"APPROVED FOR RELEASE: 06/05/2000 CIA-RDP86-00513R000101720002-8

L 42888-66
ACC NR: AP6020385

0

$$g_{\parallel} = 0.706 \pm 0.002$$
$$g_{\perp} = 2.580 \pm 0.004$$
$$B^{143} = (270 \pm 2)\ 10^{-4}\ cm^{-1}$$
$$B^{145} + (167 \pm 2)\ 10^{-4}\ cm^{-1}$$

Comparison of the g factors of Nd^{3+} in the lattices of $CaWO_4$, $PbMoO_4$, and $BaMoO_4$ shows that $g_{\perp}$ remains almost unchanged, whereas $g_{\parallel}$ decreases sharply with increasing lattice parameters.

SUB CODE: 07,20/SUBM DATE: 31May65/ ORIG REF: 002/ OTH REF: 001

Card 2/2

APPROVED FOR RELEASE: 06/05/2000 CIA-RDP86-00513R000101720002-8"

"APPROVED FOR RELEASE: 06/05/2000 CIA-RDP86-00513R000101720002-8

ACC NR: AP6018741 SOURCE CODE: UR/0057/66/036/006/1118/1120

AUTHOR: Antipin, A.A.; Kurkin, I.N.; Livanova, L.D.; Potvorova, L.Z.; Shekun, L.Ya.

ORG: Kazan' State University im. V.I.Ul'yanov-Lenin (Kazanskiy gosudarstvennyy universitet)

TITLE: EPR in calcium, strontium, and barium fluoride crystals containing samarium

SOURCE: Zhurnal tekhnicheskoy fiziki, v. 36, no. 6, 1966, 1118-1120

TOPIC TAGS: EPR, calcium, strontium, barium, samarium, fluoride, single crystal, crystal growing, EPR spectrometry

ABSTRACT: The EPR spectra of CaF_2:Sm, SrF_2Sm, and BaF_2Sm crystals were investigated at 4.2 °K with an EPR spectrometer operating in the 3 and 10 cm wavelength regions. The crystals were grown under a variety of conditions, and both colorless crystals and crystals showing the characteristic tint due to the presence of Sm^{2+} ions were obtained. The only tetragonal Sm^{3+} centers observed in CaF_2:Sm were those with $g_{\parallel} = 0 \pm 0.6$ and $g_{\perp} = 0.823 \pm 0.003$. The tetragonal Sm^{3+} centers reported by M.J.Weber and R.W.Bierig (Phys.Rev., 134, No. 6A, 1492, 1964) and W. Lowe (Phys. Rev., 134, No. 6A, 1479, 1964) were not confirmed. In SrF_2:Sm there were observed tetragonal Sm^{3+} centers with $g_{\parallel} = 0 \pm 0.06$ and $g_{\perp} = 0.829 \pm 0.002$, and in the best samples it was possible to resolve the hyperfine structure due to the Sm isotopes. No resonances that could be ascribed to Sm^{3+} were observed in BaF_2:Sm, although many crystals grown under a wide variety of conditions were examined and resonances with g-factors as low as 0.2 or 0.3 would have

Card 1/2

APPROVED FOR RELEASE: 06/05/2000 CIA-RDP86-00513R000101720002-8"

"APPROVED FOR RELEASE: 06/05/2000 CIA-RDP86-00513R000101720002-8

L 41774-66

ACC NR: AP6018741

been detected. It is suggested that the absence of Sm^{3+} EPR in BaF_2:Sm may be due to the Sm^{3+} centers having trigonal rather than tetragonal symmetry in that host: in a cubic field the ground state Γ_8 quartet contains a nonresonating Kramers doublet that could be depressed to ground position by distortion of the field along the C_3 axis. It is suggested that there may be trigonal Sm^{3+} centers in CaF_2:Sm and SrF_2Sm also. Orig. art. has: 2 formulas and 1 figure.

SUB CODE: 20 / SUBM DATE: 16Jul65 / ORIG. REF: 003 / OTH REF: 005

Card 2/2

APPROVED FOR RELEASE: 06/05/2000 CIA-RDP86-00513R000101720002-8"

"APPROVED FOR RELEASE: 06/05/2000 CIA-RDP86-00513R000101720002-8

ACC NR: AP6030982 SOURCE CODE: UR/0181/66/008/009/2808/2809

AUTHOR: Antipin, A. A.; Kurkin, I. N.; Potkin, L. I.; Shokun, L. Ya.

ORG: Kazan State University im. V. I. Ul'yanov-Lenin (Kazanskiy gosudarstvennyy universitet)

TITLE: Paramagnetic resonance of Ce^{3+} and Yb^{3+} in $BaMoO_4$ single crystals

SOURCE: Fizika tverdogo tela, v. 8, no. 9, 1966, 2808-2809

TOPIC TAGS: EPR, cerium, ytterbium, barium compound, molybdate

ABSTRACT: EPR measurements of Ce^{3+} and Yb^{3+} were made at 4.2°K on $BaMoO_4$ single crystals, which have the most elongated cell of all crystals in the scheelite homologous series. The rare earth ion was present in the amount of 0.1% and entered chiefly into the composition of the tetragonal centers. The constants of the spin Hamiltonian of Ce^{3+} ion, determined at ~10 kMc, were found to be

$$Ce^{3+}\begin{cases} g_{\parallel} = 2.637 \pm 0.004; \\ g_{\perp} = 1.541 \pm 0.003. \end{cases}$$

For the Yb^{3+} ion, only one of the principal orientations, $H \perp z$, could be observed. The corresponding parameters of the spin Hamiltonian are

