 18:1)

APPROVED FOR RELEASE: 06/15/2000 CIA-RDP86-00513R001341610012-2"

"APPROVED FOR RELEASE: 06/15/2000 CIA-RDP86-00513R001341610012-2

POGOSYAN, V.S.

Studying hybrid corn plants under conditions prevailing in Stepavan [in Armenian with summary in Russian]. Nauch.trudy Erev.un. 64:207-213 '58. (MIRA 11:12)

1. Kafedra darvinizma i genetiki Yerevanskogo gosudarstvennogo universiteta.

(Stepanavan--Corn breeding)

APPROVED FOR RELEASE: 06/15/2000 CIA-RDP86-00513R001341610012-2"

"APPROVED FOR RELEASE: 06/15/2000 CIA-RDP86-00513R001341610012-2

ACCESSION NR: AP4039595 S/0126/64/017/005/0678/0683

AUTHOR: Pogosyan, Ya. M.

TITLE: Reversing of thin ferromagnetic films in the direction of difficult magnetization

SOURCE: Fizika metallov i metallovedeniye, v. 17, no. 5, 1964, 678-683

TOPIC TAGS: ferromagnet, magnetization, hysteresis loop, crystal anisotrophy, Akulov Bitter picture, magnetooptic effect, Neel boundary/ alloy 79NMA

ABSTRACT: The character of the film reversing in the difficult magnetization direction (as a function of the magnitude of the magnetizing field) was studied as an extension of the work by R. J. Spain, H. Rubinstein (J. Appl. Phys., 1961, 32, 288) based on Akulov-Bitter pictures. Alloy 79NMA was vacuum-evaporated onto microscope slides to form blotches 10 mm in diameter and 1000-1400 Å thick. These films possessed rectangular hysteresis loops in the direction of difficult magnetization when the amplitude of the applied field exceeded the anisotrophic field. With a decrease of the applied field this shape of the loop was lost (together with the decrease of the coercive force), and finally transformed into a line. The loop was established by irreversible processes, the character of which was observed with the aid of Kerr meridian effect. The process of film reversal in the difficult

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"APPROVED FOR RELEASE: 06/15/2000 CIA-RDP86-00513R001341610012-2

POGOSYAN, Ya.M.; YEGIYAN, K.A.; SOLAKHYAN, A.O.

Determining the thickness of thin films. Izv. AN Arm. SSR. Ser. fiz.-mat. nauk 16 no.6:131-136 '63. (MIRA 17:8)

APPROVED FOR RELEASE: 06/15/2000 CIA-RDP86-00513R001341610012-2"

"APPROVED FOR RELEASE: 06/15/2000 CIA-RDP86-00513R001341610012-2

L 56645-65 EWT(1)/EWT(m)/EWP(i)/T/EWP(t)/EEC(b)-2/EWP(b) Pi-4
IJP(c) JD/GG

ACCESSION NR: AT5014636 UR/0000/65/000/000/0217/0222
681.142.324

24
B+1
21

AUTHOR: Pogosyan, Ya. M.

TITLE: Influence of dispersion on the behavior of thin ferromagnetic films near the direction of hard magnetization

SOURCE: Vsesoyuznoye soveshchaniye po magnitnym elementam avtomatiki i vychislitel'noy tekhniki, 9th, Yerevan, 1963. Magnitnyye analogovyye elementy (Magnetic analog elements); doklady soveshchaniya. Moscow, Izd-vo Nauka, 1965, 217-222

TOPIC TAGS: magnetic film dispersion, magnetic anisotropy variation, magnetic anisotropy dispersion, magnetic coherent rotation model, hard direction remagnetization, ferromagnetic film behavior

ABSTRACT: At the present time, the investigation of thin magnetic films is usually concentrated on deviations from the coherent rotation model (H. J. Oquey, Proc. IRE, 1960, 48, 237) observed in films obtained by evaporation in a vacuum. According to numerous researchers (see, e.g., E. Fuchs, Zs. Angew. Phys., 1961, 13, 157; D.O. Smith, K.J. Harte, J. Appl. Phys., 1962, 33, 1399), one of the basic causes of

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ACCESSION NR: AT5014636

such deviations is the presence of dispersion — local variations of the anisotropy in magnitude and direction. This paper describes: 1) studies of film remagnetization in the direction of hard magnetization for various numbers of boundaries per unit area; and 2) a new method for the determination of the direction (within ±3°) of the vector of residual magnetization; by turning a sample, within its plane, in three of its states of magnetization, one can uncover the magnetization direction of its original state. This last method permits the measurement of the anisotropy direction dispersion in its true sense, while other methods (H. Clow, Nature (Engl.), 1961, 191, 996; R. V. Peacock, G. Winsor, Nature (Engl.), 1962, 193, 768) find readings in dispersionless films containing macroinhomogeneities and edge effects. Orig. art. has: 2 formulas and 6 figures.

