

OSIPYAN, I.L.

Calculating columnar equipment for wind and seismic load.

Izv. vys. ucheb. zav.; nef't' i gaz 7 no.9:103-105 '64.

(MIRA 17:12)

1. Azerbaydzhanskiy institut nef'ti i khimii im. M. Azizbekova.

COPY 1.1.

1. [illegible]
2. [illegible]
3. [illegible]

OSIPIYAN, I.L.

Concerning temperature stresses in the lined tower apparatus
used in petrochemical production. Izv. vys. ucheb. zav.;
neft' i gaz 7 no.11:105-106 '64. (MIRA 18:11)

1. Azerbaydzhanskiy institut nefti i khimii im. M. Azizbekova.

OSIPYAN, I.L.

Calculating lower apparatus by the limiting state method.
Mash. 1 neft.obor. no.11:44-45 '64.

(MIRA 1941)

OSIPYAN, I.N. (st. Usovo Velikovskaya, Krasnodarskiy kray)

Several arithmetic curiosities. Mat.v shkole no.3:55-56 My-Je '56.
(MLRA 9:8)

(Arithmetic--Curiosa and miscellany)

SLESAREV, V.V.; OSIPYAN, Kh.O.

Clinical and X-ray diagnosis of diverticula of the duodenum. Zdrav.
Turk. 5 no.5:16-19 S-0 '61. (MIRA 14:12)

1. Iz kafedry rentgenologii i radiologii (ispolnyayushchiy obyazannosti
zav. V.V.Slesarev) Turkmenskogo gosudarstvennogo meditsinskogo instituta
imeni I.V. Stalina i rentgenovskogo otdeleniya Ashkhabadskoy gorodskoy
klinicheskoy bol'nitsy No.1 (glavnyy vrach - G.V.Bondar').
(DUODENUM__RADIOGRAPHY) (DUODENUM__DISEASES)

KAZIMOV, G.A.; OSIPYAN, Kh.O.

Malignant mesothelioma of the pleura. Zdrav.Turk. 6 no.2:34-36
Mr-Apr '62. (MIRA 15:11)

1. Iz kafedry gosospital'noy terapii (zav. - dotsent G.K.Khodzha-
kuliyyev) Turkmenskogo gosudarstvennogo meditsinskogo instituta i
I gorodskoy klinicheskoy bol'nitsy (glavnyy vrach - G.V.Bondar').
(PLEURA--CANCER)

KAPRIYELOV, G.M.; OSIPYAN, Kh.O.

Case of adamantinoma of the lower jaw. Zdrav. Turk. 4 no.4:38 J1-
Ag '60. (MIRA 13:9)

1. Iz kafedry gosspital'noy khirurgii (sav. - prof. I.F. Berezin)
Turkmenskogo gosudarstvennogo meditsinskogo instituta im. I.V.Stalina
i rentgenovskogo otdeleniya gorodskoy klinicheskoy bol'nitsy No.1
(glav. vrach - G.V. Bondar')
(JAWS--TUMORS)

COINTEL, L. A.

Armenia - Forests: [unclear]

Tasks of forestry in Armenia. [unclear], April 1953

9. Monthly List of Russian Accessions, Library of Congress, August 1953, Uncl.

OSTRICH, S. J.

Forests and Forestry - Argentina

Forest of Buenos Aires, Argentina. D. J. and S. J. Ostrich.

9. Monthly List of Russian Accessions, Library of Congress, 1953 1953, Uncl.

OSIPYAN, L.L.

Materials on the study of the genus *Cercospora* in the Armenian S.S.R.
Izv. AN Arm. SSR. Biol. i sel'khoz. nauki 10 no.9:35-46 S '57.
(MLRA 10:11)

1. Kafedra morfologii i sistemiki rasteniy Yerevanskogo gosudarstven-
nogo universiteta.

(Armenia--Fungi, Phytopathogenic)

OSTPYAN, L. L.: Master Biol Sci (diss) -- "Parasitic hyphal microcoma of the
Armenian SSR". Yerevan, 1968. 16 pp (Min Higher Educ USSR, Yerevan State U).
200 copies (KI, No 4, 1969, 124)

OSIPIYAN, L.L.

Biology of some hyphal fungi in the Armenian S.S.R. Izv. AN Arm. SSR. Biol. i sel'khoz.nauki 11 no.3:97-100 Ag '58. (IFRA 11:10)

1. Biologicheskiy fakul'tet Yerevanskogo gosudarstvennogo universiteta.

(Armenia--Fungi, Phytopathogenic)

OSIPYAN, L.L.

Representatives of the genus Ramularia in the Armenian S.S.R.
Nauch.trudy Brev.un. 64:111-124 '58. (MIRA 11:12)

1. Kafedra botaniki Yerevanskogo gosudarstvennogo universiteta.
(Armenia--Fungi, Phytopathogenic)

OSIPYAN, L.L.

Fungi of the order Peronosporales in the regions of the Sevan
basin in the Armenian S.S.R. Izv. AN Arm. SSR biol. nauki 16
no. 8:85-89. 1973 (MIRA 17:1)

1. Kafedra botaniki Yerevanskogo gosudarstvennogo universiteta.

8 MAY, 1954

MEMORANDUM

FOR THE DIRECTOR

FROM: SAC, [illegible]

SUBJECT: [illegible]

OSIPYAN, L.L.; TASLAKHCH'YAN, M.G.

New species of fungi in the mycoflora of the Armenian S.S.R.
found in regions of the Sevan basin. Report No. 1. Izv.AN
Arm.SSR.Biol.nauki 15 no.11:51-57 N '62. (MIRA 15:12)

1. Kafedra botaniki biologicheskogo fakul'teta Yerevanskogo
gosudarstvennogo universiteta.
(SEVAN LAKE REGION--FUNGI)

OSIFYAN, Liya Levonovna; AVAKYAN, S.V., red. izd-va; OVASAPYAN, A.A.,
tekhn. red.

[Parasitic hyphal fungi of the Armenian S.S.R.] Parazitnye gifal'-
nye griby Armianskoi SSR. Erevan, Izd-vo Erevanskogo gos. univ.
1962. 206 p. (MIRA 14:12)
(Armenia--Fungi, Phytopathogenic)

OSIPYAN, L.L.

Materials on the fungus flora of exposed ~~bottom~~ soils of Lake
Sevan. Izv. AN Arm. SSR. Biol. nauki 14 no.7:89-96 J1 '61.
(MIRA 14:9)

1. Kafedra botaniki Biologicheskogo fakul'teta Yerevanskogo
gosudarstvennogo universiteta.

(SEVAN LAKE REGION--FUNGI, PHYTOPATHOGENIC)

OSIPYAN, L.L.

Recent data on the distribution of hyphomycetes in Armenia. Nauch.
trudy Erev. un. 69 Ser. biol nauk no. 8:51-60 pt. 1 '59.

(MIRA 14:4)

1. Kafedra botaniki Yerevanskogo gosudarstvennogo universiteta.
(ARMENIA--HYPHOMYCETES)

OSIPYAN, T.L.; MELIK-MUSYAN, B.N., professor, zaveduyushchiy.

Neurinoma of the orbit. Vest. oft. 32 no.3:30-31 My-Je '53. (MLA 6:8)

1. Kafedra glaznykh bolezney Yerevanskogo meditsinskogo instituta.
(Eyes--Tumors)

CONFIDENTIAL, U.S. GOVERNMENT PRINTING OFFICE: 1975, O-211-117, 11-11.

application of the term "CONFIDENTIAL" to information that is

information that is not to be disseminated outside the agency, or to

the public, or to

the public.

"Application of Aerosols of Hexachlorane Pots in the Open Air for the Control of Vectors of Transmittable Diseases," by Lt Col Med Serv V. T. Osipyán, Candidate of Medical Sciences, Voyenno-Meditsinskiy Zhurnal, No 9, Sep 56, pp 60-63

This article reports results of tests conducted to determine the effectiveness of aerosols produced by burning of hexachlorane pots against such vectors of transmittable diseases as fleas, ticks, and flies. A special thermal mixture consisting of hexachlorane (46 percent), anthracene (13 percent), thiourea (one percent), ammonium chloride (11 percent), calcium chlorate (25 percent), and zinc dust (4 percent) was prepared to produce the aerosols. The thermal mixture was placed in special pots 11 centimeters high and 17 centimeters in diameter. The pots, when lighted, burned for about 15-18 minutes, producing a thick smoke of aerosols. The aerosols rose to a height of 0.5-1.5 meters, were carried by the wind through the air, and then settled on the ground. The tests established that the aerosol method of application of hexachlorane was 100 percent effective against fleas, ticks, and flies. (U)

USPENSKIY, N.D., kand.med.nauk, dotsent; OSIPYAN, V.T., kand.med.nauk,
polkovnik meditsinskoy sluzhby

Simultaneous use of disinfections and insecticides. Voer.-med.zhur.
no.8:65-68 Ag '57. (MIRA 10:12)

(ANTISEPTICS,

simultaneous application with insecticides (Rus))
(INSECTICIDES,

simultaneous application with antiseptics (Rus))

OSIPYAN, V.T.; KAZHDAN, V.B.; DUNAYEVA, I.D.