Card 1/2

APPROVED FOR RELEASE: 06/05/2000 CIA-RDP86-00513R000101720002-8"

"APPROVED FOR RELEASE: 06/05/2000 CIA-RDP86-00513R000101720002-8

ACC NR: AP6030982

$$Yb^{3+}\begin{cases} g_{\perp} = 3.91 \pm 0.01; \\ B^{171} = 3111 \pm 20 \text{ Mc} \\ B^{173} = 860 \pm 10 \text{ Mc} \end{cases}$$

As the H∥z orientation was approached, the lines broadened markedly, and for this reason the spectrum of Yb^{3+} at frequencies of ~9 and ~3 kMc could not be observed in this orientation. From the angular dependence of the spectrum it is concluded that

$$g_{\parallel} = 0.43 \pm 0.04.$$

SUB CODE: 20/ SUBM DATE: 07Apr66/ ORIG REF: 005/ OTH REF: 002

Card 2/2

APPROVED FOR RELEASE: 06/05/2000 CIA-RDP86-00513R000101720002-8"

"APPROVED FOR RELEASE: 06/05/2000 CIA-RDP86-00513R000101720002-8

ANTIPIN, A.N., inzh.

Specializing in construction of thermal power plants. Prom. stroi. 38 no.6:26-27 '60. (MIRA 13:7)
(Electric power plants)

APPROVED FOR RELEASE: 06/05/2000 CIA-RDP86-00513R000101720002-8"

"APPROVED FOR RELEASE: 06/05/2000 CIA-RDP86-00513R000101720002-8

ANTIPIN, A.N., inzh.

Organization of preparatory operations in the construction of Kazan thermal electric plant No.2. Energ. stroi. no.3:8-11 (13), 1960. (MIRA 14:9)

1. Upravleniye stroitel'stva Kazanskoy teploelektrotsentrali No.2.
(Kazan—Electric power plants)
(Foundations)

APPROVED FOR RELEASE: 06/05/2000 CIA-RDP86-00513R000101720002-8"

"APPROVED FOR RELEASE: 06/05/2000 CIA-RDP86-00513R000101720002-8

ANTIPIN, A.N., inzh.

Temporary supply of steam heat to the construction site of the Yaroslavl Thermal Electric Plant No. 3. Energ. stroi. no.20:147-149 '61. (MIRA 15:1)

1. Yartetsstroy.
(Yaroslavl Electric Power Plant--Steam heating)

APPROVED FOR RELEASE: 06/05/2000 CIA-RDP86-00513R000101720002-8"

"APPROVED FOR RELEASE: 06/05/2000 CIA-RDP86-00513R000101720002-8

ANTIPIN, A. N., inzh.

Some data concerning the utilization of fly ash from thermal electric plants in the United States (from foreign periodicals). Stroi. mat. 8 no.9:39-3 of cover S '62. (MIRA 15:10)

(United States--Fly ash)

APPROVED FOR RELEASE: 06/05/2000 CIA-RDP86-00513R000101720002-8"

"APPROVED FOR RELEASE: 06/05/2000 CIA-RDP86-00513R000101720002-8

ANTIPIN, A.N., inzh.

Features of the preparatory period and organization of the preparation of the building site of the Yaroslavl Thermal Electric Plant No.3. Energ. stroi. no.26:27-30 '61. (MIRA 15:7)

1. Stroitel'nyy uchastok Berezovovskoy gosudarstvennoy rayonnoy elektrostantsii.
(Yaroslavl Province—Electric power plants)

APPROVED FOR RELEASE: 06/05/2000 CIA-RDP86-00513R000101720002-8"

"APPROVED FOR RELEASE: 06/05/2000 CIA-RDP86-00513R000101720002-8

ANTIPIN, A.N., inzh.

The BK-1425 tower crane in construction of the main building of the Bereza State Regional Electric Power Plant. Energ. stroi. no.26:31-33 '61. (MIRA 15:7)

1. Stroitel'nyy uchastok Berezovskoy gosudarstvennoy rayonnoy elektrostantsii.
(Bereza—Electric power plants) (Cranes, derricks, etc.)

APPROVED FOR RELEASE: 06/05/2000 CIA-RDP86-00513R000101720002-8"

"APPROVED FOR RELEASE: 06/05/2000 CIA-RDP86-00513R000101720002-8

ANTIPIN, A.N., inzh.

Practices of thermal electric power stations in burning coal delivered from the mines in a mixture with water. Teploenergetika 9 no.11: 89-90 N '62. (MIRA 15:10)
(United States—Electric power stations—Fuel systems)
(Coal—Hydraulic conveying)

APPROVED FOR RELEASE: 06/05/2000 CIA-RDP86-00513R000101720002-8"

"APPROVED FOR RELEASE: 06/05/2000 CIA-RDP86-00513R000101720002-8

ANTIPIN, A.N., inzh.

Assembly of the main buildings of thermal electric plants using BK-1425 cranes. Mekh.stroi. 20 no.5:2-4 My '63.
(MIRA 16:4)

(Electric power plants--Design and construction)
(Cranes, derricks, etc.)

APPROVED FOR RELEASE: 06/05/2000 CIA-RDP86-00513R000101720002-8"

"APPROVED FOR RELEASE: 06/05/2000 CIA-RDP86-00513R000101720002-8

LYALIKOV, K.S.; GINZBURG, K.M.; ANTIPIN, A.V.

