"APPROVED FOR RELEASE: 04/03/2001 CIA-RDP86-00513R001030720019-8

ACCESSION NR: AT4011452

The author concludes that the location of the centers of torsion and deflection depends on the magnitude of the load for the general case of non-linear dependence and does not depend on it where the stress-deformation relationship is in terms of power factors. He demonstrates the calculation of a concrete case for a beam (see Fig. 3 in the Enclosure) with a physical non-linearity factor 4' and concludes that the locations of the centers of torsion and deflection will vary only little when loads increase in such a case. Orig. art. has: 7 graphs and 63 formulas.

ASSOCIATION: Inzhenerno-stroitel'ny*y institut, Moscow (Institute of Civil Engineering)

SUBMITTED: 00 DATE ACQ: 23Jan64 ENCL: 02

SUB CODE: MA, PH NO REF SOV: 002 OTHER: 001

Card 5/5

APPROVED FOR RELEASE: 04/03/2001 CIA-RDP86-00513R001030720019-8"

"APPROVED FOR RELEASE: 04/03/2001 CIA-RDP86-00513R001030720019-8

L 40799-65 EWT(m)/EWP(w)/EWA(d)/EPR/T/EWP(t)/EWP(z)/EWP(b) Ps-4 IJP(c)
MJW/JD

ACCESSION NR: AP4048659 S/0133/64/000/011/1033/1037

42
39
B

AUTHOR: Gol'dshteyn, Ya. Ye. (Candidate of technical sciences); Vesely, A. (Engineer); Lukash, V. (Engineer); Koshan, I. (Engineer); Stoyanova-Taseva, S. V. (Engineer)

TITLE: Effect of metallurgical factors on the mechanical properties and fatigue strength of 18KhNVA steel

SOURCE: Stal', no. 11, 1964, 1033-1037

TOPIC TAGS: fatigue strength, deoxidation, microalloying, electroslag melting, ductility/ 18KhNVA steel

ABSTRACT: Deoxidizing conditions and microalloying significantly affected the fatigue strength of 18KhNVA steel. Maximum fatigue strength was attained when an increased amount of aluminum (0.8-1 kg/T) was used in the final deoxidation, without addition of calcium-silicon to the ladle; the final Al content should be 0.02-0.05%. Such deoxidation pulverized the nonmetallic inclusions and the secondary grain and reduced its growth on heating. The plastic limit $\sigma_{0.005}$ and

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L 40799-65
ACCESSION NR: AP4048659

3

the fatigue limit σ_{-1} of the 18KhNVA steel also depended on the low temperature tempering conditions after hardening. Increasing the temper temperature from 180 to 250C increased the value of $\sigma_{0.005}$ by 5-20 kg/mm^2, and of σ_{-1} by 3-8 kg/mm^2, depending on the aging and purity of the steel. Homogenization at 1120-1200C had no effect on these properties. Electroslag remelting increased the plastic and ductile properties of the steel and lowered the threshold of cold brittleness by 20-40C and the coefficient of anisotorpy. Dueto the higher chemical and structural homogeneity and the low contamination with nonmetallic inclusions in the electroslag melted steel, fatigue strengths of the order of 60-74 kg/mm^2 can be attained by hardening in oil and tempering at 225-250C. "D. G. Zhukov participated in conducting.....the melting tests." Orig. art. has: 4 figures and 7 tables.

ASSOCIATION: none

SUBMITTED: 00 ENCL: 00 SUB CODE: MM

NR REF SOV: 002 OTHER: 006

Card 2/2

APPROVED FOR RELEASE: 04/03/2001 CIA-RDP86-00513R001030720019-8"

"APPROVED FOR RELEASE: 04/03/2001 CIA-RDP86-00513R001030720019-8

LUKASH, V. M. PA 22/49T14

USSR/Electricity Oct 48
Capacitors
Testing and Standardization

"A Device for Checking Condensers," V. M. Lukash, Khar'kov State Inst of Measures and Measuring Instr, 1 p

"Elektrichestvo" No 10

Describes apparatus with schematic diagram. Condensers can be checked from one to 1,400$\mu\mu$F. Sensitivity is 0.1$\mu\mu$F.

[redacted] 22/49T14

APPROVED FOR RELEASE: 04/03/2001 CIA-RDP86-00513R001030720019-8"

"APPROVED FOR RELEASE: 04/03/2001 CIA-RDP86-00513R001030720019-8

VLASHCHENKO, L.F.; NOVIKOV, V.M.; ZINOV'YEVA, M.M.; SIDOROVA, A.P.; KARDASHOVA, A.A.; KLEYMENOV, I.Ya.; KRASNOPOL'SKIY, N.M. [deceased]; LUKASH, Ye.G.; SAMOFALOV, P.Ye.; YASHINA, Ye.I.; KULIKOV, P.I., dots., retsenzent; MAKAROVA, T.I., kand. tekhn. nauk, retsenzent; MERENBURG, A.N., spets. red.; KOSSOVA, O.N., red.; SOKOLOVA, I.A., tekhn.red.

[Handbook for the technologist of the fishing industry] Spravochnik tekhnologa rybnoi promyshlennosti. Moskva, Pishchepromizdat. Vol.1. 1963. 589 p. (MIRA 17:3)

APPROVED FOR RELEASE: 04/03/2001 CIA-RDP86-00513R001030720019-8"

"APPROVED FOR RELEASE: 04/03/2001 CIA-RDP86-00513R001030720019-8

SAFONOVA, A.A.; LUKASH, Ye.V.

Rapid method for determining nitrogen oxides in concentrated sulfuric acid of wet catalysis. Koks i khim. no.8:51 '63.

1. Rutchenkovskiy koksokhimicheskiy zavod.
(Nitrogen oxides) (Sulfuric acid)
(Catalysis)

APPROVED FOR RELEASE: 04/03/2001 CIA-RDP86-00513R001030720019-8"

"APPROVED FOR RELEASE: 04/03/2001 CIA-RDP86-00513R001030720019-8

SHATS, Ya.Yu., kand. tekhn. nauk; LUKANCHUK, I.A., inzh.

Using electronic digital computers in the automation of a machine shop. Mekh. i avtoprokov. 18 no.8:41-43 Ag '64. (MIRA 17:10)

APPROVED FOR RELEASE: 04/03/2001 CIA-RDP86-00513R001030720019-8"

"APPROVED FOR RELEASE: 04/03/2001 CIA-RDP86-00513R001030720019-8

L 22129-65 EWT(1)/EWA(h) Peb BSD/ASD(a)-5/SSD/AFWL/AFMD(p)/ESD(c)/ESD(dp)/ESD(gs)

ACCESSION NR: AP5001749 S/0302/64/000/004/0068/0070

AUTHOR: Kotlyarov, V. L.; Lukashchuk, L. A.; Shvetskiy, B. I.

TITLE: High-speed register for digital electronic measuring instruments

SOURCE: Avtomatika i priborostroyeniye, no. 4, 1964, 68-70

TOPIC TAGS: digital instrument, register, digital recording system

ABSTRACT: The development of a high-speed register for handling 20 readings of digital instruments per second is reported. Based on a type BPM-20 serial printer, the register comprises digit and coding drums, a phototransistor, thyratrons, triggers, etc. Two block diagrams give an idea of the printer's remodeling. For a type V7-8 voltmeter, the number of registered readings may be brought to 40 per second, as the reading takes only 7 digits in the 16-digit mechanism. Orig. art. has: 2 figures and 1 formula.

ASSOCIATION: L'vovskiy politekhnicheskiy institut (L'vov Polytechnic Institute)

SUBMITTED: 00 ENCL: 00

SUB CODE: DP NO REF SOV: 000 OTHER: 000

Card 1/1

APPROVED FOR RELEASE: 04/03/2001 CIA-RDP86-00513R001030720019-8"

"APPROVED FOR RELEASE: 04/03/2001 CIA-RDP86-00513R001030720019-8

LUKASHCHUK, V.A., aspirant

Treatment of protracted pregnancy. Akush.i gin. no.5:59-63 '61.
(MIRA 1[illegible]:1)

1. Iz kafedry akusherstva i ginekologii No.1 (zav. - prof. V.N. Savitskiy) Kiyevskogo instituta usovershenstvovaniya vrachey (dir. - dotsent M.N. Umovist).
(PREGNANCY, PROTRACTED)

APPROVED FOR RELEASE: 04/03/2001 CIA-RDP86-00513R001030720019-8"

"APPROVED FOR RELEASE: 04/03/2001 CIA-RDP86-00513R001030720019-8

LUKASHCHUK, V.O., aspirant

Case of 20-day retention stay of the fetus in the abdominal cavity following complete uterine rupture. Ped. akush. i gin. 22 no. 1:61-62 '60. (MIRA 13:8)

1. Kafedra aki sherstva i ginekologii No. 2 (zav. - prof. V.M. Savutskiy [V.M. Savyts'kyi] Kiyevskogo instituta usovershenstvvaniya vrachey (dir. - dots. V.D. Bratus').
(PREGNANCY, COMPLICATIONS OF)

APPROVED FOR RELEASE: 04/03/2001 CIA-RDP86-00513R001030720019-8"

"APPROVED FOR RELEASE: 04/03/2001 CIA-RDP86-00513R001030720019-8

LUKASHCHUK, Yu. K.

Cand Med Sci - (diss) "Development of muscle tonus and capacity for voluntary contraction and relaxation of muscles during the school years and the effect therein of persons engaged in various kinds of sport." Leningrad, 1961. 17 pp; (Ministry of Public Health RSFSR, Leningrad Sanitary-Hygienic Med Inst, First Leningrad Med Inst imeni Academician I. P. Pavlov, Chair of Physical Restorative and Sport Medicine); 300 copies;price not given; (KL, 6-61 sup, 238)

APPROVED FOR RELEASE: 04/03/2001 CIA-RDP86-00513R001030720019-8"

"APPROVED FOR RELEASE: 04/03/2001 CIA-RDP86-00513R001030720019-8

LUKASHENKO, A.A.

Utilization of autoosteoblastic tissue in the surgical treatment of bone cavities in children. Nov.khir.arkh. no.4:40-42 '62. (MIRA 15:5)

1. Kafedra detskoy khirurgii i ortopedii (zav. - prof. M.L. Dmitriyev) Odesskogo meditsinskogo instituta i khirurgicheskoye otdeleniye Odesskoy gorodskoy detskoy klinicheskoy bol'nitsy.
(BONE GRAFTING)

APPROVED FOR RELEASE: 04/03/2001 CIA-RDP86-00513R001030720019-8"

"APPROVED FOR RELEASE: 04/03/2001 CIA-RDP86-00513R001030720019-8

25(2) SOV/119-59-12-16/18

AUTHORS: Gorokhov, V. M., Engineer, Grishakin, V. I., Engineer, Lukashenko, A. I., Engineer

TITLE: The Direct Pneumatic Piston Drive PSP-1

PERIODICAL: Priborostroyeniye, 1959, Nr 12, p 27 (USSR)

ABSTRACT: The test and design office of the factory "Teploavtomat" developed the pneumatic drive of which a sectional view is presented in figure 1. With unchanged command air pressure, the strain produced by this pressure in the diaphragm is compensated by a spring. Valve 11 remains in mid-position. If the command air pressure changes, the valve is shifted from the mid-position, and the working pressure displaces the piston. A general view is shown in figure 2. It is further said that a suggestion of the Institut avtomatiki i telemekhaniki (Institute of Automation and Telemechanics) was realized in designing this pneumatic drive. There are 2 figures.