Butadione, an effective agent for the control of body lice. Zhur.
mikrobiol. epid. i immun. 31 no.7:18-22 J1 '60. (MIRA 13:9)

1. Iz Voenno-meditsinskoy ordena Lenina akademii im.Kirova.
(PYRAZOLIDINEDIONE) (LICE)

KRYLOV, V.N., polkovnik meditsinskoy sluzhby, dotsent; OSIPYAN, V.T.,
polkovnik meditsinskoy sluzhby, kand.med.nauk; VESELOV, M.P.,
podpolkovnik meditsinskoy sluzhby, kand.med.nauk;
GOL'DIN, R.B., mayor meditsinskoy sluzhby, kand.med.nauk

Method for studying the seeding of surfaces of various
objects with bacteria. Voen.-med. zhur. no.4:45-46 Ap '61.

(MIRA 15:6)

(BACTERIOLOGY--TECHNIQUE)

IOFFE, I.S., prof.; OSIPYAN, V.T., kand.med.nauk

B-propiolactone, a new disinfectant. Voen.-med. zhur. no.6:52-53
Je '61. (MIFA 14:8)

(DISINFECTION AND DISINFECTANT)

(LACTONES)

OSIPIAN, V. T.; GRABOVSKIY, B. S.; KAZHDAN, V. B.; DUNAYEVA, I. D.

Method of laboratory selection of repellent preparations and
evaluation of their activity in relation to fleas. Med. paras.
i paraz. bol. no.6:734-737 '61. (MIRA 15:6)

1. Iz Voenno-meditsinskoy ordena Lenina akademii imeni S. M.
Kirova.

(INSECT BAITs AND REPELLENTS) (FLRAS)

OSIPYAN, V.T., polkovnik meditsinskoy sluzhby, kand.med.nauk; KAZHDAN, V.B.,
mayor meditsinskoy sluzhby, kand.med.nauk

Use of aerosols of DDT for control of rat fleas in living areas.
Voen.-med. zhur. no.8: 52-55 Ag '61. (MIRA 15:2)
(DDT (INSECTICIDE)) (FLEAS...EXTERMINATION)

OSIPYAN, V.T.; STEPANOV, M.K.; GRABOVSKIY, B.S.; SMIRNOV, K.K.; KAZHDAN,
V.B.; MASLIY, L.K.; DUNAYEVA, I.D.

Comparative effectiveness of hexamethylenebenzamide and acetyl-
tetrahydroquinoline as protective agents against fleas in humans.
Med. paraz. i paraz. bel. 32 no.5:551-553 S-0'63 (MIRA 16:12)

1. Iz Voenno-meditsinskoy ordena Lenina akademii imeni S.M.
Kirova.

L 38633-65

ACCESSION NR: AP5011371

methyl bromide, achieving 91% deaths of Staphylococcus aureus at the maximum exposure time.

Orig. art. has 3 figures.

ASSOCIATION: Voenno-meditsinskaya ordena Lenina akademiya im. S. M. Kirova
(Military Medical Order of Lenin Academy)

SUBMITTED: 11Apr63

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NO REF SOV: 005

OTHER: Q04

JPRS

Card 2/2 fso

SINITSKIY, A.A., prof.; OSIPYAN, V.T., kand. med. nauk

Book review. Zhur. mikrobiol., epid. i immun. 41 no.10:155-156
'64. (MIRA 18:5)

OSIPYAN, V.T., kand. tekhn. nauk

Reviews. Zhurn. mikrobiol., epid. i immunit. 41 no.11:152-153 1965.
(MIRA 1846)

OSIPYAN, V.T., kand.med.nauk

Reviews and bibliography. Zhur.mikrobiol., epid. i immun.
42 no.10:146-148 0 '65.

(MIRA 18:11)

OSIPYAN, Yu. A.; KUSHNIR, I. P.

"A study of the influence of carbon on the mechanical properties and dislocation structure of iron whiskers."

paper submitted for Intl Conf on Fracture, Sendai, Japan, 13-16 Sep 66.

Inst. Solid State Physics and Cent. Inst. Ferrous Metallurgy.

OSIPYAN, YU. A.

USSR/Physics - Martensite transformations

Card 1/1 Pub. 22 - 18/51

Authors : Lyubov, B. Ya, and Osipyan, Yu. A.

Title : On the kinetics of isothermal martensite transformation near absolute zero

Periodical : Dok. AN BSSR 101/5, 853-856, Apr. 11, 1955

Abstract : Experiments with martensite transformations are described. The experiments were conducted to determine that the phase transformations of martensite at temperatures near absolute zero do not depend on the temperature, but to the speed of such transformation and that it is a function of the energy of atomic fluctuations. Seven references: 1 British, 2 USA and 4 USSR (1935-1953). Table; graph.

Institution : Central Scientific Research Institute of Ferrous Metals, Institute of Metallography and Physics of Metals

Presented by : Academician G. V. Kurdjumov, January 1, 1955

126-3-5/34

AUTHORS: Il'ina, V.A., Kritskaya, V.K. Kurdyumov, G.V., Osip'yan, Yu.A. and Stelletskaia, T. I.

TITLE: Study of the dependence of the bond forces on the state of crystals in metals and solid solutions. (Izucheniye zavisimosti sil svyazi ot sostoyaniya kristallov v metallakh i tverdykh rastvorakh).

PERIODICAL: "Fizika Metallov i Metallovedeniye" (Physics of Metals and Metallurgy), 1957, Vol. IV, No. 5, pp. 417-431 (U.S.S.R.)

ABSTRACT: Numerous studies revealed that the interatomic bond forces in a metallic crystal lattice can be influenced by alloying. Depending on the nature of the alloying element, the bond forces can be increased or decreased. Earlier work of the authors (3) and of Iveronova, V.I. and Katsnel'son, A.A. (4) have shown that the concentration of the alloying component is also of great importance, the heat treatment and plastic deformation was also found to influence the characteristic temperature of the solid solution (2,3,5,6). In recent years a considerable amount of work has been published inside and outside the Soviet Union in which anomalies are reported in the changes of certain properties as a result of heat treatment and deformation of numerous solid solutions. On the basis of experimental data of various authors it can

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126-3-5/34

Study of the dependence of the bond forces on the state of crystals in metals and solid solutions. (Cont.)

be considered as an established fact that certain properties of the solid solution can be changed appreciably by heat treatment and deformation without any change occurring in the chemical composition of the investigated phase; this phenomenon (change in the characteristic temperatures, electrical resistance anomalies, change of the lattice period etc.) was detected only in solid solutions but not in pure metals. Analysis of results of other authors permits the assumption that the anomalies in the properties observed by various authors can be attributed to a general cause and are the result of the same process taking place inside very small volumes of the crystal lattice of the solid solution. The most likely assumption is that the observed anomalies in the properties are due to changes in the distribution of the atoms in the lattice of the solid solution and on that numerous authors are in agreement but, on the other hand, various authors disagree on the character of the redistribution of the atoms inside the solid and on the nature of this phenomenon; however, there is no direct confirmation of this assumption and the problem requires further study. In the here described work the

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126-3-5/34

Study of the dependence of the bond forces on the state of crystals in metals and solid solutions. (Cont.)