Role of potassium iodide in the process of the formation of photographic emulsions. Part 1. Silver iodobromide ammonia-free emulsions. Zhur. nauch. i prikl. fot. i kin. 8 no.2:101-105 Mr-Ap '63. (MIRA 16:3)

1. Laboratoriya aerometodov AN SSSR i Leningradskiy institut kinoinzhenerov.
(Photographic emulsions) (Potassium iodide)

APPROVED FOR RELEASE: 06/05/2000 CIA-RDP86-00513R000101720002-8"

"APPROVED FOR RELEASE: 06/05/2000 CIA-RDP86-00513R000101720002-8

ANTIPIN, D. N.

Antipin, D. N. and Yershov, V. S. "Academician Konstantin Ivanovich Skryabin", (The helminthologist, on the 40th anniversary of his scientific activity), Sbornik rabot po gel'mintologii (Vsesoyuz. in-t gel'mintologii im. akad. Skryabina), Moscow, 1948, p. 5-13, with portrait.

SO: U-3042, 11 March 53, (Letopis'nykh Statey, No. 10, 1949).

APPROVED FOR RELEASE: 06/05/2000 CIA-RDP86-00513R000101720002-8"

"APPROVED FOR RELEASE: 06/05/2000 CIA-RDP86-00513R000101720002-8

ANTIPIN, D. N.

Antipin, D. N. and Stepanova, Z. V. "A study of the clinical properties of 'paraskaridoz' in horses", Sbornik rabot po gel'mintologii (Vsesoyuz. in-t gel'mintologii im. akad. Skryabina), Moscow, 1948, p. 25-43, -Bibliog: 11 items.

SO: U-3042, 11 March 53, (Letopis'nykh Statey, No. 10, 1949).

APPROVED FOR RELEASE: 06/05/2000 CIA-RDP86-00513R000101720002-8"

"APPROVED FOR RELEASE: 06/05/2000 CIA-RDP86-00513R000101720002-8

ANTIPIN, D. N., Dr. of Vet. Sci.

All-Union Inst. of Helminthology named after Acad. K. I. Skriabin.

"Pasture prophylaxis of helminthous diseases of agricultrual animals."

SO: Veterinariia 25(4), 1948. p 36.

APPROVED FOR RELEASE: 06/05/2000 CIA-RDP86-00513R000101720002-8"

"APPROVED FOR RELEASE: 06/05/2000 CIA-RDP86-00513R000101720002-8

ANTIPIN, D. N.

"Annual Meeting of the All-Union Society of Helminthologists," Veterinariya, No 4, pp 52-57, Apr 51.

U-4722

APPROVED FOR RELEASE: 06/05/2000 CIA-RDP86-00513R000101720002-8"

"APPROVED FOR RELEASE: 06/05/2000 CIA-RDP86-00513R000101720002-8

ANTIPIN, D., & DOROGOV, A.

"Organization of Measures for the Fight Against Diseases of Animals."
Moscow. "The Moscow Worker." 1952. 25 pages Free 2,500 copies.
Contents of the Pamphlet:
D. ANTIPIN--"Orgainzation of Anti-helminthous Measures;
A. DOROGOV--"Utilization of the Preparation ASD in Veterinary Practice.

SO: Veterinariya, July 1952.

APPROVED FOR RELEASE: 06/05/2000 CIA-RDP86-00513R000101720002-8"

"APPROVED FOR RELEASE: 06/05/2000 CIA-RDP86-00513R000101720002-8

1. ANTIPIN, D. N.

2. USSR (600)

4. Veterinary Medicine

7. Helminthiasis in domestic animals. Veterinariia 30, No. 4, 1953.

9. Monthly List of Russian Accessions, Library of Congress, April 1953, Unclassified.

APPROVED FOR RELEASE: 06/05/2000 CIA-RDP86-00513R000101720002-8"

"APPROVED FOR RELEASE: 06/05/2000 CIA-RDP86-00513R000101720002-8

USSR/Medicine - Veterinary

Card 1/1

Author : Antipin, D. N.

Title : Veterinary congress in the Hungarian People's Republic

Periodical : Veterinariya, 6, 60-62, June 1954

Abstract : A conference, called by the Academy of Sciences of the Hungarian People's Republic, was held in Budapest on March 1-3, 1954. Representatives of the Soviet Union, Poland, Czechoslovakia Bulgaria and the German Democratic Republic participated in the discussions on sanitary and hygienic maintenance of farm animals, parasitic diseases, and the importance of hygiene and sanitation in the prevention of tuberculosis among animals. All speakers stressed the importance of sanitation and expounded the benefits derived from maintenance of farm animals under natural environmental conditions.

Institution :

Submitted :

APPROVED FOR RELEASE: 06/05/2000 CIA-RDP86-00513R000101720002-8"

"APPROVED FOR RELEASE: 06/05/2000 CIA-RDP86-00513R000101720002-8

SKRYABIN, K.I., akademik; ANTIPIN, D.N., redaktor; AUZAN, N.P., tekhnicheskiy redaktor.

[Trematodes of animals and humans; principles of trematode study] Trematody zhivotnykh i cheloveka; osnovy trematodologii. Moskva, Izd-vo Akademii nauk SSSR. Vol.9. 1954. 656 p. (MLRA 7:12)
(Trematode)

APPROVED FOR RELEASE: 06/05/2000 CIA-RDP86-00513R000101720002-8"

"APPROVED FOR RELEASE: 06/05/2000 CIA-RDP86-00513R000101720002-8

USSR/Medicine - Veterinary, Helminth Control
Card 1/1

Author : Antipin, D. N.