Card 1/1

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"APPROVED FOR RELEASE: 04/03/2001 CIA-RDP86-00513R001030720019-8

L 52094-65 EWT(d)/EWT(1)/FA/T-2/EWP(1) Pg-4/Pk-4/Pl-4/Po-4/Pq-4
IJP(c) BC

ACCESSION NR: AP5015354 UR/0286/65/000/009/0099/0099
621-52

49
48
B

AUTHOR: Gorokhov, V. M.; Lukashenko, A. I.

TITLE: An electropneumatic converter. Class 42, No. 170777

SOURCE: Byulleten' izobreteniy i tovarnykh znakov, no. 9, 1965, 99

TOPIC TAGS: transducer, automatic control, pneumatic control, pneumatic device

ABSTRACT: This Author's Certificate introduces an electropneumatic converter. The device contains an electromechanical transducer which changes electrical current to a proportional force, a pneumatic converter which changes the force to a proportional pressure and a power amplifier. The device is designed for producing an integral relationship between the output signal and input signal, clamping the output signal when the converter is disconnected from the electrical regulator and keeping the output signal within selected limits. A pneumatic integrator is connected to the output of the force-to-pressure converter. A cutoff valve is connected in the line which connects the choke and capacitance of the integrator. A spring-type actuating mechanism is connected between the output of the power amplifier and two valves

Card 1/2

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L 52094-65

ACCESSION NR: AP5015354

which limit the output signal.

ASSOCIATION: Opytno-konstruktorskoye byuro "Teploavtomat" ("Teploavtomat" Experimental Design Office)

SUBMITTED: 21Dec63 ENCL: 00 SUB CODE: DP, EC

NO REF SOV: 000 OTHER: 000

BJG

Card 2/2

APPROVED FOR RELEASE: 04/03/2001 CIA-RDP86-00513R001030720019-8"

"APPROVED FOR RELEASE: 04/03/2001 CIA-RDP86-00513R001030720019-8

L 24787-66 EWT(1)/EWP(m)/EPF(n)-2/EWA(d)/ETC(m)-6 JKT/WW

ACC NR: AP6014221 (N) SOURCE CODE: UR/0198/66/002/004/0142/0143

AUTHOR: Pancienkov, A. N.; Lukashenko, A. N.; Shaybo, N. V.

ORG: None

96
85
B

TITLE: Scientific conference on the hydrodynamics of a submerged foil

SOURCE: Prikladnaya mekhanika, v. 2, no. 4, 1966, 142-143

TOPIC TAGS: hydrodynamics, fluid dynamics, flow analysis, cavitation, cavity flow, boundary layer flow

ABSTRACT: A scientific conference on the aerohydrodynamics of a foil near a free surface and a solid surface was held at the Kiev Institute of Hydromechanics of the USSR Academy of Sciences from 28—30 October 1965, with 106 delegates from 45 Soviet institutions participating. The following scientific institutions were represented: Central Scientific-Research Institute im. Academician A. N. Krylov; Central Institute of Aerohydrodynamics; Institute of Hydrodynamics, Siberian Branch, USSR Academy of Sciences; Leningrad Shipbuilding Institute; Leningrad Institute of Water Transportation Engineers; Central Scientific Research Institute of the Maritime Fleet; Novosibirsk and Gor'kiy Institutes of Water Transportation Engineers; Kazan' and Kiyev State Universities; Institute of Mechanics, Moscow State University; Kiyev Institute of the Civil Air Fleet; and Khar'kov Aviation Institute. Forty-one papers were presented which dealt with actual aerohydrodynamic problems of high-speed objects, among

Card 1/2

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"APPROVED FOR RELEASE: 04/03/2001 CIA-RDP86-00513R001030720019-8

L 24787-66

ACC NR: AP6014221 11

which were the following: A. N. Panchenkov discussed problems of the unsteady motion of a foil at a variable distance from a surface, and the hydrodynamic boundary-value problem of a cavitating submerged foil. K. K. Fedyayevskiy presented an approximate nonlinear theory of a rectangular low-aspect-ratio foil moving near a fluid surface at high Froude numbers. V. I. Rudomanov reported on takeoff (lift) and landing (settling) dynamics of craft utilizing surface effect. V. M. Ivchenko reported on unsteady hydrodynamic problems of supercavitating bodies and the use of electronic digital computers in propeller design. G. A. Ryazanov's paper dealt with electric flow simulation around foils of infinite span, and magnetic flow simulation around foils of finite span. V. V. Kopeyetskiy reported on the use of a magnetic simulation method for estimating the effect of blade thickness in the design of a propeller with a given blade pressure differential. V. A. Kas'yanov and G. N. Boyarskiy reported on investigations made on electrohydrodynamic flows and on boundary-layer control along a foil profile. Ye. D. Udartsev reviewed methods for the laminarization of the boundary layer of electrohydrodynamic flows. Yu. K. Biktimirov reported on specific features in plotting the potential of velocities caused by a source moving in a fluid. R. B. Nudel'man discussed bodies moving in a multilayer fluid, and V. T. Tokarev reported on a quantum-hydrodynamical analogy and its application in hydrodynamics problems. In a final statement, it is mentioned that the conference emphasized the importance and urgency of problems in aerohydrodynamics of a foil near a surface. The lag of Soviet science in the study of supercavitating foils was also mentioned, and a more intense study of three-dimensional cavitation problems was recommended. It was agreed that the proceedings of this conference be published. [GE]

SUB CODE: 13, 01, 20/ SUBM DATE: none/ ATD Press: 4250

Card 2/2

APPROVED FOR RELEASE: 04/03/2001 CIA-RDP86-00513R001030720019-8"

"APPROVED FOR RELEASE: 04/03/2001 CIA-RDP86-00513R001030720019-8

TYUTYUNNIKOV, Yu.B. TSEPURIT, V.Ya.; LUKASHENKO, B.Ya.; SOLDATENKO, I.S.

Experimental and industrial preparation and coking of coals of the Lvov-Volyn Basin. Koks i khim. no.11:5-8 '61. (MIRA 15:1)

1. L'vovskiy sovnarkhoz (for Tyutyunnikov, TSepurit, Lukashenko).
2. Khar'kovskiy koksokhimicheskiy zavod (for Soldatenko).
(Lvon-Volyn Basin--Coke)

APPROVED FOR RELEASE: 04/03/2001 CIA-RDP86-00513R001030720019-8"

"APPROVED FOR RELEASE: 04/03/2001 CIA-RDP86-00513R001030720019-8

SOV/137-58-7-14646

Translation from: Referativnyy zhurnal, Metallurgiya, 1958, Nr 7, p 100 (USSR)

AUTHORS: Lukashenko, E.Ye., Borodin, V.I.

TITLE: Intensification of the Aluminum Alloy Vacuum Dezincification Process (Intensifikatsiya protsessa vakuumnogo obestsinkovaniya alyuminiyevykh splavov)

PERIODICAL: Byul. Tsentr. in-t inform. M-va tsvetn. metallurgii SSSR, 1957, Nr 2, pp 14-17

ABSTRACT: Laboratory investigations of the process are conducted showing that the evaporation of Zn from Al alloy is a surface process and depends upon equalization of the composition of the alloy. In connection therewith, changes have been made in the design of the closets of the vacuum distillation furnaces at the Podol'sk secondary metals plant in order to provide better circulation of the alloy; the number of channels has been changed, their cross section reduced, bath depth has been reduced, and thermal insulation increased. Permanent condensers were replaced by interchangeable ones, the condenser-throat cross sections were increased, and residual pressure was reduced. The results obtained with furnaces of modified design are adduced.

Card 1/1 L.P.

1. Aluminum alloys--Production 2. Zinc--Evaporation 3. Vacuum furnaces--Design 4. Vacuum furnaces--Equipment

APPROVED FOR RELEASE: 04/03/2001 CIA-RDP86-00513R001030720019-8"

"APPROVED FOR RELEASE: 04/03/2001 CIA-RDP86-00513R001030720019-8

LUKASHENKO, E.YE.

136-3-4/25

AUTHOR: Lukashenko, E. Ye.

TITLE: Vacuum Dezincing of Lead. (O vakuumnom obestsinkovanii svintsa).

PERIODICAL: Tsvetnyye Metally, 1957, No.3, pp.12-22 (USSR)

ABSTRACT: This article is in response to one by Fisher and Shesterin which was published for discussion (Ref.1). It is based on a survey of the literature on the removal of zinc from lead under vacuum and on original experiments made by the author under the direction of V. A. Pazukhin (at the Minsvetmetzoloto organization). The general relations prevailing in vacuum distillation are first considered, a diagrammatic representation of zinc distribution in an Al-Zn alloy (layer thickness against weight % of Zn) being given. The roles of the major factors in dezincing are then discussed on the basis of previously reported and new experimental results. The factors include alloy composition, distillation temperature, residual pressure, layer thickness, alloy mixing, condensing conditions and condensate composition. Two plots of zinc-content against layer thickness are shown. Tabulation of data are presented showing the influence of temperature on the dezincing of lead at a residual pressure of 0.1 mm Hg, the influence of residual pressure (0.001 to 5.0 mm Hg) on

1/2

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"APPROVED FOR RELEASE: 04/03/2001 CIA-RDP86-00513R001030720019-8

Vacuum Dezincing of Lead. 136-3-4/25

dezincing of lead at 600 to 650 C, the composition of condensates and the supersaturation of the mixed vapour with lead at a residual pressure of 0.1 mm Hg. The last is based on the authors calculations and a table of Zn partial pressures, calculated according to Raoult's law, is also given. The general conclusion is that the reduction of the zinc content of lead from 0.5 to 6.0% to 0.01% is practicable at 600 to 700 C and residual pressures up to 0.01 mm Hg; for more thorough dezincing fractionation is necessary. The author also considers dezincing under industrial conditions and shows a table of plant characteristics for the Chimkent and an American installation; a table of zinc partial vapour pressures over Pb-Zn alloys. Diagrams of some continuous-action installations are given. In conclusion the author summarises his objections to some of Fisher and Shesterin's points and gives a table of dezincing obtained in laboratory installations.

2/2 There are 4 figures, 8 tables and 17 references, 8 of which are Slavic.