influence was investigated of differing treatments on the interatomic interaction in crystals of solid solutions and of some high melting point metals and the influence was studied of the plastic deformation and heat treatment on the bond forces. The investigations were effected by X-ray methods and by measuring the resonance frequency of the longitudinal elastic oscillations (determination of the modulus of elasticity). The investigations were carried out on iron alloyed with chromium, manganese, W, Ni, Ti and also on pure Cr, W and Ta. For melting the metals a 50 kg capacity high frequency furnace was used and the material was cast into 25 kg ingots. The ingots were subjected to diffusion annealing at 1200 C and then forged into a square of 40 x 40 mm cross section and into rods of 15 mm dia. Forging was begun at 1000 to 1100 C and, after forging, the material was cold rolled with a total reduction of 62.5%, the specimens for determining the modulus of elasticity were cut from the rolled strip in the direction of rolling and were 100 mm long and 10 mm dia. The chemical analyses of eight of the investigated melts are given in Table 1, p 419. The results are described in some detail which were obtained

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126-3-5/34

Study of the dependence of the bond forces on the state of crystals in metals and solid solutions. (Cont.)

for the characteristic temperature of the solid solutions, Fe-Cr, Fe-Mn, Fe-W, Fe-Ti and for the bond forces in the pure metals Cr, W, Ta and also for the Young modulus of iron and the alloys Fe-Ni, Fe-W, Fe-Cr, Fe-Mn after various types of heat treatment. It was found that the characteristic temperature of the pure metals Fe, Mo, W and Ta does not change after heat treatment and deformation of these metals. In chromium an increase was observed in the characteristic temperature after heating deformed specimens to 600 C; after heating deformed chromium at 800 C its characteristic temperature did not change; it was found that the effect of changes in the characteristic temperature as a function of the heating temperature is reversible. There is a bond force during heat treatment and deformation of the solid solutions Fe-Cr, Fe-W and Fe-Mn: the characteristic temperature increases on heating within a given temperature range and decreases as a result of plastic deformation and hardening (Fe-Cr, Fe-Mn). It was established that there is full correspondence between the direction of the change in the characteristic temperature and the Young modulus, resulting from heat treatment and working of the solid solutions

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126-3-5/34

Study of the dependence of the bond forces on the state of crystals in metals and solid solutions. (Cont.)

Fe-Cr, Fe-W and Fe-Mn. It is assumed that the revealed phenomenon of a change in the bond forces during heat treatment and working of various solid solutions is due to a redistribution of the atoms in the crystal lattice and that an increase in the bond forces corresponds to an increase of the degree of the near order. There are 10 figures, 6 tables and 24 references, 1 of which are Slavic.

SUBMITTED: December 4, 1950.

ASSOCIATION: Central Ferrous Metallurgy Scientific Research Institute.
(Tsentral'nyy Nauchno-Issledovatel'skiy Institut Chernoy
Card 5/5 Metallurgii).

AVAILABLE: Library of Congress

OSIP'YAN, Yu. A.,

"A study of the Relationship between tensile strength and the state of dislocations in Metals and solid solutions," with I. I. Ilyin, V. A. Khrushchov, et al., *Phys. and Math. Sci.*; Kariyukov, T. V., *Academicheskii*, page 10, 1965, No. 1, T. 1.,

In book *Problems of Physical Metallurgy*, Moscow Metallurgizdat, 1965, No. 1, 1965, 115-120, *Sbornik* transl.

The articles in the book present results of investigations conducted in the leading body, Inst. of Physical Metallurgy, a part of the Inst. of Metallurgy of Ferrous Metallurgy located in Cherepovets. The investigations are concerned with phase transformations in alloys, strengthening and softening processes, diffusion processes studied with the aid of radioactive isotopes, and certain other questions.

SOV/53-67-4-3/7

Thread-shaped Crystals With a Strength That Is Near Theoretical Strength

has hitherto been achieved. Part I of the paper gives details (with numerous figures) concerning the formation, orientation, and shape of the whiskers; breeding by the regeneration of metals from their salts, and breeding by means of condensation from vapors, and other methods are described, as also the production of nonmetallic whiskers; a number of photographs shows the shape and growth of copper- and tin-whiskers considerably enlarged (up to 9000 times). Part II contains a very vivid description of the growth of such crystals as well as data concerning a large number of papers, which are given in a table covering two pages. Part III deals with experiments and results concerning the mechanical properties of the whiskers: among other things, experimental data on the deformation of whiskers are compared with those of ordinary crystals; the tearing of these whiskers with as well as without previous plastic deformation is investigated and described in diagrams. The creeping of metallic whiskers is described (also the creeping resistance of whiskers is considerably greater than that of ordinary crystals of the same material). Finally, the influence exercised by temperature and by the dimensions of whiskers on their strength is described as also the influence

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SOV/53-67-4-3,7

Thread-shaped Crystals With a Strength That Is Near Theoretical Strength

exercised by surface properties upon strength. Also the recovering of whiskers is demonstrated on the basis of figures 31 and 32 (altogether 10 photographs). Finally, other properties of whiskers are discussed in short (part IV). There are 33 figures, 5 tables, and 81 references, 6 of which are Soviet.

Card 3/3

18(4), 18(6)

AUTHORS:

Kurdyumov, G. V., Academician, SOV/20-124-1-21/69
Kritskaya, V. K., Latayko, P. A., Osip'yan, Yu. A.

TITLE:

On the Variation of the Forces of Interatomic Bond in a Single-phase Solid Solution Nickel-aluminum (Ob izmeneniyakh sil mezhatomnoy svyazi v odnofaznom tverdom rastvore nikel'-alyuminiy)

PERIODICAL:

Doklady Akademii nauk SSSR, 1959, Vol 124, Nr 1, pp 76-78 (USSR)

ABSTRACT:

Short reference is first made to earlier papers dealing with this subject. The castings of the nickel-aluminum alloy (8.3 atomic % Al) were annealed for 100 hours at 1,150°. The forging of the casting up to a cross section of 40 x 25 mm² began at 1,000° and was completed at a temperature of ~400-500°. Towards the end of the forging process the casting had already assumed a dark color. The forged workpieces were then cold-drawn and from them samples of 100 mm length and 10 mm diameter were produced. On these samples, Young's modulus was determined by measurement of the resonance frequencies in the case of longitudinal oscillations of the rod at room temperature. The results obtained by these

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On the Variation of the Forces of Interatomic Bond
in a Single-phase Solid Solution Nickel-aluminum

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measurements are shown by a diagram for various initial alloy states. In the cold deformed and in the hardened state Young's modulus of the alloy is higher by $6 \frac{1}{2}$ than in the case of an annealed alloy. In order to convey the alloy from a state with a high modulus (state B) into one of a low modulus (state A) it is necessary to heat it up to temperatures of more than $600-700^{\circ}$, after which it is gradually cooled down. With heating up to $700-1,000^{\circ}$, Young's modulus gradually decreases. For the purpose of conveying the alloy from state A into state B it is sufficient to heat up to 300° with subsequent cooling in water. Already after heating up to 100° the modulus is noticeably increased. The state A does not change if cooling takes place slowly after heating to 300° or higher temperatures. These data make it possible to draw the conclusion that state B in a hardened alloy is not produced by undercooling of a steady state at high temperatures down to room temperature, but rather by such a transformation which occurs in the alloy only in the case of rapid cooling within the temperature interval of from 300° and room temperature. If the alloy is heated in state A up to

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On the Variation of the Forces of Interatomic Bond
in a Single-phase Solid Solution Nickel-aluminum

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300°, no essential changes occur in it either during heating or during aging. A change occurs only during rapid cooling. From the data discussed it further follows that the state B, which is produced by the rapid cooling of the alloy at a temperature below 300°, is a metastable state, which, in the case of a sufficiently high temperature, i.e. in the case of sufficient atomic mobility, may go over into the stable state A. At present, the nature of the alloys with high Young's modulus and the nature of the transition A → B is not yet known. The Debye X-ray pictures showed no difference between the crystal structures of the alloy in the states A and B. However, an essential difference was observed with respect to the microstructure of the alloy. Similar results were obtained also for a solid solution Ni - Cu (10.8 atom % Cu). There are 3 figures and 8 references, 5 of which are Soviet.

SUBMITTED: September 26, 1958

Card 3/3

66453

SOV/20-129-3-21/70

~~18 (6), 18 (7)~~ 18.1250, 18.8200
AUTHORS: Kritskaya, V. K., Kurdyumov, G. V.,
Academician, Osip'yan, Yu. A.