Title : News items on helminths in farm animals from material received by the editors

Periodical : Veterinariya, 31, 23-27, Apr 1954

Abstract : Contains several one-paragraph news items. The subjects discussed are as follows:

1. Seasonal dynamics of Dicrocoelium Lanceatum population and of Dictyocaulus and Moniezia populations;
2. Viability of Dicrocoelium Lanceatum;
3. Treatment of bronchopneumonia in sheep with ASD (Dorogov's antiseptic stimulant) and effectiveness of ASD against Dictyocaulus in sheep;
4. Treatment of macracanthorhynchus in swine with either tincture or decoction of ledum palustre;
5. Treatment of thelaziasis in cattle with iodine or lysol solutions;
6. Treatment of strongyliasis in horses with carbon tetrachloride;
7. Effectiveness of thymol in the treatment of dicroceliasis in sheep;
8. Treatment of Cestadiasis in dogs by feeding them squash seed paste; One correspondent suggests that incidence of paramphistomiasis has risen since 1948. Table; graphs; figures.

Institution :

Submitted :

APPROVED FOR RELEASE: 06/05/2000 CIA-RDP86-00513R000101720002-8"

"APPROVED FOR RELEASE: 06/05/2000 CIA-RDP86-00513R000101720002-8

ANTIPIN, D.N.

Veterinary Congress in the Hungarian People's Republic. Veterinariia 31 no.6:60-62 Je '54. (MLRA 7:6)

APPROVED FOR RELEASE: 06/05/2000 CIA-RDP86-00513R000101720002-8"

"APPROVED FOR RELEASE: 06/05/2000 CIA-RDP86-00513R000101720002-8

SKRYABIN,K.I., akademik, laureat Stalinskikh premii, zasluzhennyy deyatel' nauki; ANTIPIN,D.N., redaktor; SOMOROV,B.A., tekhnicheskiy redaktor

[Trematodes of animals and man; fundamentals of trematodology] Trematody zhivotnykh i cheloveka; osnovy trematodologii. Moskva, Izd-vo Akademii nauk SSSR. VOL 11. 1955. 751 p. (MLRA 9:2)
(TREMATODA)

APPROVED FOR RELEASE: 06/05/2000 CIA-RDP86-00513R000101720002-8"

"APPROVED FOR RELEASE: 06/05/2000 CIA-RDP86-00513R000101720002-8

ANTIPIN, D.N., professor.

Scientific and practical assistance to collective farms in the control of helminthiasis in domestic animals. Veterinariia 32 no.3:10-13 Mr '55. (MLRA 8:4)

1.Vsesoyuznyy institut gel'mintologii imeni akademika K.I. Skryabina.
(PARASITES--DOMESTIC ANIMALS) (WORMS, INTESTINAL AND PARASITIC)

APPROVED FOR RELEASE: 06/05/2000 CIA-RDP86-00513R000101720002-8"

"APPROVED FOR RELEASE: 06/05/2000 CIA-RDP86-00513R000101720002-8

ANTIPIN, D.N., professor.

How to put into practice the achievements displayed at the All-Union Agricultural Exhibition. Veterinariia 32 no.4:8 Ap '55. (MIRA 8:5)
(PARASITES--CATTLE) (VETERINARY MEDICINE)

APPROVED FOR RELEASE: 06/05/2000 CIA-RDP86-00513R000101720002-8"

"APPROVED FOR RELEASE: 06/05/2000 CIA-RDP86-00513R000101720002-8

ANTIPIN, D.M., doktor veterinarnykh nauk, professor; YERSHOV, V.S., doktor veterinarnykh nauk, professor; ZOLOTAREV, N.A., doktor veterinarnykh nauk, professor; SALYAYEV, V.A., doktor veterinarnykh nauk, professor; SOLOVEY, A.S., redaktor; VESKOVA, Ye.I., tekhnicheskiy redaktor

[Parasitology and festations of farm animals] Parazitologiia i invazionnye bolezni sel'skokhoziaistvennykh zhivotnykh. Pod red. V.S.Ershova. Moskva, Gos. izd-vo selkhoz. lit-ry, 1956. 478 p. (Parasites--Domestic animals) (MLRA 9:11)

APPROVED FOR RELEASE: 06/05/2000 CIA-RDP86-00513R000101720002-8"

"APPROVED FOR RELEASE: 06/05/2000 CIA-RDP86-00513R000101720002-8

BENEDIKTOV, I.A., redaktor; GRITSENKO, A.V., redaktor; IL'IN, M.A., zamestitel' glavnogo redaktora, LAPTEV, I.D., LISKUN, Ye.F.; LOBANOV, P.P., glavnyy redaktor; LYSENKO, T.D.; SKRYABIN, K.I.; STOLETOV, V.N.; PAVLOV, G.I., kandidat sel'skokhozyaystvennykh nauk, nauchnyy redaktor; SOKOLOV, N.S., professor, nauchnyy redaktor; ANTIPOV-KARATAYEV, I.N., doktor sel'skokhozyaystvennykh nauk, nauchnyy redaktor; KARPINSKIY, N.P., kandidat sel'skokhozyaystvennykh nauk, nauchnyy redaktor; SHESTAKOV, A.G., doktor sel'skokhozyaystvennykh nauk, professor, nauchnyy redaktor; RUBIN, B.A., doktor sel'skokhozyaystvennykh nauk, nauchnyy redaktor; KOMARNITSKIY, N.A., dotsent, nauchnyy redaktor; LYSENKO, T.D., akademik, nauchnyy redaktor; POLYAKOV, I.M., professor, nauchnyy redaktor; SHCHEGOLEV, V.N., doktor sel'skokhozyaystvennykh nauk, professor, nauchnyy redaktor; YAKUSHKIN, I.V., akademik, nauchnyy redaktor; LARIN, I.V., professor, doktor biologicheskikh nauk, nauchnyy redaktor; SMELOV, S.P., professor, doktor biologicheskiy nauk, nauchnyy redaktor; EDEL'SHTEYN, V.I., professor, doktor sel'skokhozyaystvennykh nauk, nauchnyy redaktor; SHCHERBACHEV, D.M., professor, doktor meditsinskikh nauk, nauchnyy redaktor; OGOLEVETS, G.S., kandidat sel'skokhozyaystvennykh nauk, nauchnyy redaktor; YAKOVLEV, P.N., akademik, nauchnyy redaktor; YAKIMOV, V.P., agronom, nauchnyy redaktor [deceased], KYTINOVA, G.P., professor, doktor sel'skokhozyaystvennykh nauk, nauchnyy redaktor; TIMOFEYEV, N.N., professor, nauchnyy redaktor; TUROV, S.I., professor, doktor biologicheskikh nauk; YUDIN, V.M., akademik, nauchnyy redaktor; LISKUN, Ye.F., akademik, nauchnyy redaktor; VITT, V.O., professor, doktor sel'skokhozyaystvennykh nauk, nauchnyy redaktor; KALININ, V.I., kandidat sel'skokhozyaystvennykh nauk, nauchnyy redaktor