AVAILABLE: Library of Congress

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"APPROVED FOR RELEASE: 04/03/2001 CIA-RDP86-00513R001030720019-8

SOV/137-58-8-16743

Translation from: Referativnyy zhurnal, Metallurgiya, 1958, Nr 8, p 74 (USSR)

AUTHORS: Lukashenko, E.Ye., Pazukhin, V.A.

TITLE: An Investigation of Vacuum Distillation of Liquid Alloys of Aluminum with Zinc and Magnesium (Issledovaniye razgonki v vakuume zhidkikh splavov alyuminiya s tsinkom i magniyem)

PERIODICAL: Sb. nauchn. tr. Mosk. in-t tsvetn. met. i zolota, 1957, Nr 27, pp 215-238

ABSTRACT: An investigation is made of the influence upon vacuum distillation of alloys of Al with Mg and Zn of a number of factors, namely, alloy constitution, process temperature and duration, residual pressure, conditions of condensation, and the presence of a third component in the alloy. Gradients of concentration of Zn and Mg in a thickness of alloy are established, and the effect of the depth of the layer of alloy upon distillation is checked. At 700-800-900°C, the Knudsen method is used to determine the Zn and Mg vapor pressure over alloys thereof with Al; the activities and coefficients of activity are calculated. A modification of vacuum-distillation furnaces is suggested for the removal

Card 1/2

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"APPROVED FOR RELEASE: 04/03/2001 CIA-RDP86-00513R001030720019-8

SOV/137-58-8-16743

An Investigation of Vacuum Distillation of Liquid Alloys (cont.)

of zinc from secondary Al alloys, affording better stirring of the melt.

L.P.

1. Aluminum magnesium-zinc-alloys--Vaporization
2. Alloys--Vapor pressure 3. Vacuum apparatus--Performance

Card 2/2

APPROVED FOR RELEASE: 04/03/2001 CIA-RDP86-00513R001030720019-8"

"APPROVED FOR RELEASE: 04/03/2001 CIA-RDP86-00513R001030720019-8

137-58-6-12080 D

Translation from: Referativnyy zhurnal, Metallurgiya, 1958, Nr 6, p 128 (USSR)

AUTHOR: Lukashenko, E.Ye.

TITLE: Investigation of the Fundamental Laws Governing the Vacuum Distillation of Aluminum Alloys Containing Zinc and Magnesium (Issledovaniye osnovnykh zakonomernostey vakuumnoy distillyatsii splavov alyuminiya s tsinkom i magniyem)

ABSTRACT: Bibliographic entry on the author's dissertation for the degree of Candidate of Technical Sciences, presented to the Mosk. in-t tsvetn. met. i zolota (Moscow Institute of Nonferrous Metals and Gold), Moscow, 1958

ASSOCIATION: Mosk. in-t tsvetn. met. i zolota (Moscow Institute of Nonferrous Metals and Gold), Moscow

1. Aluminum alloys--Processing 2. Vacuum furnaces--Applications
3. Zinc--Properties 4. Magnesium--Properties

Card 1/1

APPROVED FOR RELEASE: 04/03/2001 CIA-RDP86-00513R001030720019-8"

"APPROVED FOR RELEASE: 04/03/2001 CIA-RDP86-00513R001030720019-8

S/076/60/034/010/010/022
B015/B064

AUTHORS: Pazukhin, V. A., and Lukashenko, E. Ye.

TITLE: The Applicability of the Equation of Davey to Calculate the Rate of the Vacuum Distillation of Alloys 18

PERIODICAL: Zhurnal fizicheskoy khimii, 1960, Vol. 34, No. 10, pp. 2254-2257

TEXT: The authors discuss the applicability of the equation suggested by T. R. S. Davey (J. Metals, 1, 991, 1953) to calculate the rate of vacuum distillation of alloys. The equation combines the time of distillation with the initial and final content of the volatile component, the residual pressure, the distillation temperature, and the condensation temperature, and the evaporation surface. The authors show that the applicability of the equation for a vacuum distillation of real liquid alloys in industrial furnaces is limited by at least nine conditions. The volatility of one component only is considered, the change of temperature and concentration in the mass of the melt is not taken into account, only

Card 1/2

APPROVED FOR RELEASE: 04/03/2001 CIA-RDP86-00513R001030720019-8"

"APPROVED FOR RELEASE: 04/03/2001 CIA-RDP86-00513R001030720019-8

The Applicability of the Equation of Davey to Calculate the Rate of the Vacuum Distillation of Alloys

S/076/60/034/010/010/022
B015/B064

a weak influence of the distance between the evaporation- and condensation surfaces is considered,and moreover it is assumed that the evaporation surface and the activity coefficient of the volatile component remain constant in the concentration range given, and at the distillation temperature. The thermal conductivity of the vapor pipe and the purity of the evaporation surface are not taken into account in the equation. The condition that the partial pressure of the volatile component must exceed the pressure of the residual gases in the system at the end of distillation proved to be of special importance. The latter is not particularly mentioned by Davey, becomes, however, apparent from a deduction of the equation, which is shown by the authors of the present paper by three examples. On the basis of their findings the authors state that the Davey equation is mainly applicable to film distillations. There are 6 references: 3 Soviet and 3 US.

SUBMITTED: January 20, 1959

Card 2/2

APPROVED FOR RELEASE: 04/03/2001 CIA-RDP86-00513R001030720019-8"

"APPROVED FOR RELEASE: 04/03/2001 CIA-RDP86-00513R001030720019-8

S/598/61/000/006/002/034
D245/D303

AUTHORS: Lukashenko, E.Ye., Zinov'yeva, N.K., Terekhin, V.P. and Feofanov, L.P.

TITLE: The mechanism of magnesiothermal reduction and formation of titanium sponge in an industrial reactor

SOURCE: Akademiya nauk SSSR. Institut metallurgii. Titan i yego plavy. no. 6, 1961. Metallotermiya i elektrokhimiya titana, 14 - 20

TEXT: The authors carried out 6 experiments on the process using a reaction vessel enclosed in an industrial reactor and with $TiCl_4$ feed of 20, 30, 60, 80 and 95 % of that normally applied. The results show that the mechanism of the process can be regarded as in three stages. In the first ($TiCl_4$ consumption < 60 %) refined sponge and a thin lining form on the reactor wall. $TiCl_4$ reduction prevails on the mirror surface of the fused Mg. The reaction rate is rapid and the role of secondary reactions unimportant. In the second stage ($TiCl_4$ consumption < 80 %), Mg penetrates the pores

Card 1/2

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of the sponge, the lining becomes larger and the role of surface-diffusion processes and secondary chemical reactions becomes more marked. In the third stage ($TiCl_4$ consumption $>$ 80 %), the volume of the reaction mass increases at the expense of the lining. $TiCl_4$ reduction is gradual with intermediate formation of Ti sub-chlorides and their final reduction to metal. There are 3 figures and 8 references: 6 Soviet-bloc and 2 non-Soviet-bloc. The references to the English-language publications read as follows: F.S. Wartman and J. Oth, J. Electrochem. Soc., 1954, v. 101, no. 10; W.J.Kroll, Metal Industry, 1955, v. 27, nos. 4-9.

APPROVED FOR RELEASE: 04/03/2001 CIA-RDP86-00513R001030720019-8"

"APPROVED FOR RELEASE: 04/03/2001 CIA-RDP86-00513R001030720019-8

S/137/62/000/006/034/163
A006/A101

AUTHORS: Lukashenko, E. Ye., Kramnik, V. Yu., Garmata, V. A., Sergiyenko, S.N.

TITLE: Development and assimilation of magnesium-thermal reduction of titanium tetrachloride in retorts without an inserted reaction beaker

PERIODICAL: Referativnyy zhurnal, Metallurgiya, no. 6, 1962, 14, abstract 6G100 (In collection: "Titan i yego splavy", no. 6, Moscow, AN SSSR, 1961, 23 - 26)

TEXT: Industrial experiments of reducing and vacuum-separating $TiCl_4$ in retorts without beakers make it possible 1) to raise the coefficient of useful utilization of the reactor volume from 35 - 40 to 50 - 60%, and the cyclic yield of Ti-sponge by 50 - 60%; 2) to raise the hourly output of reduction and separation furnaces by 30 - 50%; 3) to raise the labor efficiency of the main production staff by 30% in this conversion department. Moreover, apparatus without beakers assure the production of high-quality Ti-sponge.

[Abstracter's note: Complete translation] G. Svodtseva

Card 1/1

APPROVED FOR RELEASE: 04/03/2001 CIA-RDP86-00513R001030720019-8"

"APPROVED FOR RELEASE: 04/03/2001 CIA-RDP86-00513R001030720019-8

SHVETS, V.I.; VOLKOVA, L.V.; LUKASHENKO, E.Ye.; PREOBRAZHENSKIY, N.A.

Lipides. Part 13: Synthesis of unsaturated α,β-diglycerides of same or different acids. Zhur.ob.khim. 32 no.8:2479-2482 Ag '62. (MIRA 15:9)

1. Moskovskiy institut tonkoy khimicheskoy tekhnologii imeni M.V. Lomonosova.

(Glycerides)

APPROVED FOR RELEASE: 04/03/2001 CIA-RDP86-00513R001030720019-8"

"APPROVED FOR RELEASE: 04/03/2001 CIA-RDP86-00513R001030720019-8

LUKASHENKO, F. D. Scientific Co-Worker

Pleuropneumonia

Aluminum hydroxide formol vaccine against infectious pleuropneumonia in goats, Veterinariia, 29 no. 7, 1952

Uzbek Scientific-Research Veterinary Institute

Trans. U-4811 (CTS 49, p. 102)

Monthly List of Russian Accessions, Library of Congress, October 1952. Unclassified

APPROVED FOR RELEASE: 04/03/2001 CIA-RDP86-00513R001030720019-8"

"APPROVED FOR RELEASE: 04/03/2001 CIA-RDP86-00513R001030720019-8

LUKASHENKO, F.D., kand.veterinarnykh nauk

Etiology of pneumonia in calves. Report No. 1. Trudy Uz. nauch.-issl.inst.vet. 14:9-15 '61. (MIRA 16:2)
(Uzbekistan--Calves--Diseases and pests)
(Uzbekistan--Pneumonia)

APPROVED FOR RELEASE: 04/03/2001 CIA-RDP86-00513R001030720019-8"

"APPROVED FOR RELEASE: 04/03/2001 CIA-RDP86-00513R001030720019-8

LUKASHENKO, F.D., kand.veterinarnykh nauk

Effectiveness of some therapeutic measures against pneumonia in calves. Trudy Uz.nauch.-issl.vet. 14:17-19 '61. (MIRA 16:2)

(Tashkent Province-- Calves--Diseases and pests)
(Uzbekistan--Pneumonia)

APPROVED FOR RELEASE: 04/03/2001 CIA-RDP86-00513R001030720019-8"

"APPROVED FOR RELEASE: 04/03/2001 CIA-RDP86-00513R001030720019-8

LUKASHENKO, F.D., kand.veterinarnykh nauk

Testing antibiotics and sulfodimesin in the paratyphoid fever of valves. Trudy Uz.nauch.-issl.inst.vet, 14:21-25 '61. (MIRA 16:2)

(Sulfamethazine) (Antibiotics)
(Uzbekistan--Paratyphoid fever) (Uzbekistan--Calves--Diseases and pests)

APPROVED FOR RELEASE: 04/03/2001 CIA-RDP86-00513R001030720019-8"

"APPROVED FOR RELEASE: 04/03/2001 CIA-RDP86-00513R001030720019-8

LUKASHENKO, F.D., kand.veterinarnykh nauk

Preparing and testing hyperimmune serum in infectious pleuropneumonia of goats. Trudy Uz.nauch.-issl.inst.vet. 14:27-32 '61. (MIRA 16:2)
(Pleuropneumonia) (Goats--Diseases and pests) (Serum)

APPROVED FOR RELEASE: 04/03/2001 CIA-RDP86-00513R001030720019-8"

"APPROVED FOR RELEASE: 04/03/2001 CIA-RDP86-00513R001030720019-8

S/073/62/028/005/002/005
I003/I203

AUTHORS: Yeremenko, V.N., and Lukashenko, G.M.