TITLE: On the Nature of the Variations of Young's Modulus in the
Thermal Treatment of Single-phase Alloys on the Basis of Nickel

PERIODICAL: Doklady Akademii nauk SSSR, 1959, Vol 129, Nr 3, pp 550-552 (USSR)

ABSTRACT: The present paper investigates the dependence of the elastic modulus on thermal treatment carried out on samples of pure nickel (electrolytic nickel twice remelted in a vacuum) and on some solid solutions on a nickel basis (Ni + 10% Cu, Ni + 10% Co, Ni + 3.5% Mo). All these alloys were single-phased during the entire interval of the heat treatment. Both in the case of nickel and in all alloys investigated, the variations of the elastic modulus depend on the manner in which they are cooled down from high temperatures. The dependence of the elastic modulus on the temperature of thermal treatment is shown in a diagram. For nickel and for all solid solutions this dependence is qualitatively the same; it is similar to the dependence for the alloy Ni-Al. The differences between the values of the elastic modulus in the state A (with a low value of the elastic modulus) and the state B (with a high value of the elastic modulus) fluctuate between 5% for

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On the Nature of the Variations of Young's Modulus in
the Thermal Treatment of Single-phase Alloys on the Basis of Nickel

nickel and 12% for the alloy Ni - Co. A microstructure with many lines of slide is characteristic of the state B. A vertical displacement along the individual slide lines could be observed in the interference microscope. In the states A and B the investigated alloys have not only different values of the elastic modulus at room temperature but also a different temperature dependence of the elastic modulus. For the annealed samples (state A) the temperature dependence of the elastic modulus has an anomalous character within the temperature interval of from room temperature to Curie point and is represented by means of a curve with a minimum. After quenching from a temperature that is higher than that of the total transition A → B, this anomaly of the elastic modulus vanishes, and in the state B it decreases in a monotonic manner with increasing temperature in the case of all alloys. After quenching and annealing, the difference between the values of the elastic modulus of nickel and its solid alloys is not determined by the difference in the strength of the binding forces, but by the influence exerted by the structure upon the mechanostriational

Card 2/3

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OSIP'YAN, Yu. A., Cond. Phys-Met. Sci (USSR) "Investigation of
Some Physical Properties of a Dilute Solution of Ions of
Nickel." Moscow, 1961, 10 p. (In Russian) (USSR)
(KL 50 p 1-01, 7).

PHASE I MEN ESTIMATES 54,575

Academy of Sciences, Doctor of Physics and Mathematics; Tech. Institute of Metals, Zvezdnyy, Zhukovskiy, Moscow; Institute of Physics and Mathematics; Viktor Pribludnyy Institute; Institute of Physics and Mathematics; Candidate of Physics and Mathematics, Leningrad University; Doctor of Technical Sciences; Boris Andreyevich Oshchepkov, Paris; Doctor of Technical Sciences; Vladimir Vasilyevich Kuznetsov, Candidate of Technical Sciences; Kham Isakovich Davletov, Candidate of Technical Sciences; Technical Institute; Candidate of Physics and Mathematics; and Lev Vasilyevich Chernov, Candidate of Technical Sciences.

Lev Vasilyevich Chernov, Candidate of Physics and Mathematics (Radiography in Physical Metallurgy), Moscow, Metallurgicheskii, 141. MS No. 1,000 copies printed.

Specialty: Nuclear Chemistry Institute, Cherny Metallurgy, Leningrad, Metallurgicheskii, 141. MS No. 1,000 copies printed.

Editor: V. I. Belykh, Editor of Publishing House, V. I. Belykh, Berlin, Tech. Inst. Tech. Reproduction.

Card 1/7

Abstract: This handbook is intended for ray technicians working in plant laboratories of the metallurgical and machine manufacturing industry. It may also be useful to technical personnel in the field of applied x-ray diffraction analysis employed at scientific, technical, and educational institutions.

CONTENTS: The handbook contains basic information of the methods employed in metallography. It consists of four parts. Part I contains descriptive of methods for the study of polycrystals, including the special features of the work with sharp-focus tubes and diffraction cameras, preparation of specimens, and choice of radiation source, filtration, geometry, and geometry of the picture. Data on the preparation of specimens and on the application of electron diffraction techniques to metal sections are also presented. Part II contains a detailed description of stress and deformations in crystals of metal, as well as of new methods for determining the size of grains and areas of coherent scattering. The methods for determining data on methods for studying the recrystallization of metals and alloys are presented. Part III is devoted to x-ray phase analysis to be carried out with the aid of tables included in the appendix. Part IV deals with x-ray diffraction in metallography that has been experimentally treated by thermal and by metallography. In particular, they are mentioned. There are 29 references (in Russian, English, German, and French).

Card 2/7

18.8200 1045 1413 2808

27258

S/020/61/139/005/0*0/02*
B104/B201

AUTHORS: Molotilov, B. V., and Osip'yan, Yu. A.

TITLE: Anomaly of the modulus of elasticity and domain structure of nickel

PERIODICAL: Akademiya nauk SSSR. Doklady, v. 139, no. 5, 1961, 1095-1097

TEXT: G. V. Kurdyumov et al. (DAN, 124, 76 (1959); DAN, 129, 550 (1959)) had earlier studied the effect of a heat treatment upon the temperature dependence of the modulus of elasticity of nickel and one-phase nickel alloys. The remarkable growth of the modulus of elasticity of nickel and its alloys was found to be accompanied by the appearance of slip bands on polished surfaces of the test specimens. This circumstance pointed to the relationship between this anomaly and the effect of lattice defects, appearing in the hardening process, upon the magnetostrictive part of elastic deformation. An inhibition of the boundaries of ferromagnetic domains by the defects is therefore expected to lead to a diminution of the contribution of magnetostrictive deformations to the general deforma-

Card 1/4

2725

S/O20/61/139/005/011/12
B104/B201

Anomaly of the modulus of elasticity ..

tion, whereby the modulus of elasticity is caused to grow. The authors examined the change of the magnetic state of a crystal after hardening by directly observing its magnetic structure. A nickel single-crystal was bred in a furnace by crystallization; electrolytic nickel was used for the purpose. In parallel to the (111) plane, disk-shaped samples were cut out of the single crystal. The sample surfaces were polished, the samples were then annealed, and subsequently again polished electrolytically, with less than 0.02 μ being removed in the process. The magnetic structure was observed with the aid of a suspension. A relief then appeared on the polished surfaces after 500°C hardening. Two systems of slip bands enclosing a reciprocal angle of 57° could be established. Bands with a greater deposition of the suspended substance enclosed many "mosaic" domains which are typical of a nickel crystal in the stressed state and which were also observed by other author on mechanically polished nickel samples. If an outer magnetic field is applied, the bands with a greater deposition oppose a strong resistance to a shift of their boundaries. It is said to be evident that these processes take place also if no magnetic field, but an external elastic stress is applied. These bands with a greater deposition are no ordinary domain boundaries, but
Card 2/4

27258

S/O2C/61/139/005/010/021
B104/B201

Anomaly of the modulus of elasticity ...

are disturbances of the crystal lattice. These disturbances of the crystal lattice in the slip bands lead to the formation of magnetic poles, the strength of which can be estimated from the magnitude of residual stresses. With reference to a paper by Ch. Kittel (Rev. Mod. Phys., 21, 547 (1949)) the effective permeability of a ferromagnetic substance in the disturbed region is discussed. The effective anisotropy constant of deformed nickel is regarded as being essentially determined by the magnetic energy. In this case, an amount of 30 - 50 kg/mm² is obtained for the residual stress. There are 4 figures and 7 references: 3 Soviet and 4 non-Soviet. The two most important references to English-language publications read as follows: S. Siegel et al., Phys. Rev., 42, 663 (1936); W. Elmore, Phys. Rev., 54, 309 (1938).

ASSOCIATION: Institut metalovedeniya i fiziki metallov Tsentral'nogo nauchno-issledovatel'skogo instituta chernoy metallurgii im. I. P. Bardina (Institute of Metal Science and Physics of Metals of the Central Scientific Research Institute of Siderurgy imeni I. P. Bardin)

Card 3/4

S/O20/62/143/002/012/022
B104/B102

18.11.50

AUTHORS: Osip'yan, Yu. A., and Usikov, M. P.