ASSOCIATION: none

SUBMITTED: 28Dec64 ENCL: 00 SUB CODE: SS, EM

NO REF SOV: 002 OTHER: 013

Card 2/2

APPROVED FOR RELEASE: 06/15/2000 CIA-RDP86-00513R001341610012-2"

"APPROVED FOR RELEASE: 06/15/2000 CIA-RDP86-00513R001341610012-2

ACCESSION NR: AP4017353 S/0126/64/017/002/0212/0216

AUTHOR: Pogosyan, Ya. M.; Yegiyan, K.A.; Pogosyan, T. A.

TITLE: Effect of anisotropy direction dispersion on the behavior of thin ferromagnetic films

SOURCE: Fizika metallov i metallovedeniye, v. 17, no. 2, 1964, 212-216

TOPIC TAGS: ferromagnetism, ferromagnetic film, magnetization direction, nickel alloy, iron containing alloy, molybdenum containing alloy, magnetism, hysteresis loop

ABSTRACT: A multitide of new properties has been discovered in thin ferromagnetic films which cannot be explained by a simple theory of coherent rotation and which may arise from factors such as the dispersion of axial direction of the magnetization. To investigate the residual magnetization which results from inhibitedly directed film saturation, the authors undertook a magnetomicroscopic study of 800-1400 Å, disk-shaped films, 10 mm in diameter, obtained by sublimation of an alloy consisting of Ni (79%), Fe(17%) and Mo(4%) at 300 C in a $2 \cdot 10^{-5}$ mm Hg vacuum in the presence of a 40-oe magnetic field. The study showed that the films develop an inhibitedly directed rectangular hysteresis loop and possess a residual magnetization state stable enough to offset

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ACCESSION NR: AP4017353

subsequent reapplication of the field, which generates a new phase and steps up its growth. Orig. art. has: 4 figures.

ASSOCIATION: None

SUBMITTED: 12Feb63 DATE ACQ: 18Mar64 ENCL: 00

SUB CODE: ML, PH NO REF SOV: 001 OTHER: 010

Card 2/2

APPROVED FOR RELEASE: 06/15/2000 CIA-RDP86-00513R001341610012-2"

"APPROVED FOR RELEASE: 06/15/2000 CIA-RDP86-00513R001341610012-2

L 3972[illegible]-65 EWT(1)/EWT(m)/T/EWP(t)/EEC(b)-2/EWP(b) Fi-4 IJP(c) JD/GG

ACCESSION NR: AP5004263 S/0126/65/019/001/0038/0044

37
36
B

AUTHOR: Pogosyan, Ya. M.

TITLE: The state of residual magnetism in thin ferromagnetic films close to the axis of paramagnetic susceptibility

TOPIC TAGS: magnetic thin film, magnetic anisotropy, hysteresis, magnetic permeability, computer memory, magnetic domain switching

ABSTRACT: The fact that the properties of actual films differ from those of ideal films, i.e. from those which satisfy the theory of coherent rotation, leads to difficulties in the practical application of thin films. Deviations caused by dispersion of the direction of anisotropy in the film in particular lead to division of the film into narrow domains after saturation along the axis of paramagnetic susceptibility or close to it. Dispersion of the direction of anisotropy also causes hysteresis along the axis of paramagnetic susceptibility in uniaxially anisotropic films. This hysteresis has been explained by the presence of a large number of boundaries. In actual films, the size of the narrow domains varies within wide limits depending on the dispersion. Division of the film into domains takes place not only after saturation along the axis of paramagnetic susceptibility, but also in the neighborhood of this axis. The boundaries of the domains which

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L 39724-65

ACCESSION NR: AP5004263

are formed do not lie along the axis of magnetic susceptibility but are determined by the alignment of the magnetization in two neighboring domains. The instance of the boundary being parallel to axis of magnetic susceptibility constitutes a special case where the symmetry of two neighboring domains coincides. This corresponds to preliminary saturation precisely along the axis of paramagnetic susceptibility. The direction of residual magnetism evaluated according to the obliterating boundary, coincides with the direction determined by the Kerr magneto-optic method and by the hysteresis loop. Besides dispersion of the direction of anisotropy, the films also show large-scale nonhomogeneity. "The author expresses his gratitude to Professor R. V. Telesnin for valuable remarks and advice during discussion of this work." Orig. art. has: 5 figures.