TITLE: Thermodynamic properties of magnesium-zinc liquid solutions

PERIODICAL: Ukrainskiy khimicheskiy zhurnal, v.28, no.5, 570-574

TEXT: The thermal properties of the liquid magnesium-zinc system have been little investigated despite the fact that this system is very interesting both as the basis for many commercial alloys and as a system with strongly reactive components. In order to define the thermodynamic properties of liquid Mg-Zn alloys the emf of the

$$Mg_{solid} \left| Mg^{2+}_{liq} + KCl + LiCL \right| Mg\text{-}Zn_{liq}$$

concentration cell was measured for 12 Mg-Zn alloys containing from 10 to 90 at% of Mg. The conclusion is reached that the behaviour of Mg-Zn liquid alloys shows considerable deviation from that of perfect solutions. This is due to the strong reactions between magnesium and zinc which give rise to a short-range order in the liquid Mg-Zn systems. There are 4 figures and 1 table.

Card 1/2

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"APPROVED FOR RELEASE: 04/03/2001 CIA-RDP86-00513R001030720019-8

Thermodynamic properties... S/073/62/028/0005/002/005
I003/I203

ASSOCIATION: Institut metallokeramiki i spets. splavov AN USSR (Institute of Powder Metallurgy and Special Alloys, AS UkrSSR)

SUBMITTED: April 29, 1961

Card 2/2

APPROVED FOR RELEASE: 04/03/2001 CIA-RDP86-00513R001030720019-8"

"APPROVED FOR RELEASE: 04/03/2001 CIA-RDP86-00513R001030720019-8

S/073/62/028/004/002/004
I017/I217

AUTHORS: Yeremenko, B.N. and Lukashenko, G.M.

TITLE: Thermodynamic properties of liquid solutions in the system: Mg-Al

PERIODICAL: Ukrainskiy khimicheskiy zhurnal, v.28, no.4, 1962, 462-466

TEXT: The emf and thermodynamic properties of the system Mg/KCl - LiCl + 1% $MgCl_2$ (Mg + Al) were investigated. Solid Mg was used as the reference electrode. Measurements were carried out in a argon atmosphere. The electromotive force was measured for each composition at 6-12 different temperatures, between the "liquidus" and 650°C. The Mg-Al system shows very small deviations from the ideal. The highest value of ΔF is - 140 cal/mole. The heat of mixing is negative and its highest value is - 400 cal/mole for a composition displaced toward aluminium. The entropies of mixing of liquid Mg and Al are close to the ideal values. There are 6 figures and 1 table.

Card 1/2

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"APPROVED FOR RELEASE: 04/03/2001 CIA-RDP86-00513R001030720019-8

S/073/62/028/004/002/004
I017/I217

Thermodynamic properties of...

ASSOCIATION: Institut metallokeramiki i spetsial'nykh splavov AN USSR (Institute of Powder Metallurgy and Special Alloys Ukr SSR)

SUBMITTED: March 4, 1961

Card 2/2

APPROVED FOR RELEASE: 04/03/2001 CIA-RDP86-00513R001030720019-8"

"APPROVED FOR RELEASE: 04/03/2001 CIA-RDP86-00513R001030720019-8

S/078/63/008/001/001/026
B119/B186

AUTHORS: Yeremenko, V. N., ~~Lukashenko, G. M.~~

TITLE: Thermodynamic properties of higher zinc antimonide

PERIODICAL: Zhurnal neorganicheskoy khimii, v. 8, no. 1, 1963, 8 - 10

TEXT: The electromotive force (e.m.f.) and the temperature coefficient of the e.m.f. were measured for galvanic chains according to the scheme $Zn_{liqu}|KCl - NaCl - ZnCl_2|[ZnSb + Sb]_{solid}$. The results were used to calculate the free energy of formation, the entropy, and the heat of formation when ZnSb is formed from the elements. The measurements were made with Zn-Sb alloys containing 15, 20, 25, 30, 37, and 43 % by weight of Zn at 420 - 500°C. The measured values corresponded to the equation e.m.f. $= 0.0795 - (t - 450)\cdot 0.66\cdot 10^{-4}$ volts with an accuracy of ± 0.5 mv. The free energy of formation for the production of solid ZnSb from liquid Zn and solid Sb, $\Delta Z = -3670 + 3.04\ (t - 450)$ cal/mole. The entropy of formation $\Delta S = -3.04$ cal/mole·deg. The heat of formation ΔH at 450°C = -5870 cal/mole. For the formation of solid ZnSb from solid Zn and Sb, $\Delta H^{o}_{ZnSb} = -4130$ cal/mole

Card 1/2

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= -2065 cal/g-atom; ΔS^{o}_{ZnSb} = -0.53 cal/mole.deg = -0.26 cal/g-atom·deg. The standard quantities for the formation of ZnSb at 298°K could not be determined since neither the heat capacity of the compound nor the heat of phase transformation at 300°C are known. There are 2 figures. The most important English-language references are: G. Silvey, V. Lyonns, V. Silvestry. J. Electrochem. Soc., 108, 658. (1961); O. Kubaschewski, J. Catterall. Thermochemical data of Alloys, Pergamon Press, 1956; H. Seltz, B. Dewitt. J. Amer. Chem. Soc., 61, 2594 (1939).

ASSOCIATION: Institut metallokeramiki i spetssplavov Akademii nauk USSR (Institute of Powder Metallurgy and Special Alloys of the Academy of Sciences UkrSSR)

SUBMITTED: March 28, 1962

APPROVED FOR RELEASE: 04/03/2001 CIA-RDP86-00513R001030720019-8"

"APPROVED FOR RELEASE: 04/03/2001 CIA-RDP86-00513R001030720019-8

YEREMENKO, V.N.; LUKASHENKO, G.M.

Thermodynamic parameters of melts of the system magnesium-tin. Ukr.khim.zhur. 29 no.9:896-900 '63. (MIRA 17:4)

1. Institut metallokeramiki i spetsial'nykh splavov AN UkrSSR.

APPROVED FOR RELEASE: 04/03/2001 CIA-RDP86-00513R001030720019-8"

"APPROVED FOR RELEASE: 04/03/2001 CIA-RDP86-00513R001030720019-8

YEREMENKO, V.N.; LUKASHENKO, G.M.

Thermodynamic properties of liquid solutions of the magnesium - cadmium system. Ukr. khim. zhur. 29 no.10:1048-1052 '63. (MIRA 17:1)

1. Institut metallokeramiki i spetsial'nykh splavov AN UkrSSR.

APPROVED FOR RELEASE: 04/03/2001 CIA-RDP86-00513R001030720019-8"

"APPROVED FOR RELEASE: 04/03/2001 CIA-RDP86-00513R001030720019-8

L 29993-65 EWT(m)/EWP(t)/EWP(b) IJP(c) JD/JW

ACCESSION NR: AP4046744 S/0226/64/000/005/0049/0051

20
19
B

AUTHOR: Yeremenko, V.N.; Lukashenko, G.M.; Sidorko, V.R.

TITLE: Thermodynamic properties of manganese silicides

15 27

SOURCE: Poroshkovaya metallurgiya, no. 5, 1964, 49-51

TOPIC TAGS: manganese silicide, electromotive force, isothermal potential, entropy, heat of formation, galvanic element

ABSTRACT: The aim of this work was to study the thermodynamic properties of MnSi and $MnSi_{1.7}$ by the emf method. Measurements were made of the emf of high-temperature galvanic circuits of the type:

$$Mn_{solid} \left| \begin{matrix} KCl\text{--}NaCl \\ +\ 2\%\ MnCl_2 \end{matrix} \right| [Mn\text{--}Si]_{solid}$$

The alloys of Mn with Si were in heterogeneous regions: ($MnSi_{1.7}$ + Si) for cell I and (MnSi + $MnSi_{1.7}$) for cell II. $E_I = 0.5070 - 1.184 \cdot 10^{-4} T$ v; $E_{II} = 0.3141 - 0.016 \cdot 10^{-4} T$ v; average deviation was ±0.002 and +0.004 v. The isobaric-isothermal potential for the

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"APPROVED FOR RELEASE: 04/03/2001 CIA-RDP86-00513R001030720019-8

L 29993-65
ACCESSION NR: AP4046744

formation of $MnSi_{1.7}$ at 953-1093K can be expressed by $\Delta Z^{o}_{MnSi_{1.7}} = -97,917+22.85T$ joules/mole (-23,400+5.46 cal/mole); for MnSi, $\Delta Z^{o}_{MnSi} = -82,435+13.56T$ joules/mole (-19,700+3.24T cal/mole). The accuracy for $MnSi_{1.7}$ can be evaluated as ±410 joules/mole and for MnSi as ±700 joules/mole. At 1023K, the heat and entropy of formation from solid Si and β-Mn are, respectively, $\Delta H^{o}_{MnSi_{1.7}} = -36.4K$ joules/gm-at. (-8.7 kcal/gm-at.) $\Delta S^{o}_{MnSi_{1.7}} = -8.37$ joules/gm-at. deg (-2.0 cal/gm-at. deg). The corresponding values for MnSi are: $\Delta H^{o}_{MnSi} = -41.22$ kjoules/gm-at. $\Delta S^{o}_{MnSi} = -8.78$ joules/gm-at. deg. Orig. art. has: 1 figure and 8 formulas.