TITLE: Quenching defects in a solid nickel-aluminum solution

PERIODICAL: Akademiya nauk SSSR. Doklady, v. 143, no. 2, 1962, 319 - 322

TEXT: Disks 15 to 20 mm in diameter were made of cold-rolled nickel-aluminum foils of 30 μ thickness and annealed in vacuo at 1000°C for 8 hr. Subsequently, they were heated again in vacuo up to 400°C and quenched in oil. The diameter of the disks was reduced to about 1000 μ by electrolytic polishing. The foils were examined under an electron microscope at an accelerating voltage of 75 kv, and a beam diameter of less than 10 μ . Prismatic dislocation loops were detected, which are taken as an indirect indication of the relatively high energy of packing defects. From a detailed analysis of the specific features of the structure observed it is concluded that the dislocation loops produced by rapid cooling act as sources of dislocations. The resulting dislocations move along the glide planes. Some of them appear on the surface while others act on the gliding system, interact with other

Card 1/3

Quenching defects in a solid...

3/020/62/143/002/012/022

B104/B102

dislocations, and form stable dislocation grids or barriers of the type of sessile dislocations. This mechanism causes considerable fields of elastic stresses in the glide planes, which impede the movement of domain boundaries during magnetization or when applying external elastic stresses, lead to the occurrence of the ΔE effect, and change the magnetic properties. L. M. Utevskiy is thanked for valuable comments. There are 3 figures and 12 references: 7 Soviet and 5 non-Soviet. The four most recent references to English-language publications read as follows: P. P. Hirsch, J. Inst. Met., 97, 406 (1959); R. E. Smallman, K. H. Westmacott, G. A. Coiley, J. Inst. Met., 98, 127 (1959 - 1960); G. Thomas, Phil. Mag., 4, 1213 (1959); G. T. Fourie, H. Wilsdorf, J. Appl. Phys., 31, no. 12, 2219 (1960).

ASSOCIATION: Institut metallovedeniya i fiziki metallov Tsentral'nogo nauchno-issledovatel'skogo instituta chernoy metallurgii im. I. P. Bardina (Institute of Science and Physics of Metals of the Central Scientific Research Institute of Ferrous Metallurgy imeni I. P. Bardin)

X

Card 2/3

Quenching defects in a solid...

S/020/62/143/002/012/022
B104/B102

PRESENTED: October 25, 1961, by G. V. Kurdyumov, Academician

SUBMITTED: October 20, 1961

Card 3/3

X

S/ 17/62/000/007/002/010
D207/D301

AUTHORS: Il'ina, V.A., Kritskaya, V.K., Candidate of Physico-Mathematical Sciences, Kurdyumov, G.V., Member of the Academy of Sciences, USSR, and Osip'yan, Yu.A.

TITLE: On the nature of changes of Young's modulus and the characteristic temperature due to heat treatment of nickel-based solid solutions

SOURCE: Dnepropetrovsk. Institut metallovedeniya i fiziki metallov. Problemy metallovedeniya i fiziki metallov, no. 7, Moscow, 1962, 34 - 63

TEXT: Mechanical and other properties of nickel and its alloys were investigated as a function of their heat treatment and in relation to their microstructure. Apart from nickel, the following nickel alloys were studied: 1) With 2.9 % Al, 2) 5.7 % Al, 3) 11.5 % Cu, 4) 10.2 % Co, 5) 9.8 % Co, 6) 10.3 % Fe, 7) 14.5 % Mo, 8) 5.6 % Mo, 9) 20 % Cr. All these alloys contained also small amounts of C, Si, Mn, P and S. They were prepared in a high-frequency furnace, subject-

Card 1/3

On the nature of changes of Young's ... S/717/62/000/007/002/017
D207/D301

guage publications read as follows: A. Taylor, and K. Hinton, J. Inst. Metals, 81, 4, 169, 1952-3; F. Nordheim and N. Grant, J. Inst. Metals, 82, 9, 440, 1953-4; S. Siegel and S. Quimby, Phys. Rev., 49, 663, 1941.

Card 3/3

L 12607-63 EWT(1)/EWG(k)/BDS/EEC(b)-2 AFFTC/ASD/ESD-3 PI-4/

Pz-4 AT/LJP(C)/JT

ACCESSION NR: AP3001615

S/0030/63/000/005/0007/0019

69

AUTHOR: Kurdyumov, G. V. (Academician); Osip'yan, Yu. A. (Candidate of Physical and Mathematical Sciences)

TITLE: Some aims and goals in the study of solid-state physics 21

SOURCE: AN SSSR. Vestnik, no. 5, 1963, 7-19

TOPIC TAGS: electronic structure, crystal formation, magnetic phenomenon, high pressure

ABSTRACT: The Academy of Sciences is undertaking extensive reorganizations of the institutes concerned with solid-state physics. These are to deal with the extraordinary increase in the scope of this science, particularly in the fields of microwave spectroscopy, quantum microwave electronics, magnetic and structural neutron diffraction analysis, semiconductors, low-temperature physics, spectroscopy, and the phenomenological mechanics of strength and plasticity. Soviet science must make an increased effort to study the following: 1) the electronic structure of solid states, emphasizing the energy structure of the electronic spectrum in solid states; 2) the influence of inclusions and defects in the crystal structure on solid-state properties; 3) crystal formation, where the study, aided by chemistry

Card 1/2

L 12607-63

ACCESSION NR: AF3001615

and mineralogy, falls into two main groups: (a)-theoretical and experimental studies of the genesis and growth of natural crystals, and (b)-their synthetic production; 4) the physics of magnetic phenomena—of importance in geophysics and still poorly understood; 5) solid-state physics at high pressures, and 6) the physics of strength, concerned, among other things, with the effect produced by high-energy radiation on solid-state structures and their properties. The Presidium of the Academy of Sciences, SSSR, strongly supports these endeavors and solicits the help of the various chemical institutes. It has long been evident that the Academy needs a special design office and an experimental station to produce special equipment for the study of solid-state physics. The lack of specialists and technicians in this field is drawn to the attention of all concerned.

ASSOCIATION: none

SUBMITTED: 00

DATE ACQ: 21Jun63

ENCL: 00

SUB CODE: 00

NO REF SOV: 001

OTHER: 000

Card 2/2

L 51975-65 EWT(m)/EWP(w)/EWA(d)/T/EWP(t)/EWP(b)/EWA(c) IJP(c) MJW/JD
ACCESSION NR: AT5011206 UR/2717/64/000/008/0101/0111

35
30
B+1

AUTHOR: Osip'yan, Yu. A.

TITLE: Production and study of the mechanical properties of
copper and iron whiskers

SOURCE: Dnepropetrovsk. Institut metallovedeniya i fiziki metallov.
Problemy metallovedeniya i fiziki metallov, no. 8, 1964, 101-111

TOPIC TAGS: metal mechanical property, metal whisker, copper, iron,
crystal growth, crystal growth rate

ABSTRACT: Whiskers with a total impurity content not exceeding 10⁻⁴%
were produced by the halide reduction method. Experimental equipment
consisted of a tubular furnace, a cooled quartz tube, connecting
pipes for feeding and withdrawing hydrogen and argon, thermocouples,
and manometers. Iron crystals were produced in two steps -

512 to 800°C, maximum crystal length from 10 to 50 mm, residence time

Card 1/3

L 51975-65

ACCESSION NR: AT5011206

4

from 40 to 60 min, and axial growth rate from 2.78 to 20.8 m/sec. Mechanical properties of the whiskers were tested with a special micromachine which is described. For an iron whisker 4 microns in diameter, after elastic deformation of 1% rupture took place at a stress slightly above 200 kg/mm². The modulus of elasticity was about 20,000 kg/mm². Data are presented on the strength of iron and copper whiskers as a function of the diameter of the transverse section. At very small diameters (on the order of 1 micron) the strength of copper and iron whiskers obtained experimentally (450 and 1,000 kg/mm²)

Orig. art. has: 12 figures and 1 table.