(Continued on next card)

APPROVED FOR RELEASE: 06/05/2000 CIA-RDP86-00513R000101720002-8"

"APPROVED FOR RELEASE: 06/05/2000 CIA-RDP86-00513R000101720002-8

BENEDIKTOV, I.A.---- (continued) Card 2.
GREBEN', L.K., akademik, nauchnyy redaktor; NIKOLAYEV, A.I., professor, doktor sel'skokhozyaystvennykh nauk, nauchnyy redaktor; RED'KIN, A.P., professor, doktor sel'skokhozyaystvennykh nauk, nauchnyy redaktor; SMETNEV, S.I., professor, doktor sel'skokhozyaystvennykh nauk, nauchnyy redaktor; POPOV, I.S., professor, doktor sel'skokhozyaystvennykh nauk, nauchnyy redaktor; MANTEYFEL', P.A., professor nauchnyy redaktor; INIKHOV, G.S., professor, doktor khimicheskikh nauk, nauchnyy redaktor; ANFIMOV, A.N., professor, nauchnyy redaktor; GUBIN, A.F., professor, doktor sel'skokhozyaystvennykh nauk, nauchnyy redaktor; POLTEV, V.I., professor, doktor veterinarnykh nauk, nauchnyy redaktor; LINDE, V.V., professor, doktor tekhnicheskikh nauk, nauchnyy redaktor; CHERGAS, B.I., professor, doktor biologicheskikh nauk, nauchnyy redaktor; NIKOL'SKIY, G.V., professor, nauchnyy redaktor; AVTOKRATOV, D.M., professor, doktor veterinarnykh nauk, nauchnyy redaktor; IVANOV, S.V., professor, doktor biologicheskikh nauk, nauchnyy redaktor; VIKTOROV, K.P., professor, doktor veterinarnykh nauk, nauchnyy redaktor; KOLYAKOV, Ya.Ye., professor, doktor veterinarnykh nauk, nauchnyy redaktor; ANTIPIN, D.N., professor, doktor veterinarnykh nauk, nauchnyy redaktpr; MARKOV, A.A., professor, doktor veterinarnykh nauk, nauchnyy redaktor; DOMRACHEV, G.V., professor, doktor veterinarnykh nauk, nauchnyy redaktor· OLIVKOV, B.M., professor, doktor veterinarnykh nauk nauchnyy redaktor [deceased]; FLEGMATOV, N.A., professor, doktor veterinarnykh nauk, nauchnyy redaktor; BOLTINSKIY, V.N., professor, doktor tekhnicheskikh nauk, nauchnyy redaktor; VIL'YAMS, Vl.P., professor, doktor tekhnicheskikh nauk, nauchnyy redaktor; KRASNOV, V.S., kandidat tekhnicheskikh nauk, nauchnyy redaktor;

(Continued on next card)

APPROVED FOR RELEASE: 06/05/2000 CIA-RDP86-00513R000101720002-8"

"APPROVED FOR RELEASE: 06/05/2000 CIA-RDP86-00513R000101720002-8

BENEDIKTOV, I.A.---(continued) Card 3.

YEVREINOV, M.G., akademik, nauchnyy redaktor; SAZONOV, N.A., doktor tekhnicheskikh nauk, nauchnyy redaktor; NIKANDROV, B.I., inzhener, nauchnyy redaktor; KOSTYAKOV, A.N., akademik, nauchnyy redaktor; CHERKASOV, A.A., professor, doktor tekhnicheskikh nauk, nauchnyy redaktor; DAVITAYA, F.F., doktor sel'skokhozyaystvennykh nauk, nauchnyy redaktor; IVANOV, N.N., professor, doktor tekhnicheskikh nauk, nauchnyy redaktor; ORLOV, P.M., professor, doktor tekhnicheskikh nauk, nauchnyy redaktor, LOZA, G.M., kandidat ekonomicheskikh nauk, nauchnyy redaktor; CHERNOV, A.V., kontrol'nyy redaktor; ZAVARSKIY, A.I., redaktor; ROSSOSHANSKAYA, V.A., redaktor; FILATOVA, N.I., redaktor; YEMEL'YANOVA, N.I., redaktor; SILIN, V.S., redaktor BRANZBURG, A.Yu., redaktor; MAGNITSKIY, A.V., redaktor terminov; KUDRYAVTSEVA, A.G., redaktor terminov; AKSENOVA, A.P., mladshiy redaktor; MALYAVSKAYA, O.A., mladshiy redaktor; FEDOTOVA, A.F., tekhnicheskiy redaktor

(Continued on next card)

APPROVED FOR RELEASE: 06/05/2000 CIA-RDP86-00513R000101720002-8"

"APPROVED FOR RELEASE: 06/05/2000 CIA-RDP86-00513R000101720002-8

BENEDIKTOV, I.A.---(continued) Card 4.