ASSOCIATION: Institut problem. materialovedeniya AN UkrSSR (Institute of Materials Science, AN UkrSSR)

SUBMITTED: 14Jan64 ENCL: 00 SUB CODE: IC, TD

NO REF SOV: 006 OTHER: 000

Card 2/2

APPROVED FOR RELEASE: 04/03/2001 CIA-RDP86-00513R001030720019-8"

"APPROVED FOR RELEASE: 04/03/2001 CIA-RDP86-00513R001030720019-8

YEREMENKO, V.N. (Kiyev); LUKASHENKO, G.M. (Kiyev); SIDORKO, V.R. (Kiyev)

Thermodynamic properties of solid solutions in the system copper-manganese. Izv. AN SSSR. Met. i gor. delo no.6:151-155 N-D '64. (MIRA 18:3)

APPROVED FOR RELEASE: 04/03/2001 CIA-RDP86-00513R001030720019-8"

"APPROVED FOR RELEASE: 04/03/2001 CIA-RDP86-00513R001030720019-8

L 27180-65 EWT(m)/EWP(t)/EWP(b) IJP(c) JD/JW

ACCESSION NR: AP4009356 S/0078/64/009/001/0220/0221

24
13
B

AUTHOR: Lukashenko, G. M.; Yeremenk, V. N.; Sidorko, V. P.

TITLE: Thermodynamic investigation of the silver-antimony system

SOURCE: Zhurnal neorganicheskoy khimii, v. 9, no. 1, 1964, 220-221

TOPIC TAGS: silver antimony system, silver antimony thermodynamic property, entropy, enthalpy, entropy, heat capacity

ABSTRACT: The thermodynamic properties of the Ag-Sb solid state system were studied by measuring the e.m.f. and the temperature coefficients of the e. m. f. of the concentrated circuit $Ag_{solid} \mid AgI \mid [Ag\text{-}Sb]_{solid}$. Results are summarized in the enclosed figures. For the phase of stoichiometric composition Ag_3Sb, $\Delta Z^o = -960$ cal./gm. atom; $\Delta S^o = 1/28$ cal/gm. atom. degree, $\Delta H^o = -80$ cal./gm. atom. The e. m. f.--temperature function is expressed by the equation: $E = 0.0491 - 0.745 \times 10^{-4}(t-350)$v. Change of the composition of the epsilon' phase

Card 1/4

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"APPROVED FOR RELEASE: 04/03/2001 CIA-RDP86-00513R001030720019-8

L 27180-65

ACCESSION NR: AP4009356

(based on Ag_3Sb) in the area of homogeneity does not significantly affect thermodynamic properties of this phase. Orig. art. has: 2 figures and 4 equations.

ASSOCIATION: None

SUBMITTED: 04May63 ENCL: 02 SUB CODE: IC, TD

NO REF SOV: 004 OTHER: 001

Card 2/4

APPROVED FOR RELEASE: 04/03/2001 CIA-RDP86-00513R001030720019-8"

"APPROVED FOR RELEASE: 04/03/2001 CIA-RDP86-00513R001030720019-8

L 27180-65

ACCESSION NR: AP4008356

ENCLOSURE: 01

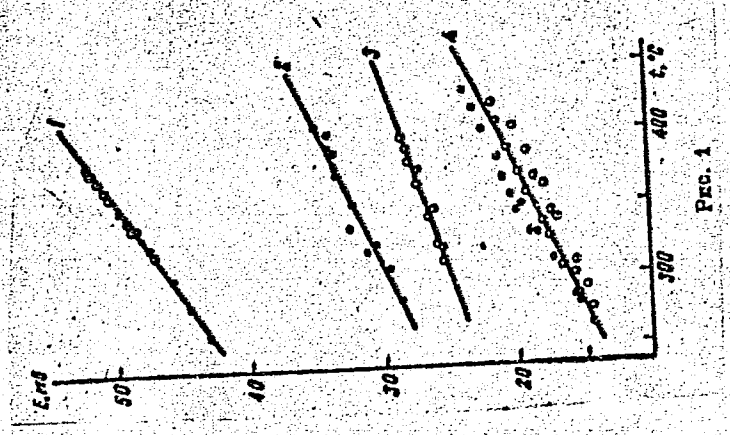

Fig. 1. E.m.f.--temperature relationship of concentrated circuits.

Ag_{solid} AgI $Ag\text{-}Sb_{solid}$

1. for alloys with 63 and 43 at.% Ag
2. for alloys with 74.5 at.% Ag (E=-5.9 + 0.016T, mv)
3. for alloys with 76.5 at.%Ag (E=6.0 - 0.033T, mv)
4. for alloys with 80 and 82.5 at.%Ag (E=-12.6 - 0.05T, mv)

Card 3/4

APPROVED FOR RELEASE: 04/03/2001 CIA-RDP86-00513R001030720019-8"

"APPROVED FOR RELEASE: 04/03/2001 CIA-RDP86-00513R001030720019-8

L 27180-65

ACCESSION NR: AP4009356

ENCLOSURE: 02

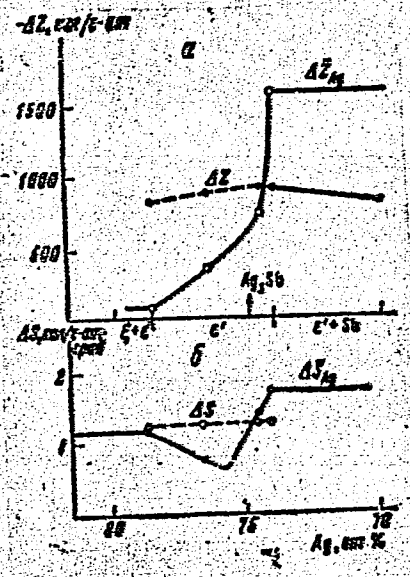

Рис. 2

Fig. 2. (a) relationship between integral and partial value of the isobaric-isothermal potential at 713°K and composition.
(b) relationship between integral and partial entropy and composition

Card 4/4

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"APPROVED FOR RELEASE: 04/03/2001 CIA-RDP86-00513R001030720019-8

L 12958-65 EWT(m)/EWP(e)/EWP(b) IJP(c) JD/JW

ACCESSION NR: AP4041577 S/0078/64/009/007/1552/1555

AUTHOR: Yeremenko, V. N.; Lukashenko, G. M.

TITLE: Thermodynamic properties of magnesium antimonide

SOURCE: Zhurnal neorganicheskoy khimii, v. 9, no. 7, 1964, 1552-1555

TOPIC TAGS: magnesium antimonide, thermodynamic property, electromotive force, alpha magnesium antimonide, isobaric isothermal potential, entropy, heat of formation, standard entropy of formation, standard heat of formation

ABSTRACT: The thermodynamic properties of the low-temperature alpha-modification of Mg_3Sb_2 were determined by the e.m.f. method. The e.m.f. of the circuit Mg_{solid} | KCl + LiCl + 1% $MgCl_2$ | [Mg_3Sb_2 + Sb] was measured in the 400-550C range using alloys with 85, 80, 75 and 65 atom% Sb (i.e. heterogeneous mixture of Mg_3Sb_2 solid + Sb) and 10 atom% Sb (Mg_3Sb_2 + Mg) (Fig. 1). The dependence of e.m.f. on temperature is shown by the relationship E = 0.4063 - 0.26×10^{-4} T ± 0.002 v. The isobaric-isothermal potential ΔZ = -56230 - 3.60T cal/mol = -235150 - 15.06T joules/mole. The entropy of formation ΔS = +3.60 cal/mol. degree = 15.06 joules/mol. degree, and

Card 1/3

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"APPROVED FOR RELEASE: 04/03/2001 CIA-RDP86-00513R001030720019-8

L 12958-65
ACCESSION NR: AP4041577

at 500C the heat of formation $\Delta H = -56230$ cal/mol. The standard heat and entropy of formation were calculated: $\Delta H_{298K} = -55500$ cal/mol, $\Delta S_{298K} = 4.87$ cal/mol degree. Orig. art. has: 3 figures

ASSOCIATION: Institut metallokeramiki i spetsial'ny*kh splavov Akademii nauk SSSR (Institute of Metalloceramics and Special Alloys Academy of Sciences SSSR)

SUBMITTED: 11Apr63 ENCL: 01

SUB CODE: TD, IC NR REF SOV: 006 OTHER: 004

Card 2/3

APPROVED FOR RELEASE: 04/03/2001 CIA-RDP86-00513R001030720019-8"

"APPROVED FOR RELEASE: 04/03/2001 CIA-RDP86-00513R001030720019-8

ENCLOSURE: 01

L 12958-65
ACCESSION NR: AP4041577

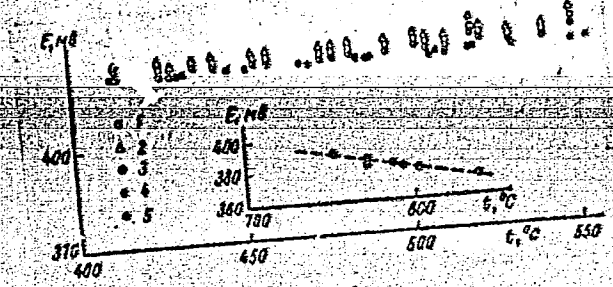

fig. 1

Relationship between e. m. f. and temperatures of concentrated circuit. $Mg_{solid}|KCl + LiCl + 1\% MgCl_2|[Mg_3Sb_2 + Sb]$ solid

1--Alloy with 65 atm. %; 2--alloy with 75 atm. %; 3--alloy with 65 atm. %
4--alloy with 85 atm. % (repeated experiment); 5--e. m. f. of circuit
$Mg_{liq}|KCl + LiCl + 1\% MgCl_2|(Mg\text{-}Sb)_{liq}$ for alloy with 60 atm. % Sb.

Card 3/3

APPROVED FOR RELEASE: 04/03/2001 CIA-RDP86-00513R001030720019-8"

"APPROVED FOR RELEASE: 04/03/2001 CIA-RDP86-00513R001030720019-8

L 12024-65 EWT(m)/EPF(n)-2/EPR/EWP(b)/EWP(e) Ps-4/Pu-4 AEDC(a)/ASD(p)-3/
BSD/AS(mp)-2/AFETR JD/JW/JG/AT/WG
ACCESSION NR: AP4046448 S/0078/64/009/010/2295/2296

AUTHOR: Lukashenko, G. M.; Yeremenko, V. N.

TITLE: Thermodynamic properties of magnesium silicide

SOURCE: Zhurnal neorganicheskoy khimii, v. 9, no. 10, 1964, 2295-2296

TOPIC TAGS: magnesium silicide, high temperature semiconductor, thermodynamic property, potential of formation, heat of formation, entropy of formation

ABSTRACT: Little-known thermodynamic properties of magnesium silicide (Mg_2Si)—a high-temperature n-type semiconductor—have been determined by the emf method. The equilibrium emf of the concentration cell $Mg/KCl-LiCl+1\%MgCl_2[Mg_2Si+Si]$ was measured at 400—600C for various compositions of Mg-Si alloys. The curve of emf versus temperature was fitted by the method of least squares. The emf and dE/dT data made it possible to calculate isobaric-isothermic potential ΔZ^0, entropy ΔS^0, and heat ΔH^0 of Mg_2Si formation from the elements within the indicated temperature range. The error margin of the ΔH^0 determination was estimated to be ±500 cal/mol. The standard ΔS^0 and ΔH^0

Card 1/2

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"APPROVED FOR RELEASE: 04/03/2001 CIA-RDP86-00513R001030720019-8

L 12014-65
ACCESSION NR: AP4046448

values were also calculated. The ΔH^0_{298K} value was found to be in very good agreement with some of the previous data, but in sharp disagreement with certain other data. The fact that there was a considerable negative value of ΔS^0_{298K} is emphasized. Orig. art. has: 1 figure and 3 formulas.