Card 2/3

L 51975-65

ACCESSION NR: AT5011206

ASSOCIATION: Institut metallovedeniya i fiziki metallov, Dnepropetrovsk
(Institute of Physical Metallurgy and Physics of Metals)

SUBMITTED: 00 ENCL: 00 SUB CODE: MM

NR REF SOV: 001 OTHER: 001

mm
Card 3/3

L 33244-66 EWT(m)/T/EWP(w)/EWP(t)/ETI LJP(c) JD
ACC NR: AR601622 SOURCE CODE: UR/0058/65/000/011/ED44/ED44

AUTHOR: Osip'yan, Yu. A. ²⁷ ¹⁸ ³⁶
_B

TITLE: Production of copper and iron filamentary crystals and investigation of their mechanical properties ¹⁶

SOURCE: Ref. zh. Fizika, Abs. 11E339

REF SOURCE: Sb. tr. In-t metalloved. i fiz. metallov Tsent. n.-i. in-ta chernoy metallurgii, vyp. 36, 1964, 101-111

TOPIC TAGS: fiber crystal, iron, copper whisker, metal whisker, tensile test, crystal growing

ABSTRACT: A procedure for obtaining ²⁷ Cu and Fe whiskers is described. A special installation was developed, which makes it possible to combine the process of obtaining a dry halide and the process of growing the whisker by reducing the halide in a hydrogen stream. This makes it possible to obtain whiskers of good quality with not more than 10⁻⁴% of impurities. To investigate the mechanical properties of the whiskers, a microscopic tension machine was developed, with a solenoid serving as a loading device and with a capacitive pickup for the strain. Tension diagrams of whiskers of Fe and Cu are plotted. Maximum whisker strength was 1000 kg/mm² for Fe and 450 kg/mm² for Cu. A strong dependence of the strength of the whisker on the cross section diameter is observed. It is concluded that the features of the mechanical properties of whiskers obtained in this investigation (unusually high strength,

Cord 1/2

L 33244-66

ACC NR: AR6016224

6
statistical character of the dependence of the strength of the whisker on the dimensions) point to a strong influence of the structure of the whisker on the physical properties. E. Nadgornyy. [Translation of abstract]

SUB CODE: 20

Card 2/2 *dy*

APTEKAR', I.L.; OSIP'YAN, Yu.A.

Properties of solid solutions as a criteria for the structure^l changes
in them. Probl. metalloved. i fiz. met. no.8:355-372 '64. (MIRA 18:7)

KUSHNIR, I.P.; MIKHAYLOVA, L.K.; OSIP'YAN, Yu.A.

Effect of carbon on the dislocation structure of iron microcrystals.
Kristallografiia 10 no.1:87-91 Ja-F '65.

(MIRA 18:3)

1. Institut metallofiziki Tsentral'nogo nauchno-issledovatel'skogo
instituta fiziki tverdogo tela AN SSSR.

OSIFYAN, Yu. A.; KUSHNIR, I. P.

"A study of the influence of carbon on the mechanical properties and dislocation structure of iron whiskers."

report submitted for Intl Conf on Fracture, Sendai, Japan, 12-17 Sep 71.

Inst Solid State Physics & Cent Inst Ferrous Metallurgy, USSR

L 22039-66 ENT(m)/T/ENP(t) IJP(c) JD

ACC NR: AP6012941

SOURCE CODE: UR/0070/65/010/001/0087/0091

AUTHOR: Kushnir, I. P.; Mikhaylova, L. K.; Onip'yan, Yu. A. 45BORG: Institute of the Physics of Metals, TsNIICHM (Institut metallofiziki TsNIICHM);
Institute of Solid State Physics, AN SSSR (Institut fiziki tverdogo tela AN SSSR)TITLE: Effect of carbon on the dislocation structure of iron microcrystalsSOURCE: Kristallografiya, v. 10, no. 1, 1965, 87-91 21 16 21

TOPIC TAGS: plastic deformation, metal crystal, crystal lattice dislocation, carbon, iron, crystal growing, hardness, etched crystal

ABSTRACT: This paper makes use of selective etching to investigate the change in the dislocation rosettes in iron microcrystals resulting from carburization. The data may be explained in terms of the effect that carbon has on transverse slip of the dislocations in α -Fe. For a rosette to be formed, dislocations must be produced at the point where a local load is acting, after which they move and multiply: i.e., all the elementary processes occur that take place during plastic deformation. Thus, an analysis of the way the dislocations are arranged in a rosette gives at least a qualitative explanation of a number of features of the development of plastic deformation and strengthening of crystals.

In iron, electron microscope studies show that a large tendency of the dislocations toward transverse slip is a characteristic feature of plastic deformation. This is due to the fact that in the body-centered crystal lattice

Card 1/3

UDC: 548.4

L 22089-66

ACC NR: AP6012941

of α -Fe there is a large number of possible slip planes, while the dislocations themselves are narrow and easily move from one slip plane to the other. Observations show that intersection and interaction between the dislocations result in the formation of very nonuniform structures, which act as a barrier to the motion of other dislocations but may be active sources of dislocations.

Iron microcrystals were grown from the gaseous phase by reducing iron chloride with hydrogen at 730--750° C. Carbon was introduced into the microcrystals either by keeping the samples in a stream of H₂ containing heptane vapor for 40 minutes at 550--600° C or in Co at 800° C. The methods gave ~0.007 and 0.02% carbon respectively. Microhardness testing equipment was used for local loading of the microcrystals. The dislocation structures of the deformed microcrystals were observed by etching with a mixture of alcohol solutions of picric and nitric acid at room temperature.

After local loading, the microcrystals show definite dislocation rosettes, the rays of which always extend along definite crystallographic directions, which are the traces of the intersection of the slip planes at the surface of the crystal.

With carbon present it is possible to observe rosettes on both the cubic and the {110} faces of the microcrystals. On the {110} faces, the rays of the rosette are predominately along the $\langle 111 \rangle$ directions (slip planes {110}, {112}, and {123}). On the {001} faces, not always, but very often, the rays of the rosette extend along the $\langle 210 \rangle$ directions, corresponding to the slip planes {211} and {123}, making it necessary to eliminate the {110} plane from the number of possible slip planes in the crystals.

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L-22089-66

ACC NR: AP6012941

Impurities added to a material, by depositing on the dislocation lines, may fix the lines and prevent them from moving, thus strengthening the material. But by being adsorbed at dislocations, impurities may have a considerable effect on such microscopic characteristics of the dislocations as their width, tendency toward transverse slip, etc., and thus substantially change the distribution, the nature of the motion, and the interaction between dislocations during plastic deformation. In any particular case, depending on the conditions for plastic deformation and the state of the material, an impurity may exert either a strengthening or a weakening effect on the crystal. Orig. art. has: 5 figures. [JPRS]

SUB CODE: 20, 11 / SUBM DATE: 14Jul64 / ORIG REF: 008 / OTH REF: 006

Card 3/3 BLG

BABAYEV, C.G., kand. med. nauk; OSIPYANTS, Kh.G.

X-ray diagnosis of amebic liver abscesses. Vestn. zhurn. Ashkhabada.
121-122 '64. M. A. 1964.

1. Iz Maryyskogo oblastnogo otdela zdravookhraneniya (zav. -
khirurg - C.G. Babayev) i rentgenologicheskogo otdeleniya
(zav. - Kh.G. Osipyants, nauchnyy rukovoditel' - prof. I.F. Beregin)
1-y klinicheskoy bol'nitsy Ashkhabada.

FLESHKOVA, S.A.; BERENTSVEYG, Yu.M.; OSIPYANTS, L.P.; RATNER, M.M.;
STEFANOVICH, G.P. (Sverdlovsk).

Care of patients suffering from diseases with a protracted
course. Zdrav. Ros. Feder. 7 no.9:16-18 S '63. (MIRA 16:10)

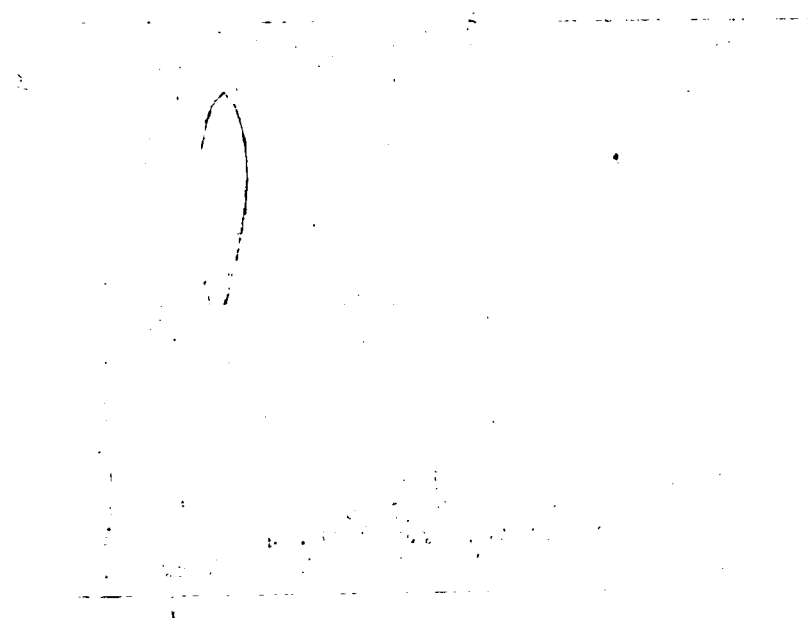
X

COPIES, N.A.