ASSOCIATION: none

SUBMITTED: 10Jun63 ENCL: 00 SUB CODE: EM, DP

NO REF SOV: 004 OTHER: 008

mc

Card 2/2

APPROVED FOR RELEASE: 06/15/2000 CIA-RDP86-00513R001341610012-2"

"APPROVED FOR RELEASE: 06/15/2000 CIA-RDP86-00513R001341610012-2

POGOSYAN, Ya.M.; YEGIYAN, K.A.; POGOSYAN, T.A.

Effect of the directional dispersion of anisotropy on the behavior of thin ferromagnetic films. Fiz. met. i metalloved. 17 no.2:212-216 F '64. (MIRA 17:2)

APPROVED FOR RELEASE: 06/15/2000 CIA-RDP86-00513R001341610012-2"

"APPROVED FOR RELEASE: 06/15/2000 CIA-RDP86-00513R001341610012-2

TRCHUNYAN, A.A.; POGOSYAN, Ya.M.; YEGIYAN, K.A.; POGOSYAN, T.A.

Apparatus for the simultaneous study of ferromagnetic films by Kerr's magneto-optical method and the Akulov - Bitter method. Izv. AN Arm. SSR.Ser.fiz.-mat.nauk 17 no.1:131-136 '64. (MIRA 17:3)

APPROVED FOR RELEASE: 06/15/2000 CIA-RDP86-00513R001341610012-2"

"APPROVED FOR RELEASE: 06/15/2000 CIA-RDP86-00513R001341610012-2

S/0022/64/017/001/0131/0136

ACCESSION NR: AP4026811

AUTHORS: Trchunyan, A. A.; Pogosyan, Ya. M.; Yegiyan, K. A.; Pogosyan, T. A.

TITLE: Equipment for simultaneous investigation of ferromagnetic films using the magneto-optical method of Kerr and the Akulov-Bitter method

SOURCE: AN ArmSSR. Izv. Seriya fiziko-matematicheskikh nauk, v. 17, no. 1, 1964, 131-136

TOPIC TAGS: ferromagnetic film, magneto-optical method, powder pattern, metallographic microscope, magnetic field, Helmholtz coil

ABSTRACT: The equipment for simultaneously studying ferromagnetic films using the magneto-optical method of Kerr and the powder patterns of Akulov-Bitter has been described and several photographs of specimens with different magnification are included. The equipment consists of two basic components; an instrument for magneto-optical observations and a metallographic microscope MIM-8 with some minor modifications to observe the Akulov-Bitter patterns. Photographs of the general setup and a detailed diagram for the optical system are presented. The advantage of the system described lies in the possibility of observing the same portion of

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"APPROVED FOR RELEASE: 06/15/2000 CIA-RDP86-00513R001341610012-2

ACCESSION NR: AP4026811

the film by both methods in a magnetic field generated by the same Helmholtz coil, under identical conditions suitable for a comparative study. Several examples of films studied by this method are outlined briefly. Orig. art. has: 6 figures.

ASSOCIATION: none

SUBMITTED: 21Jun63 DATE ACQ: 16Apr64 ENCL: 00

SUB CODE: PH NO REF SOV: 000 OTHER: 008

Card 2/2

APPROVED FOR RELEASE: 06/15/2000 CIA-RDP86-00513R001341610012-2"

"APPROVED FOR RELEASE: 06/15/2000 CIA-RDP86-00513R001341610012-2

POGOSYAN, Ya.M.