ASSOCIATION: Institut metallokeramiki i spetssplavov AN UkrSSR (Institute of Powder Metallurgy and Special Alloys, AN UkrSSR)

SUBMITTED: 19Jun63 ATD PRESS: 3120 ENCL: 00

SUB CODE: IC, TD NO REF SOV: 005 OTHER: 004

Card 2/2

APPROVED FOR RELEASE: 04/03/2001 CIA-RDP86-00513R001030720019-8"

"APPROVED FOR RELEASE: 04/03/2001 CIA-RDP86-00513R001030720019-8

L 15210-66 EWT(m)/EWP(t)/EWP(b) LIP(c) JW/JD
ACC NR: AP6001295 SOURCE CODE: UR/0363/65/001/008/1296/1297

71
B

AUTHOR: Yeremenko, V. N.; Lukashenko, G. M.

ORG: Institute of Materials Science Problems, Academy of Sciences UkrSSR (Institut problem materialovedeniya Akademii nauk UkrSSR)

TITLE: Thermodynamic properties of magnesium germanide

SOURCE: AN SSSR. Izvestiya. Neorganicheskiye materialy, v. 1, no. 8, 1965, 1296-1297

TOPIC TAGS: magnesium compound, germanium compound, electromotive force, thermodynamic calculation, free energy, entropy, heat of formation

ABSTRACT: To study the thermodynamic properties of the compound Mg_2Ge, use was made of the method of electromotive forces. The emf of the galvanic concentration cell

$$Mg_s/KCl - LiCl - MgCl_2/[Mg_2Ge + Ge]s$$

was measured in the 700-900K range. The alloys were prepared from 99.92% pure Mg and single-crystal germanium of semiconductor purity, and were subjected to preliminary annealing for 24 hr at 900K. Treatment of results by the least-squares method gave the following temperature dependence of the emf (in V):

$$E = 0.272 - 0.38 \times 10^{-4} T.$$

Card 1/2 UDC 546.46'289

APPROVED FOR RELEASE: 04/03/2001 CIA-RDP86-00513R001030720019-8"

"APPROVED FOR RELEASE: 04/03/2001 CIA-RDP86-00513R001030720019-8

L 15210-66
ACC NR: AP6001295

The temperature dependence of the standard free energy of formation of Mg_2Ge is described by the equation (in cal/mole)

$$\Delta F^{O} Mg_2Ge - 25100 + 3.5\ T.$$

The standard heat and entropy of formation are respectively

$$\Delta H^{O} Mg_2Ge = -8.37 \text{ kcal/ g-at},$$

$$\Delta S^{O} Mg_2Ge = -1.17 \text{ cal/deg g-at}.$$

Orig. art. has: 1 figure.

SUB CODE: 11 / SUBM DATE: 20Jan65 / ORIG REF: 005 / OTH REF: 001

Card 2/2

APPROVED FOR RELEASE: 04/03/2001 CIA-RDP86-00513R001030720019-8"

"APPROVED FOR RELEASE: 04/03/2001 CIA-RDP86-00513R001030720019-8

YERMENKO, V.N.; LUKASHENKO, G.M.; SIDORKO, V.R.

Thermodynamic properties of manganese silicides. Report No.2. Porosh. met. 5 no.9:91-94 S '65. (MIRA 18:9)

1. Institut problem materialovedeniya AN UkrSSR.

APPROVED FOR RELEASE: 04/03/2001 CIA-RDP86-00513R001030720019-8"

"APPROVED FOR RELEASE: 04/03/2001 CIA-RDP86-00513R001030720019-8

LUKASHENYA, G. V.; POLGREBENKOV, A. L.

Temperature coefficient of the burning velocity of some systems. Zhur. fiz. khim. 36 no.12:2784-2786 D '62. (MIRA 16:1)

1. Institut khimicheskoy fiziki AN SSSR.

(Systems(Chemistry)) (Combustion)

APPROVED FOR RELEASE: 04/03/2001 CIA-RDP86-00513R001030720019-8"

"APPROVED FOR RELEASE: 04/03/2001 CIA-RDP86-00513R001030720019-8

IVANOV, V.A., dotsent, kand.tekhn.nauk; KUNITSKIY, L.P., dotsent, kand.tekhn. nauk; KORMAKOV, L.I., dotsent, kand.tekhn.nauk; GUDKOV, P.N., dotsent; PRIMAK, N.S., dotsent, kand.tekhn.nauk; BRYANTSEV, V.I., inzh.; SIKALO, P.I., inzh.; NOSOV, G.M., inzh.; LUKASHENKO, I., red.; BERGER, K., red.; REZNICHENKO, I., red.; ZELENKOVA, Ye., tekhn.red.

[Wooden construction elements; analysis and design] Dereviannye konstruktsii; primery rascheta i konstruirovaniia. Kiev, Gos.izd-vo lit-ry po stroit. i arkhit.USSR, 1960. 537 p. (MIRA 13:9)
(Building, Wooden)

APPROVED FOR RELEASE: 04/03/2001 CIA-RDP86-00513R001030720019-8"

"APPROVED FOR RELEASE: 04/03/2001 CIA-RDP86-00513R001030720019-8

LUKASHENKO, I.A., inzhener.

Erecting arches from three-stage blocks without using formwork experimental investigation. Nov. v stroi. tekh. no.7:70-82 '55. (MLRA 9:11)

1. Nauchno-issledovatel'skiy institut stroitel'noy tekhniki Akademii arkhitektury USSR.
(Arches) (Precast concrete construction)

APPROVED FOR RELEASE: 04/03/2001 CIA-RDP86-00513R001030720019-8"

"APPROVED FOR RELEASE: 04/03/2001 CIA-RDP86-00513R001030720019-8

LUKASHENKO, I.A.

LUKASHENKO, I.A., Cand Tech Sci -- (diss) "Study of new types of arched roofs made from local stone material." Kiev, 1958. 20 pp (Acad of Construction and Architecture UkSSR. Inst of Graduate Studies. Inst of Construction Engineering). 100 copies (KL, 20-58,97)

APPROVED FOR RELEASE: 04/03/2001 CIA-RDP86-00513R001030720019-8"

"APPROVED FOR RELEASE: 04/03/2001 CIA-RDP86-00513R001030720019-8

YERSHOV, L.D., kand.tekhn.nauk; CHERNYSHEV, G.S., inzh.; LUKASHENKO, I.A., inzh.; UDOVIK, L.N., inzh.; LESHCHINA, A.S., inzh.; SAS, Ye.Ya., inzh.. Prinimali uchastiye: BORTNIK, S.P., inzh.; EPEL'BOYM, P.L., inzh.; INOSOVA, N.A.. LUKASHENKO, I.A., inzh., red.

[Instructions for manufacturing three-step blocks for arched roofs made without forms] Instruktivnye materialy po proizvodstvu trekhstupenchatykh blokov dlia bezopalubochnykh svodchatykh pokrytii. Kiev, Biuro tekhn.informatsii NIISK ASIA USSR, 1958. 35 p. (MIRA 12:4)

1. Akademiya budivnytstva i arkhitektury URSR. Instytut budivel'nykh materialiv i vyrobiv.
(Building blocks) (Roofs)

APPROVED FOR RELEASE: 04/03/2001 CIA-RDP86-00513R001030720019-8"

"APPROVED FOR RELEASE: 04/03/2001 CIA-RDP86-00513R001030720019-8

BAKLANOV, G.M.; LUKASHENKO, I.A.

Arched roofs made without forms for farm construction. Stroi. mat 7 no.7:18-21 Jl '61. (MIRA 14:7)

1. Zamestitel predsedatelya Gosstroya USSR (for Baklanov).
2. Rukovoditel' laboratorii Nauchno-issledovatel'skogo instituta stroitel'nykh konstruktsiy Akademii stroitel'sta i arkhitektury USSR (for Lukashenko).
(Farm buildings) (Roofs)

APPROVED FOR RELEASE: 04/03/2001 CIA-RDP86-00513R001030720019-8"

"APPROVED FOR RELEASE: 04/03/2001 CIA-RDP86-00513R001030720019-8

LUKASHENKO, Ivan Andreyevich; KRAVTSOV, Boris Kravtsov; SHVETS, Zoya Aleksandrovna; IVANOV, Sergey Dmitriyevich; KOMENDANT, K.P., red.; BABIL'CHANOVA, G.A., tekhn. red.

[Asbestos-cement elements for industrial buildings]Asbestotsementnye konstruktsii dlia promyshlennykh zdanii. Kiev, Gosstroiizdat USSR, 1962. 48 p. (MIRA 15:9)
(Asbestos cement) (Walls)

APPROVED FOR RELEASE: 04/03/2001 CIA-RDP86-00513R001030720019-8"

"APPROVED FOR RELEASE: 04/03/2001 CIA-RDP86-00513R001030720019-8

BOGDANOVICH, Galina Nikolayevna, kand. tekhn. nauk; BULAKOVSKIY, Vadim Ivanovich, kand. tekhn. nauk; GOLOVCHENKO, Pavel Sergeyevich, kand. tekhn.nauk; DEKHTYAR, Etya Mikhaylovna, inzh.; KARNAUKHOV, Nikolay Petrovich, inzh.; KLIMANOVA, Yekaterina Antonovna, kand. tekhn. nauk; KRAVTSOV, Boris Konstantinovich, kand. tekhn. nauk; LIBERMAN, Al'fred Davidovich, kand. tekhn. nauk; LUKASHENKO, Ivan Andreyevich, kand.tekhn. nauk; POGREBNYAK, Zinaida Feofanovna, kand. tekhn. nauk; ROKHLIN, Il'ya Aleksandrovich, kand.tekhn.nauk; TRET'YAKOV, Lev Dmitriyevich, kand. tekhn. nauk; TSATSKINA, Frida Naumovna; REZNICHENKO, I.Ye., red.; LEUSHCHENKO, N.L., tekhn.red.

[Handbook for construction laboratories]Spravochnik dlia stroitel'nykh laboratorii. Pod red. B.K.Kravtsova. Kiev, Gosstroiizdat, 1962. 821 p. (MIRA 16:3)

1. Nauchnyye sotrudniki Akademii stroitel'stva i arkhitektury Ukr.SSR (for all except Reznichenko, Leushchenko).
(Building research--Handbooks, manuals, etc.)