Case of thymoma accompanied by apoplexia gravia. Khirurgia 40
no. 22:123-124 D 162. (MIRA 13.3)

1. Onkologicheskoye otdeleniye (zav. I.B. Akayevskiy) Respu-
blikanskoy bol'shoy (glavnyy vrach N.E. Mironova) Chechenc-
Ingushskoy ASSR.

OSIROWSKI, W.



OSIS, N.; PROKOP'YEV, P.

Homogenous constant magnetic field of β -spectograph. Vestis Latv
ak no.9:85-92 '60. (KEAI 10:9)

(Magnetic fields) (Spectrum analysis)

S/798/61/000/000/012/012

AUTHORS: Balodis, M. K., Osis, N. L., Prokof' yev, P. T.

TITLE: A beta-spectrograph with a permanent magnet.

SOURCE: Radioaktivnyye izlucheniya i metody ikh issledovaniya.
Inst. fiz. AN LatvSSR. Riga, Izd-vo AN LatvSSR, 1961, 135-141.

TEXT: This paper describes the construction of a β -spectrometer with a permanent magnet for the measurement of conversion electrons, that is, for the study of the spectra of the internal-conversion electrons of γ -rays, which affords one of the most practicable methods for the accurate determination of the quantum characteristics of the excitation levels of atomic nuclei by means of a spectrometer equipped with a transverse magnetic field. The yoke of the magnet is rectangular (h 145 cm, w 60 cm, l 59 cm). The polar tips are 100x60 cm², each consisting of 2 plates 7.0 cm thick. The magnets are arranged between the polar tips and the yoke. The yoke and the tips are made of Cr-3 (St-3) steel, the magnets of AlNiCo-5. The air gap between the polar tips was chosen at a minimal 10 cm. To achieve geometric and "magnetic" parallelism, two St-2 steel plates 100x60x1.9 cm³ were introduced, one of which is pressed flush against the polar tip, while the other leaves a narrow air gap of 0.6 cm between itself and the tip to allow for shimming

Card 1/3

A beta-spectrograph with a permanent magnet.

S/798/61/000/000/012/012

in the adjustment of the magnetic field. A magnetic field strength of 80 to 300 oersted is needed for the investigation of 0.06- to 3.5-mev conversion electrons. To achieve that field strength, 50 magnets, each 6.51 cm long, were set up alongside each polar tip. Two magnetizing coils, with a total of 1,000 windings, were employed in the instrument. Upon completion of the assemblage and magnetization, the magnetic field strength (MFS) in the gap must be insensitive to impacts, vibration, external magnetic fields, and temperature variations. "Stabilization" was achieved by applying a weak pulsating field of opposite polarity and by placing the magnet into a +50°C thermostat. The permissible fluctuations of the MFS were limited by the required resolution of the instrument (10^{-3} to 10^{-4}) in the investigation of the conversion electrons in the K-shell and the L-subshells. It was therefore measured by the most accurate nuclear-resonance method, in which the measurement of the field was reduced to a measurement of the frequency of a HF generator. Accuracy and signal-to-noise-ratio requirements dictated the size of the sensor (filler volume 0.11 cm^3). A 200-oersted field was measured with a nuclear magnetometer (block scheme shown) with an accuracy of 0.02%. Uniformity of the magnetic field was achieved by magnetic-polarity reversal (nonuniformity reduced to $\pm 0.15\%$) and by shimming with 0.2-0.5-mm shim strips which raised the edges relative to the center (non-uniformity reduced to ± 0.05 - 0.08% over a 90×50 - cm^2 area). Parameters of the measuring chamber: The radius of the trajectories of the electrons had a maximum

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A beta-spectrograph with a permanent magnet.

B/798/61/000/000/012/012

value of 45 cm, a minimum of 11 cm. The maximum angular width of the beam in the plane of the magnetic field (MF) $\psi = 0.007$ rad, in a plane perpendicular thereto $\phi = 0.029$ rad. The source holder consisted of an activated wire or band held by a brass support and placed in a readily insertable and removable cup with a slotted diaphragm (slit 2 mm wide) to limit the electron-capture angle. The source itself was an Al or Au foil, 0.5×0.03 mm² and 0.5×0.05 mm², carrying the radioactive preparation. The length of the source was 20 mm, the distance from the source to the diaphragm - 34 mm. Details of the photographic plate holder are described. Verification of the accuracy of the instrument was obtained by a record of the conversion-electron spectrum of Ca^{137} , wherein the intensity of the lines was determined from the blackening of the P-50 (R-50) photoemulsion, and also by counting the electron tracks on the emulsion. The ratios found, K:L:M = $(5.0 \pm 0.3):1.0:(0.24 \pm 0.06)$, agreed well with the data of I.A. Antonova (Akad.n.SSSR, Izv., ser. fiz., v.20, no.8, 1956, 896; ZhTF, v.30, no.3, 1956, 571). There are 5 figures and 5 references (3 Russian-language Soviet papers, 2 English-language papers: Slătis, K., Arkiv för Fysik, v.6, no.5, 1953, 415; Mladjenović, M.S., Institute of Nuclear Sciences "Boris Kidrich," Bull., v.6, 1956, 51).

ASSOCIATION: None given.

Card 3/3

STRAZDINA, Pauline, kand. ekon. nauk; AVEKSE, R., otv. za vypusk;
OSIS, R. [translator]; SVEIDE, V. [translator]; ABOLS, J.
[translator]; VOLFS, L., tekhn. red.

[Development of public dining facilities in Soviet Latvia]
Sabiedriskas edinasanas attistiba Padomju Latvija. Riga,
"Padomju Latvijas kooperators" 1960. 55 p. (MIRA 16:4)
(Latvia--Restaurants, lunchrooms, etc.)

(SIS, Ya. Ya.: Master Thesis (1960) -- "Investigation of systems of electric drive with fixed positive feedback". Leningrad, 1960. 114 pp. (Min. High. Sch. of the USSR, Leningrad Electrical Engineering Inst. Im V. I. Il'yunov (Leningrad)), 1960. (KL, No. 1, 1960, 1960)

OSIS, Ya. Ya.

Cand Tech Sci - (diss) "Improvement of the indices of static and dynamic conditions of the performance of automated electric drive." Kaunas, 1961. 16 pp; with diagrams; (State Committee of Higher and Secondary Specialist Education of the Council of Ministers Lithuanian SSR, Kaunas Polytechnic Inst); 180 copies; price not given; (KL, 10-61 sup, 217)

OSIS, Yan Yanovich [Osis, Janis], starshiy prepodavatel'

Use of transistor e.m.f. Hall transducers in an automatically controlled electric drive system. Izv.vys.ucheb.zav.; elektromekh. 5 no.9:1009-1013 '62. (MIRA 16:1)

1. Kafedra elektrifikatsii promyshlennosti i transporta
Rizhskogo politekhnicheskogo instituta.
(Electric driving) (Transducers)

S/196/61/000/009/043/052
E194/E155

AUTHOR: Osis, Ya.Ya.

TITLE: Allowing for the e.m.f. of remanent magnetism in the equations of an electric drive system and means of reducing it

PERIODICAL: Referativnyy zhurnal, Elektrotehnika i energetika, no.9, 1961, 8, abstract 9K 72. (Zinātn. fakult. Rīgas politehn. inst. Uch. zap. Rīzhsk politehn. in 3, 1960 97-106)

TEXT: In analysing the statistical characteristics of an automatic d.c. electrical drive system, the e.m.f. of remanent magnetism of the machine is allowed for by linearising the hysteresis loop or by representing it as a number of straight line sections. The e.m.f. of remanent magnetism of machines is about 5 - 10% of the rated voltage and accordingly the problem of cutting out remanent magnetism is considered. Methods of reducing the remanent magnetism e.m.f. of d.c. machines are described and their characteristics briefly discussed. The method of superimposing an alternating magnetic field on the direct field



Card 1/2

Allowing for the e.m.f. of remanent .. S/196/61/000/009/043/052
E194/E155

is considered in detail. Practical recommendations are made
about the application of this method to an amplidyne and to a
machine type ПН (PN). Results of experimental investigations
are given.
10 figures 5 literature references.