[Agricultural encyclopedia] Sel'skokhoziaistvennaia entsikolopediia. Izd.3-e, perer. Moskva, Gos. izd-vo selkhoz. lit-ry. Vol.5. [T-IA.] 1956. 663 p. (MLRA 9:9)
(Agriculture—Dictionaries and encyclopedias)

APPROVED FOR RELEASE: 06/05/2000 CIA-RDP86-00513R000101720002-8"

"APPROVED FOR RELEASE: 06/05/2000 CIA-RDP86-00513R000101720002-8

ANTIPIN, D.M.

Materials of the scientific session of the All-Union Society of Helminthologists. Veterinariia 33 no.2:90-95 F '56. (MIRA 9:5)
(HELMINTHOLOGY)

APPROVED FOR RELEASE: 06/05/2000 CIA-RDP86-00513R000101720002-8"

"APPROVED FOR RELEASE: 06/05/2000 CIA-RDP86-00513R000101720002-8

ANTIPIN, D.N., professor.

Principles and methods of ridding farm animals of helminthiasis. Veterinariia 33 no.4:23-29 Ap '56. (MLRA 9:7)
(Veterinary medicine) (Worms, Intestinal and parasitic)

APPROVED FOR RELEASE: 06/05/2000 CIA-RDP86-00513R000101720002-8"

"APPROVED FOR RELEASE: 06/05/2000 CIA-RDP86-00513R000101720002-8

ANTIPIN, D.N.

Helminthiases of farm animals. Veterinariia 33 no.5:45-48 My '56. (MLRA 9:8)

(Worms, Intestinal and parasitic)
(Parasites--Domestic animals)

APPROVED FOR RELEASE: 06/05/2000 CIA-RDP86-00513R000101720002-8"

"APPROVED FOR RELEASE: 06/05/2000 CIA-RDP86-00513R000101720002-8

ANTIPIN, D.N., professor.

Measures for controlling helminths during the period when animals are kept in stalls. Veterinariia 33 no.11:8-10 N '56. (MLRA 9:11)
(Worms, intestinal and parasitic) (Veterinary medicine)

APPROVED FOR RELEASE: 06/05/2000 CIA-RDP86-00513R000101720002-8"

"APPROVED FOR RELEASE: 06/05/2000 CIA-RDP86-00513R000101720002-8

Antipin, D N

USSR/General Division. Congresses. Sessions. Conferences. A-4

Abs Jour : Ref Zhur-Biologiya, No 2, 1958, 4696

Author : D. N. Antipin
Inst :
Title : On the Results of the Third Zonal International Conference of the Countries of Asia on the Problems of Veterinary Sciences.

Orig Pub : Vestn. s.-kh. nauki, 1957, No 5, 154-157

Abstract : A conference organized by the international epizootic bureau and "FAO", were held 24 Nov. to 1 December 1956 in Tokio (Japan). A brief survey of the reports on problems of the control of infections in animal husbandry of the countries of Asia (diseases of fowl, foot and mouth desease, plague of cattle, hemorrhaging septicemia) as well as data on the scientific research and production establishments of veterinary sciences and animal husbandry in Japan is given

Card 1/1

APPROVED FOR RELEASE: 06/05/2000 CIA-RDP86-00513R000101720002-8"

"APPROVED FOR RELEASE: 06/05/2000 CIA-RDP86-00513R000101720002-8

ANTIPIN, D.N., referent

Helminth infestations of farm animals. Veterinariia 35 no.5:80-83 My '58. (MIRA 12:1)

(Worms, Intestinal and parasitic)
(Veterinary parasitology)

APPROVED FOR RELEASE: 06/05/2000 CIA-RDP86-00513R000101720002-8"

"APPROVED FOR RELEASE: 06/05/2000 CIA-RDP86-00513R000101720002-8

ANTIPIN, D.N.

[Parasitology and invasive diseases of farm animals] Parazitologiia i invazionnye bolezni sel'skokhoziaistvennykh zhivotnykh. Izd.2., ispr. i dop. Moskva, Gos.izd-vo sel'khoz.lit-ry, 1959. 491 p. (MIRA 13:7)

(Parasites--Domestic animals)

APPROVED FOR RELEASE: 06/05/2000 CIA-RDP86-00513R000101720002-8"

"APPROVED FOR RELEASE: 06/05/2000 CIA-RDP86-00513R000101720002-8

ANTIPIN, D.N.

Helminthiasis in farm animals. Veterinariia 36 no.6:41-44 Je '59. (MIRA 12:10)

(Worms, Intestinal and parasitic)

APPROVED FOR RELEASE: 06/05/2000 CIA-RDP86-00513R000101720002-8"

"APPROVED FOR RELEASE: 06/05/2000 CIA-RDP86-00513R000101720002-8

ANTIPIN, D.N., glavnyy veterinarnyy vrach, Yartsevskiy rayon, Smolenskoy oblasti.