APPROVED FOR RELEASE: 04/03/2001 CIA-RDP86-00513R001030720019-8"

"APPROVED FOR RELEASE: 04/03/2001 CIA-RDP86-00513R001030720019-8

ROKHLIN, Il'ya Aleksandrovich, kand.tekhn.nauk; LUKASHENKO, Ivan Andreyevich, kand.tekhn.nauk; AYZEN, Arkadiy Markovich. Prinimali uchastiye: DRANISHNIKOV, P.I., kand.tekhn.nauk; MINTSKOVSKIY, M.Sh., kand. tekhn.nauk. KOMAR, A.N. [deceased], red.; BERGER, K., red.; GARKAVENKO, L., tekhn. red.

[Handbook for construction engineers] Spravochnik konstruktora-stroitelia. Pod red. A.N.Komara. Kiev, Gostroiizdat USSR, 1963. 813 p. (MIRA 16:6)

1. Deystvitel'nyy chlen Akademiy stroitel'stva i arkhitektury SSSR i UkrSSR (for Komar).
(Building)

APPROVED FOR RELEASE: 04/03/2001 CIA-RDP86-00513R001030720019-8"

"APPROVED FOR RELEASE: 04/03/2001 CIA-RDP86-00513R001030720019-8

LUKASHENKO, I.A., kand.tekhn.nauk; YASHCHENKO, V.V., inzh.

In-situ investigations of glass reinforced concrete elements of industrial buildings. Stroi.konstr. no.2:14-24 '65. (MIRA 18:12)

1. Nauchno-issledovatel'skiy institut stroitel'nykh konstruktsiy Gosstroya SSSR, Kiyev (for Yashchenko).

APPROVED FOR RELEASE: 04/03/2001 CIA-RDP86-00513R001030720019-8"

"APPROVED FOR RELEASE: 04/03/2001 CIA-RDP86-00513R001030720019-8

S/181/62/004/010/060/063
B102/B104

AUTHORS: Korsunskiy, M. I., Genkin, Ya. Ye., and Lukashenko, L. I.

TITLE: The L_{III} and L_{II} absorption edges of niobium

PERIODICAL: Fizika tverdogo tela, v. 4, no. 10, 1962, 2986 - 2987

TEXT: The wavelengths of the L_{II} and L_{III} edges of the emission spectrum of metallic niobium, $\lambda_{L_{III}} = (5223.5 \pm 0.2)$X and $\lambda_{L_{II}} = (5022.9 \pm 0.3)$X, should agree with the corresponding absorption edges. Since no data are available for the L_{II} absorption edge, and since for L_{III} the only published value is $\lambda_L = 5212.1$ X which disagrees with the corresponding value from the emission spectra, the absorption edge wavelengths were measured again. The authors used an X-ray spectrograph with a quartz analyzer ($d_{\infty} = 3336.00$ X, R = 700 mm). The results were:

$\lambda_{L_{III}} = (5223.6 \pm 0.4)$ X and $\lambda_{L_{II}} = (5022.8 \pm 0.5)$ X.

Card 1/2

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"APPROVED FOR RELEASE: 04/03/2001 CIA-RDP86-00513R001030720019-8

The L_{III} and L_{II} absorption... S/181/62/004/010/060/063
B102/B104

ASSOCIATION: Khar'kovskiy politekhnicheskiy institut im. V. I. Lenina (Khar'kov Polytechnic Institute imeni V. I. Lenin)

SUBMITTED: June 18, 1962

Card 2/2

APPROVED FOR RELEASE: 04/03/2001 CIA-RDP86-00513R001030720019-8"

"APPROVED FOR RELEASE: 04/03/2001 CIA-RDP86-00513R001030720019-8

L 8849-66 EWT(1)/EWT(m)/EWA(d)/T/EWP(t)/EWP(z)/EWP(b) IJP(c) JD/GG

ACC NR: AP5022731 SOURCE CODE: UR/0181/65/007/009/2829/2833

56
B

AUTHOR: Palatnik, L. S.; Lukashenko, L. I.; Ravlik, A. G.

ORG: Kharkov Polytechnical Institute im. V. I. Lenin (Khar'kovskiy politekhnicheskiy institut)

TITLE: Investigation of Permalloy films with a "supercritical" hysteresis loop

SOURCE: Fizika tverdogo tela, v. 7, no. 9, 1965, 2829-2833

TOPIC TAGS: magnetic thin film, Permalloy, hysteresis loop

ABSTRACT: The authors studied Permalloy films of various thicknesses having a "supercritical" hysteresis loop with an initial composition of 83% Ni and 17% Fe. The purpose of the work was a detailed analysis of the domain structure and behavior of the hysteresis loop parameters over a wide range of film thicknesses (0.4-20 μ) and substrate temperatures (230-450°C). The methods used for preparation of the specimens and the experimental conditions are described. Oscillograms of the hysteresis loops at various temperatures for a single specimen are given. A "supercritical" hysteresis loop is shown in figure 1. An increase in the substrate temperature from ~230 to ~360°C causes a considerable reduction in H_c and H_s, and an increase in B_r/B_s and the angle β. With a further increase in the substrate temperature, the sharp break at

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L 8849-66

ACC NR: AP5022731

point H_s is smoothed out, the coercive force is reduced, and the loop loses its "supercritical" shape. The ratio H_s/H_c falls from 10 to 2-3 in the 230-360°C temperature range. The ratio B_r/B_s increases with a reduction in film thickness varying from 0.05 to 0.85. This is in contradiction to previously proposed theoretical models which do not allow a value less than 0.5. A model is proposed for distribution of magnetization intensity in a film with "supercritical" hysteresis loop. Orig. art. has: 6 figures, 1 formula.

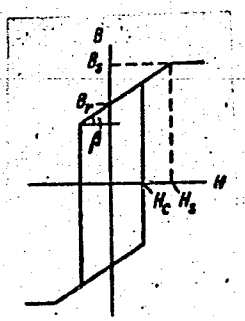

Fig. 1. "Supercritical" hysteresis loop: B_s--saturation induction; B_r--remanence; H_c--coercive force; H_s--saturation field

$$\tan\beta = \frac{B_s - B_r}{H_s}$$

SUB CODE: 20/ SUBM DATE: 26Apr65/ ORIG REF: 006/ OTH REF: 006

KJVK

Card 2/2

APPROVED FOR RELEASE: 04/03/2001 CIA-RDP86-00513R001030720019-8"

"APPROVED FOR RELEASE: 04/03/2001 CIA-RDP86-00513R001030720019-8

KORSUNSKIY, M.I.; GENKIN, Ya.Ye.; LUKASHENKO, L.I.

L_{III} and L_{II} absorption edges in niobium. Fiz.tver.tela 4 no.10:2986-2987 O '62. (MIRA 15:12)

1. Khar'kovskiy politekhnicheskiy institut imeni Lenina.
(Niobium—Spectra)

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"APPROVED FOR RELEASE: 04/03/2001 CIA-RDP86-00513R001030720019-8

S/048/63/027/003/019/025
B106/B238

AUTHORS: Korsunskiy, M. I., and Lukashenko, L. I.

TITLE: Optimum excitation conditions for X-ray spectra in the 5 - 10 Å range

PERIODICAL: Akademiya nauk SSSR. Izvestiya. Seriya fizicheskaya, v. 27, no. 3, 1963, 409-414

TEXT: The optimum excitation conditions for soft X-rays with wavelengths of 5 - 10 Å were calculated. The electrons in the anode housing were assumed to propagate in straight lines. The probability of continuous radiation at a frequency ν when the electrons are slowed down was calculated with Kramer's formula, and the energy losses of the electrons determined with Widdington's formula. Results: 1) The condition $E_0/E_\nu \gg 1$, where E_0 is the energy of the absorption edge and E_ν the energy corresponding to the frequency ν, is fulfilled when fluorescent radiation is excited by a continuous spectrum or when absorption spectra are studied employing non-photographic recording of the X-rays. In this case, an element furnishing the greatest possible radiation intensity in

Card 1/4

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the 5 - 10 Å range is recommended. The element must be of high Z and must lie at the base of a rising part of the curve $\mu M/\delta Z = f(Z)$, where μ is the linear absorption coefficient of the anode material for a radiation with frequency ν, M the atomic weight of the anode material, and δ the density of the anode material. The voltage on the tube corresponding to this element is read off from Fig. 1. 2) The element for the anode must be chosen in such a way that the wavelength of the line of maximum intensity in the exciting series is a little shorter than that of the absorption edge of the series containing the line to be excited. Here again, the voltage is read off from Fig. 1. 3) When the investigation of the absorption spectrum features photographic recording of the X-rays, in which case $E_0/E_\nu \ll 2$, it may be assumed that the intensity of radiation for $\varphi < 80^\circ$ in the 5 - 10 Å range is directly proportional to the atomic number Z of the anode element. 4) The X-ray tubes must be designed to ensure a small angle of incidence φ between the electron beam and the surface of the anode. 5) The fact that Kramer's formula, Widdington's law and the assumption that the absorption coefficient μ is proportional to $Z^4\lambda^3$ are only approximations affects the choice of the optimum values of E_0 and Z. The basic conclusions in this paper must therefore be regarded as being

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just as approximate as the assumptions made. The partial atomic absorption coefficients do not obey the $Z^4\lambda^3$ law. Calculations showed that replacing Z^4 by Z^5 at the given wavelength does not cause an error of more than 20% in the determination of E_o. Increasing the index of Z further has practically no effect on the determination of E_o. There are 2 figures and 1 table.

ASSOCIATION: Khar'kovskiy politekhnicheskiy institut im. V. I. Lenina (Khar'kov Polytechnic Institute imeni V. I. Lenin)

Figure 1. Legend: $f_\nu(t_\nu) = (\mu M/\sqrt{Z})\cdot 1.07\cdot 10^{-6} E^2 \tan\psi$, where ψ is the angle between the electron beam and the surface of the anode; $t_\nu = E_\nu/E_o$; $f_i(t_i) = (\mu M/\sqrt{Z})\cdot 1.07\cdot 10^{-6} E_i^2 \tan\psi$, where μ is the linear absorption coefficient of the anode when the frequency of radiation of the spectral line studied is ν, and E_i is the ionization energy of the i-th level, which determines the series of spectral lines studied,

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in kev; $t_i = E_i/E_o$.

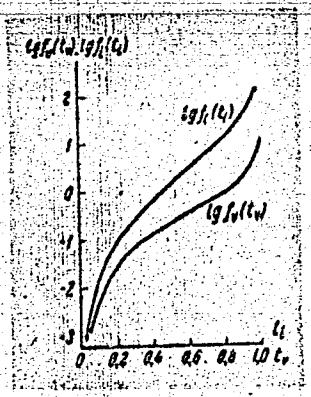

Fig. 1

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"APPROVED FOR RELEASE: 04/03/2001 CIA-RDP86-00513R001030720019-8

ACC. NR: AP6033898 SOURCE CODE: GE/0030/66/017/002/0543/0554

AUTHOR: Palatnik, L. S.; Fuks, M. Ya.; Lukashenko, L. I.; Ravlik, A. G.; Kozma, A. A.