[Abstractor's note: Complete translation.]

Card 2/2

SITCHIKHIN, V.; OSIS, Z.; MARKHEL, I., red.; GRANT, V. [Grants, V.],
tekhn. red.

[The seven-year plan of Latvia in operation] Semiletka Lat-
vii v deistvii. Riga, Latviiskoe gos. izd-vo, 1963. 73 p.
(MIRA 16:8)

(Latvia--Economic policy)

OSITINSKAYA, T.D. [Osytyn's'ka, T.D.]; PERVAKOV, V.A. [Pervakov, V.O.];
KHOTKEVICH, V.G. [Khotkevych, V.H.]

Defects of the crystal lattice due to the quenching of silver
heated in air. Ukr. fiz. zhur. 8 no.8:921-924 Ag '63.
(MIRA 16:11)

1. Khar'kovskiy gosudarstvennyy universitet im. Gor'kogo.

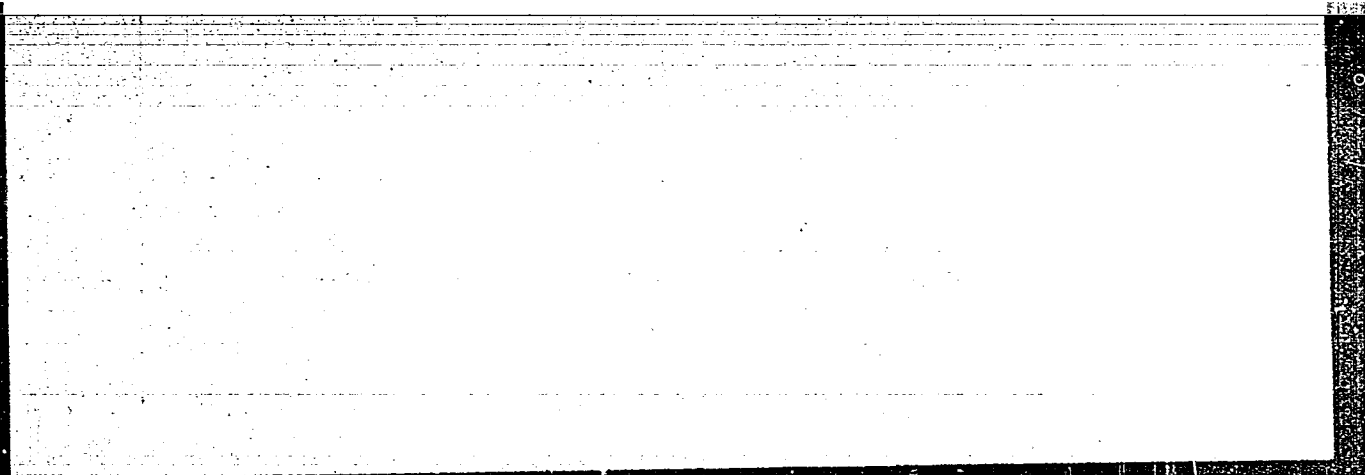
COITINSKIY, B.L., 1971.

Elements of the theory of the construction and method
of designing them. Trans. of the USSR Academy of Sciences.

(MIRA 11)

VAKSHUL, N.I., MIESON, F.S., WIFE WIFE, S.H., YADNY, S.H.

CHILL... ..
0 160.



OSITYANSKAYA, L. L.

✓ Combination scattering of light and its dependence on frequency. P. P. Shorygin and L. Z. Oshvanskaya. (L. Ya. Karpov Sci. Research Phys.-Chem. Inst., Moscow). *Doklady Akad. Nauk S.S.S.R.* 98, 51-4 (1954).—S. and O. have tested the various proposed relations between the intensity of Raman lines and the frequency of the exciting radiation, such as $I \sim \nu^2$, and $I \sim (\nu - \omega_0)^2$, where ν is the exciting frequency and ω_0 is the vibrational frequency of the group in question. The Hg lines (in cm^{-1}) 18,507 (z), 22,938(z), 24,707(k), and 27,338(q), were used as the excitation frequencies, and diverse org. compounds such as nitrobenzene, diisobutylene, acetone, and benzonitrile were studied in cyclohexane. The intensities were measured with respect to the intensity of the 1442- cm^{-1} cyclohexane line, which served as an internal standard. Intensity coeffs. were computed from $K_{121} = I/(\nu - \omega_0)^2$. These coeffs. vary considerably, as evidenced by the following representative results: nitrobenzene ($\omega_0 = 1382 \text{ cm}^{-1}$), $K_{121} = 0.59$ (z), 1.0(e), 1.6(k); diisobutylene ($\omega_0 = 1650 \text{ cm}^{-1}$), $K_{121} = 0.79$ (z), 1.0(e), 1.6(q); acetone ($\omega_0 = 1720 \text{ cm}^{-1}$), $K_{121} = 0.72$ (z), 1.0(e), 1.8(q); benzonitrile ($\omega_0 = 2230 \text{ cm}^{-1}$), $K_{121} = 0.60$ (z), 1.0(e), 1.5(k), 2.6(q). Conjugated and unconjugated multiple bonds give rise to the greatest variance in K_{121} . Other relations are briefly discussed. R. D. K.

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OSITYANSKAYA, L.Z.; SIMONOVA, I.I.

Quantitative spectrum analysis of organophosphorus insecticides
containing thionic and thiolic bonds. [Trudy] NIUIF no.171:
20-26 '61. (MIRA 15:7)

(Spectrum analysis) (Insecticides)
(Phosphorus organic compounds)

OSITYANSKAYA, L.Z.

Development of a spectrometric method for analyzing the phosphorus
organic and chlorine organic insecticides and fungicides. [Trudy]
NIUIF no.164:31 '59. (MIRA 15:5)
(Insecticides) (Fungicides)

S/204/62/002/002/004/007
I060/I242

AUTHORS: Delone, I.O., Osityanskaya, L.Z., and Petrov, Al.A.

TITLE: Redistribution of alkyl radicals in some benzene and naphthalene homologs

PERIODICAL: Neft-khimiya, v.2, no.2, 1962, 189-192

TEXT: This paper reports on the redistribution of radicals of pseudocumene, mesitylene, durene, 1,4-dimethyl-2-octylbenzene, and 2,6-dimethylnaphthalene. Experiments were conducted in the liquid phase in an autoclave at 250-300°C. In the presence of aluminosilicates the reaction $2A \rightleftharpoons B+C$ takes place at 300° with the formation of the nearest lower, and nearest higher homologs. For hydrocarbons of the type C_9H_{12} , the equilibrium compositions obtained were close to those computed. When radicals of different masses (1,4-dimethyloctyl-

Card 1/2

MOROZOVA, O.Ye.; ZEMSKOVA, Z.K.; OSITYANSKAYA, L.Z.; KISLINSKIY, A.N.;
PETROV, A.I.A.

Part 2: Catalytic dehydroisomerization of alkylcyclopentanes.
Neftekhimiia 2 no.5:676-680 S-0 '62. (MIRA 16:1)

1. Institut geologii i razrabotki goryuchikh iskopayemykh.
(Cyclopentane) (Dehydrogenation)

DELONE, I.O.; OSITYANSKAYA, L.Z.; PETROV, A.I.A.

Reactions of radical redistribution in some alkyl-substituted homologs
of benzene and naphthalene. Neftekhimii 2 no.2:189-192 Mar-Apr '68.
(MIRA 15:6)

1. Institut geologii i razrabotki goryuchikh iskopayemykh AN SSSR.
(Benzene) (Naphthalene) (Radicals (Chemistry))

SHORYGIN, P.P.; OSITYANSKAYA, L.Z.

Frequency dependence of Raman spectra. Dokl. AN SSSR 98 no.1:
51-54 S '54. (MLSA 7:12)

1. Nauchno-issledovatel'skiy fiziko-khimicheskiy institut im.
L.Ya.Karpova. Predstavleno akademikom G.S. Landsbergom.
(Raman effect)

OSTPANSKIYA, L. . .

"Line Intensity in Raman Spectra of Compounds Having Short Bonds." *Dokl. Akad. Nauk SSSR, Ser. Chem Sci, Order of Labor Red Banner Science Physicochemical Inst, Moscow, 1955*.
(IL, No 12, Mar 55)

So: Sum. No 670, 29 Sept 55 - Survey of Scientific and Technical Dissertations
Defended at USSR Higher Educational Institutions (15)