Helminthological work. Veterinatiia 37 no.4:55-59 Ap'60. (MIRA16:6)

(WORMS, INTESTINAL AND PARASITIC)

(SOBOLEV, A.S.) (MUSIENKO, I.) (BUROV, G.A.) (SHMAKOV, V.T.) (MERONOV, V.I.) (VOITENKO, D.D.) (GEVEDZE) (YAMOV, V.Z.) (PASKAL'SKAIA, M.IU) (EVTUSHENKO, IU.L.) (BRIGINETS, G.N.) (NOVIKOV, I.K.) (MOZGOVOY, A.A.) (BISHAEVA, L.K.) (PANCHENKO) (GOLYSHKINA, K.K.) (IL'IN, M.M.) (GERASIMOVA, G.N.) IUDIN, A.M.) (TRET'IAKOVA, O.N.) (PAVLOV. P.I.) (ZHIDKOV, A.E.)

(WORMS, INTESTINAL AND PARASITIC)

APPROVED FOR RELEASE: 06/05/2000 CIA-RDP86-00513R000101720002-8"

"APPROVED FOR RELEASE: 06/05/2000 CIA-RDP86-00513R000101720002-8

ANTIPIN, D. N. (Professor, VIGIS).

"Eradication of helminthiasis guarantees the increase of animal husbandry products."

Veterinariya, Vol. 38, No. 4, 1961, p. 28.

APPROVED FOR RELEASE: 06/05/2000 CIA-RDP86-00513R000101720002-8"

"APPROVED FOR RELEASE: 06/05/2000 CIA-RDP86-00513R000101720002-8

ANTIPIN, D.N., prof.

Extermination of helminths as a possibility for increasing animal husbandry production. Veterinariia 38 no.4:28-31 Ap '61 (MIRA 18:1)

1. Vsesoyuznyy institut gel'mintologii imeni akademika K.I. Skryabina.

APPROVED FOR RELEASE: 06/05/2000 CIA-RDP86-00513R000101720002-8"

"APPROVED FOR RELEASE: 06/05/2000 CIA-RDP86-00513R000101720002-8

ANTIPIN, D. N., (Reviewer)

Survey of helminthological work, according to the materials, received at the Editorial Office. Review of 18 articles

Veterinariya Vol. 38, no. 7, July 1961 p. 55.

APPROVED FOR RELEASE: 06/05/2000 CIA-RDP86-00513R000101720002-8"

"APPROVED FOR RELEASE: 06/05/2000 CIA-RDP86-00513R000101720002-8

SKRYABIN, Konstantin Ivanovich, Laureat Leninskoy i Gosudarstvennykh premiy Geroy Sotsialisticheskogo Truda, akademik; ANTIPIN, D.N.; SUDARIKOV, V.Ye.; MOZGOVOY, A.A., red. izd-va; LAUT, V.G., tekhn. red.

[Trematodes of animals and man; principles of the study of Trematodes] Trematody zhivotnykh i cheloveka; osnovy trematodologii. Izd-vo Akad. nauk SSSR. Vol.19. 1961. 471 p. (MIRA 15:2)

(Trematoda)

APPROVED FOR RELEASE: 06/05/2000 CIA-RDP86-00513R000101720002-8"

"APPROVED FOR RELEASE: 06/05/2000 CIA-RDP86-00513R000101720002-8

SKRYABIN, Konstantin Ivanovich, akademik, Geroy Sotsialisticheskogo Truda, laureat Leninskoy i Gosudarstvennykh premiy; Prinimali uchastiye: GUSHANSKAYA, L.Kh.; ANTIPIN, D.N.; GUSHANSKAYA, L.Kh., red. izd-va; MOZGOVOY, A.A., red. izd-va; YEPIFANOVA, L.V., tekhn. red.; LAUR, V.G., tekhn. red.

[Trematodes of animals and man; principles of trematodology] Trematody zhivotnykh i cheloveka; osnovy trematodologii. Moskva, Izd-vo Akad. nauk SSSR. Vol.20 1962. 563 p. (MIRA 15:9)

(Termatoda)

APPROVED FOR RELEASE: 06/05/2000 CIA-RDP86-00513R000101720002-8"

"APPROVED FOR RELEASE: 06/05/2000 CIA-RDP86-00513R000101720002-8

ANTIPIN, D.N., prof.

Present state of the treatment of animals affected with helminthiasis. Veterinariia no.12:20-22 D '63. (MIRA 17:2)

1. Vsesoyuznyy institut gel'mintologii imeni akademika K.I.Skryabina.

APPROVED FOR RELEASE: 06/05/2000 CIA-RDP86-00513R000101720002-8"

"APPROVED FOR RELEASE: 06/05/2000 CIA-RDP86-00513R000101720002-8

ANTIPIN, D.N.

Work in the field of helminthology. Veterinariia 40 no.4: 42-48 Ap '63. (MIRA 17:1)

APPROVED FOR RELEASE: 06/05/2000 CIA-RDP86-00513R000101720002-8"

"APPROVED FOR RELEASE: 06/05/2000 CIA-RDP86-00513R000101720002-8

ANTIPIN, D.N.; YERSHOV, V.S., prof.; ZOLOTAREV, N.A.; SALYAYEV, V.A.; DREVLYANSKAYA, N.I., red.

[Parasitology and invasive diseases of agricultural animals] Parazitologiia i invazionnye bolezni sel'skokhoziaistvennykh zhivotnykh. [By] D.N.Antipin i dr. Moskva, Izd-vo "Kolos" 1964. 494 p. (MIRA 17:7)

APPROVED FOR RELEASE: 06/05/2000 CIA-RDP86-00513R000101720002-8"

"APPROVED FOR RELEASE: 06/05/2000 CIA-RDP86-00513R000101720002-8

ANTIPIN, D.N., prof.