ORG: Polytechnical Institute imeni V. I. Lenin, Khar'kov (Polytechnisches Institut)

TITLE: The structure and magnetic properties of condensed ferromagnetic films

SOURCE: Physica status solidi, v. 17, no. 2, 1966, 543-554

TOPIC TAGS: magnetic thin film, electromagnetic film, vacuum degassing, cobalt, permalloy, magnetic anisotropy, ferromagnetic film

ABSTRACT: Two series of permalloy, Fe, Ni and Co films were prepared by conventional degassing and vacuum deposition at 10^{-4} to 10^{-5} torr; the thickness h of the film varied from 0.1 to 30.0 μ. The first series included films with $h \approx 1.5$ μ, the second series included films with $h \approx 0.5$ μ. The films were examined for oriented and disoriented microstresses, the grade of the dispersion of blocks, and the concentration rate of stacking faults. Various forms of structural and phase nonequilibrium were also examined. The structural peculiarities are caused by the preparation conditions as well as by the heat treatment of the film. Thus in Ni and permalloy condensates, oriented microstresses were found to exist in a direction close to normal to the film; they reach the order of 25 kg/mm^2 and decrease with increasing substrate temperature. It is believed that at least to some extent these microstresses affect

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the magnetic anisotropy in the direction of the normal. The films have a high rate of block dispersion; the mean linear block size is 100 Å at a substrate temperature of ~200°C. The concentration of twin stacking faults in permalloy films reaches up to 60%. In Co films, the deformation stacking faults were found to predominate on account of the polymorphism. The observed decrease of the coercive force in Co films at substrate temperature ~480°C is related to the decreasing concentration of the hexagonal phase. There is a distinct correlation between the structural state of the films, and their magnetic properties. This correlation is especially pronounced for the phase nonequilibrium (Co films), and for structural nonequilibrium (the effect of the texture upon the magnetic anisotropy of Co and Fe condensates). The correlation of other characteristics (stacking faults, block dimensions, disoriented microstresses, etc.) requires further study. Orig. art. has: 3 figures, 4 tables.

SUB CODE: 11,20/ SUBM DATE: 31May66/ ORIG REF: 010/ OTH REF: 008

Card 2/2

APPROVED FOR RELEASE: 04/03/2001 CIA-RDP86-00513R001030720019-8"

"APPROVED FOR RELEASE: 04/03/2001 CIA-RDP86-00513R001030720019-8

LUKASHENKO, L.K.; TRUSHIN, Yu.T.

Industrial noise control. Mashinostroitel' no.5:39-40 My '65. (MIRA 18:5)

APPROVED FOR RELEASE: 04/03/2001 CIA-RDP86-00513R001030720019-8"

"APPROVED FOR RELEASE: 04/03/2001 CIA-RDP86-00513R001030720019-8

LUKASHENKO, M. Kh.

CA

9

Production of ferrochrome in blast furnaces. M. Kh. Lukashenko and V. V. Ivashev. *Stal* 2, No. 7/8, 3-8 (1942).—Expts. were conducted on producing a 40% ferrochrome in a blast furnace from a Saranov chromite ore (which is chemically uniform, contains but few interfering impurities, is small-grained and dense), a Mn ore, limestone and gravel or crushed Dinas. Kemerovsk coke was used. Chem. analyses of all the constituents are given, the furnace and its operation are described, and a detailed log of the operation is given. M. Hosch

A56-51A METALLURGICAL LITERATURE CLASSIFICATION

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"APPROVED FOR RELEASE: 04/03/2001 CIA-RDP86-00513R001030720019-8

LUKASHENKO, M. KH.

Distr: 4E2c

Activated agglomerate of magnetic iron ore. V. A. Sorokin, M. Kh. Lukashenko, L. F. Gritsovskii, and F. V. Bulgakov. *Sbornik Nauch. Trudov Med. Fak. Donets. Ind. Inst.* 1953, No. 4, 65-129; *Referat. Zhur., Met.* 1956, Abstr. No. 9717.—By applying a fine spray of water to a layer of Fe ore during agglomeration H is formed by interaction of C and H_2O, and reduces a considerable part of the Fe_2O_3 to FeO, producing a more porous agglomerate with greater surface area. The consumption of water varies from 17.3% of the charge for 8% of coke fines to 27-30% for 18% of coke fines. For S-contg. iron ore, with an input of 5-20% of coke fines the consumption of C varies from 2 to 14.6%, depending on the vacuum, the degree of reduction of the iron oxides, and the rate of spraying. The formation of up to 40-60% of ferrous silicate in activated agglomerate contg. baked-in C is compatible with high chem. activity and mechanical strength. Use of the water spray increased the capacity of the sintering plant by 55-85%. Use of the activated agglomerate in the blast furnace increased the capacity by 13% and decreased coke consumption by 1.8%.

A. N. Pestoff

6
1-FRA

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"APPROVED FOR RELEASE: 04/03/2001 CIA-RDP86-00513R001030720019-8

LUKASHENKO, M.T.

Veterinary stations for every collective farm. Veterinariia 35 no.1: 51-54 Ja '58. (MIRA 11:2)

1. Predsedatel' kolkhoza imeni Stalina, Reniyskogo rayona, Odesskoy oblasti.

(Reni District--Veterinary medicine)

APPROVED FOR RELEASE: 04/03/2001 CIA-RDP86-00513R001030720019-8"

"APPROVED FOR RELEASE: 04/03/2001 CIA-RDP86-00513R001030720019-8

LUKASHENKO, N.

Above the fields of Priamur'ye. Grazhd.av. 19 no.10:17 O '62.
(MIRA 16:2)
(Amur Valley--Aeronautics in agriculture)

APPROVED FOR RELEASE: 04/03/2001 CIA-RDP86-00513R001030720019-8"

"APPROVED FOR RELEASE: 04/03/2001 CIA-RDP86-00513R001030720019-8

LUKASHENKO, N.M.

Operating instructions and circulars. Meteor.i gidrol. no.5:62 My '53. (MLRA 8:9)

1. Aviameteorstantsiya, g. Svobodnyy Amurskoy oblasti. (Weather forecasting)

APPROVED FOR RELEASE: 04/03/2001 CIA-RDP86-00513R001030720019-8"

"APPROVED FOR RELEASE: 04/03/2001 CIA-RDP86-00513R001030720019-8

LUKASHENKO, M. P.

K. epizootologii trikhinellezu, "Works on Helminthology" on the 75th Birthday of K. I. Skryabin, Izdak, Akad. Nauk, SSSR, Moskva, 1953, page 366
Chair Parasitology. Odessa Agricultural Inst.

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"APPROVED FOR RELEASE: 04/03/2001 CIA-RDP86-00513R001030720019-8

USSR / Diseases of Farm Animals. Diseases Caused by Helminths. R-2

Jour: Ref Zhur-Biol., No 2, 1958, 7357

Author : N. P. Lukashenko
Inst : ~~Not Given~~
Title : Diagnosis of Trichinosis in Live Hogs

Orig Pub: Svinovodstvo, 1956, No 10, 38-39

Abstract: To obtain a diagnosis of trichinosis in live hogs, the author recommends a subcutaneous allergy reaction with a soluble in acid albumen antigen prepared by means of the dehydration of an alkaline extract of trichinella larvae previously freed of the inactive non-soluble in acid albumen fraction. The antigen, in a dose of 0.1 milligrams dissolved in a 1:1,000 solution, is introduced into the skin fold of the rear surface

Card 1/2

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LUKASHENKO, N. P. Cand Vet Sci -- (diss) "Diagnosis of ~~trichinellosis~~ Trichinosis in ~~live~~ hogs by methods of allergenic (~~interdermal~~ intradermal) and serological reactions". Mos,1957. 16 pp 21 cm. (All-Union Order of Lenin Acad of Agr Sci im V.I. Lenin. All-Union Inst of Helminthology im Academician K.I. Skryabin). 140 copies. (KL, 23-57, 105)

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Allergic and serologic reactions for studying in vivo diagnosis of trichinelosis in swine. Veterinariia 34 no.2:31-32 F '57. (MLRA 10:11)

1. Vsesoyuznyy insitut gel'mintologii imeni akademika K.I. Skryabina. (Swine--Diseases and pests) (Trichina and trichinosis) (Antigens and antibodies)

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Antigenic properties of helminth antigens obtained by various methods from Trichinella spiralis larvae [with summary in English]. Med.paraz. i paraz.bol. 27 no.1:82-88 Ja-F '58. (MIRA 11:4)

1. Iz Vsesoyuznogo instituta gel'minologii imeni akademika K.I. Skryabina.
(TRICHINELLA,
spiralis, prep. & properties of antigens from larvae (Rus))

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LUKASHENKO, N.P., aspirant

Antigens obtained from the larvae of Trichinella spiralis.
Trudy VIGIS 6:92-99 '59. (MIRA 15:5)
(Antigens and antibodies)
(Trichinella spiralis)

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POTEMKINA, V.A., prof., doktor veterinarnykh nauk; LUKASHENKO, N.P., aspirant

Testing ditrazine and atonin in chicken ascariasis. Trudy VIGIS 6:246-247 '59. (MIRA 15:5)
(Ascarids and ascariasis)
(Parasites—Poultry) (Anthelmintics)

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LEYKINA, Ye.S.; LUKASHENKO, N.P.; ZORIKHINA, V.I.; LAVRENOV, B.K.; MAMEDOV, M.M.

Natural foci of Echinococcus multilocularis in Novosibirsk Province. Med.paraz. i paraz.bol. 28 no.2:206-213 Mr-Ap '59. (MIRA 12:6)

1. Iz sektora eksperimental'noy parazitologii Instituta malyarii, meditsinskoy parazitologii i gel'mintologii Ministerstva zdravookhraneniya SSSR (dir.instituta - prof.P.G.Sergiyev, zav.sektorom - prof.V.P.Pod"yapol'skaya) i gospital'noy khirurgicheskoy kliniki Novosibirskogo meditsinskogo instituta (zav.klinikoy I.L.Bregadze).

(ECHINOCOCCOSIS
multilocularis, natural foci in Novosibirsk region, USSR (Rus))

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1. Iz otdela gel'mintologii Instituta malyarii, meditsinskoy parazitologii i gel'mintologii Ministerstva zdravookhraneniya SSSR (dir. instituta - prof. P.G. Sergiyev, zav. otdelom - prof. V.P. Pod"yapol'skaya).
(TRICHINOSIS epidemiology)

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1. Institut meditsinskoy parazitologii i tropicheskoy meditsiny, Moskva, SSSR.
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1. Institut meditsinskoy parazitologii i tropicheskoy meditsiny, Moskva, SSSR.
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Studies on the pathogenesis of experimental alveolar echinococcosis (alveococcosis). Report No.1: Possibility of secondary (intraperitoneal) infection with Echinococcus alvolaris. Med. paraz.i paraz.bol. 29 no.5:601-606 S-O '60. (MIRA 13:12)

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(NOVOSIBIRSK PROVINCE--HYDATIDS)

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