Changing thin ferromagnetic films in the direction of difficult magnetization. Fiz. met. i metalloved. 17 no.5:678-683 My '64. (MIRA 17:9)

APPROVED FOR RELEASE: 06/15/2000 CIA-RDP86-00513R001341610012-2"

"APPROVED FOR RELEASE: 06/15/2000 CIA-RDP86-00513R001341610012-2

1ST AND 2ND ORDERS

PROCESSES AND PROPERTIES INDEX

Tri- and tetrachloroethylene. G. P. Pogosyan and G. M. Mkryan. Russ. 50,533, Feb. 28, 1937. Tetra- and pentachloroethanes are treated with an excess of anhyd. liquid or gaseous NH_3 at a temp. not above 0°. The mixt. of ethylene derivs., NH_3 and NH_4Cl is sepd. in the usual manner.

ASM-SLA METALLURGICAL LITERATURE CLASSIFICATION

APPROVED FOR RELEASE: 06/15/2000 CIA-RDP86-00513R001341610012-2"

"APPROVED FOR RELEASE: 06/15/2000 CIA-RDP86-00513R001341610012-2

LUSINYAN, G.; POGOSYAN, Ye.

Ways of reducing ore production costs in the Kafan Copper Ore Combine. Prom.Arm 5 no.9:16-18 S '62. (MIRA 15:9)

1. Armgiprotsvetmet.
(Kafan region--Copper mines and mining)

APPROVED FOR RELEASE: 06/15/2000 CIA-RDP86-00513R001341610012-2"

"APPROVED FOR RELEASE: 06/15/2000 CIA-RDP86-00513R001341610012-2

AMBARTSUMYAN, B.; POGOSYAN, Ye.

Mass blasting in the Kafan Mines. Prom.Arm. 5 no.1:48-50 Ja '62. (MIRA 15:2)

(Armenia—Blasting)

APPROVED FOR RELEASE: 06/15/2000 CIA-RDP86-00513R001341610012-2"

"APPROVED FOR RELEASE: 06/15/2000 CIA-RDP86-00513R001341610012-2

POGOSYAN, Z.; PETROSYANTS, Kh.; MEYLAKHS, M.; ZONOV, N.

Aeronautical kaleidoscope. Grazhd. av. 21 no.7:16-17 Jl '64. (MIRA 18:4)

APPROVED FOR RELEASE: 06/15/2000 CIA-RDP86-00513R001341610012-2"

"APPROVED FOR RELEASE: 06/15/2000 CIA-RDP86-00513R001341610012-2

SOV/110-59-8-3/24.

AUTHORS: Akopyan, G.S., Pogosyan, Z.Kh, and Gantseva, T.L. Engineers.

TITLE: 6-kV and 10-kV Transformers with Aluminium Windings.

PERIODICAL: Vestnik elektropromyshlennosti, 1959, Nr 8, pp 10-13 (USSR)

ABSTRACT: It will be advantageous to use aluminium instead of copper for transformers of output up to 1800 kVA. The physical characteristics of aluminium and copper are compared in Table (1). The dimensions, weights and turns ratios of aluminium and copper windings are compared for the case when the aluminium winding is 1.46 times the height of a copper winding. If, in order to avoid excessive production costs, the cross-section of transformers with aluminium windings is maintained the same as for copper, the height of the windings will be about doubled and the copper and aluminium-wound transformers then differ only in height. Table (2) gives a comparison between designs of transformers ranging from 20 to 100 kVA with aluminium and with copper windings. The overall weight of the aluminium-wound transformers is the greater by 4 to 5%. Aluminium windings may well be used on low-voltage transformers where the insulation cost is not excessive. The relatively low mechanical strength

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6-kV and 10 kV Transformers with Aluminium Windings.

of aluminium windings makes it difficult to use them for large transformers, although 70-MVA transformers with aluminium windings have been manufactured by the English Electric Company. Under short-circuit conditions transformers with aluminium windings take twice as long to heat up to 250°C as do those with copper windings. There is little difference in manufacturing procedure when aluminium is used, except in making joints and terminations. Existing jointing methods are adequate but it would be advisable to use copper terminations for the windings, and for this special equipment is required. Gas welding was used in the manufacture of experimental transformers with aluminium windings; this method of jointing is reliable but laborious. Cold welding was used to join copper terminations to the aluminium conductors, but because of the dissimilar coefficients of expansion of copper and aluminium the joints do not withstand high temperatures and are hence not well adapted to oil-cooled transformers. Experimental transformers with aluminium

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