Practices in helminthology. Veterinariia 41 no.4:49-53 Ap '65. (MIRA 18:6)

APPROVED FOR RELEASE: 06/05/2000 CIA-RDP86-00513R000101720002-8"

"APPROVED FOR RELEASE: 06/05/2000 CIA-RDP86-00513R000101720002-8

ANTIPIN, G.

Organization of dispatch service in machine-tractor stations. Tr. from the Russian. p. 63.
MECHANIZACE ZEMEDELSTVI, Praha, Vol. 5, no. 4, Feb. 1955.

SO: Monthly List of East European Accessions, (EEAL), LC, Vol. 4, no. 10, Oct. 1955, Uncl.

APPROVED FOR RELEASE: 06/05/2000 CIA-RDP86-00513R000101720002-8"

"APPROVED FOR RELEASE: 06/05/2000 CIA-RDP86-00513R000101720002-8

SPASSKIY, Vladislav Akimovich, polkovnik med. sluzhby, prof.; ARKAYEV, Viktor Alekseyevich, polkovnik, med. sluzhby, dots.; Prinimali uchastiye: ANTIPIN, G.M., podpolkovnik med. sluzhby; POLYAKOV, V.I., podpolkovnik med. sluzhby; PAKHOMOV, V.I., polkovnik med. sluzhby, red.; CHAPAYEVA, R.I., tekhn. red.

[Military hygiene] Voennaia gigiena. Izd.2., perer. i dop. Moskva, Voenizdat, 1962. 167 p. (MIRA 15:8)
(Military hygiene)

APPROVED FOR RELEASE: 06/05/2000 CIA-RDP86-00513R000101720002-8"

"APPROVED FOR RELEASE: 06/05/2000 CIA-RDP86-00513R000101720002-8

ANTIPIN, G.V., mashinist elektrovoza, Gerey Sotsialisticheskogo Truda; BELIKOV, I.I., elektromonter; PRESNYAKOV, I.R., Gerey Sotsialiticheskogo Truda; DENISKIN, A.I., mashinist-instruktor; MAMONIN, N.I., tokar'-ratsionalizator; KAZACHEK, I.K.; CHEN KHUA-DIN [Ch'eng Hua-ting]; U FYN [Wu Fêng]; LYU I [Liu I]; YAN CHAO [Yang Ch'ao]; TIKHMENEV, B.N., doktor tekhnicheskikh; ZABRODIN, [illegible], inzh. (g.Parizh); [illegible], inzh.; PIVOVAROV, G.I.

A feat which will live forever. Elek. i tepl. tiaga 5 no.5:1-3 My '61. (MIRA 14:7)

1. Depo Krasnoyarsk (for Antipin). 2. Omskaya distantsiya kontaktnoy seti (for Belikov). 3. Master avtomatnogo tsekha depo Liski (for Presnyakov). 4. Lokomotivnoye depo Orenburg, rukovoditel' kolonny teplovozov imeni XXII s"yezda partii (for Deniskin). 5. Instrumental'nyy tsekh kommunisticheskogo truda lokomotivnogo depo Kuybyshev (for Mamonin). 6. Literaturnyy sotrudnik gazety "Kuybyshevskiy zheleznodorozhnik" (for Kazachek). 7. Moskovskiy institut inzhenerov transporta (for Chen Hua-din, U Fyn, Lyu I, Yan Chao). 8. Rukovoditel' laboratorii peremennogo toka Vsesoyuznogo nauchno-issledovatel'skogo instituta zheleznodorozhnogo transporta Ministerstva putey soobshcheniya (for Tikhmenev). 8. Nachal'nik depo Leningrad-Baltiyskiy (for Pivovarov).

(Astronautics)

APPROVED FOR RELEASE: 06/05/2000 CIA-RDP86-00513R000101720002-8"

"APPROVED FOR RELEASE: 06/05/2000 CIA-RDP86-00513R000101720002-8

ANTIPIN, I.G.

Young technicians' club in the school at Raevka Station. Fiz.v shkole no.6: '53. (MLRA 6:10)

1. Gorod Ufa, Dorpedkabinet Ufimskoy zheleznoy dorogi.
(Raevka--Science clubs) (Science clubs--Raevka)

APPROVED FOR RELEASE: 06/05/2000 CIA-RDP86-00513R000101720002-8"

"APPROVED FOR RELEASE: 06/05/2000 CIA-RDP86-00513R000101720002-8

ANTIPIN, I.G.

Methodical work with physics teachers. Fiz.v shkole 14 no.2:66-68 Mr-Ap '54. (MLRA 7:2)

1. Gorod Ufa, Dorpedkabinet Ufimskoy zheleznoy dorogi. (Physics--Study and teaching)

APPROVED FOR RELEASE: 06/05/2000 CIA-RDP86-00513R000101720002-8"

"APPROVED FOR RELEASE: 06/05/2000 CIA-RDP86-00513R000101720002-8

AUTHOR: Antipin, I.G. (Buguruslan, Orenburg Oblast') 47-58-2-29/30

TITLE: Seminar on Electro-Engineering (Seminar po elektrotekhnike)

PERIODICAL: Fizika v Shkole, 1958, Nr 2, p 95 (USSR)

ABSTRACT: This is a description of a 4-day seminar which took place at Buguruslan school. Its aim was to show how to equip a physics laboratory for schools with limited means. The school received many electrical measuring appliances from various plants of the region. Most of these appliances are out of order, and the teachers taking part in the seminar repaired or transformed them. They will be used again for various school demonstrations.

AVAILABLE: Library of Congress

Card 1/1

1. Electrical engineering-Study and teaching 2. Laboratory equipment 3. Physics-Study and teaching

APPROVED FOR RELEASE: 06/05/2000 CIA-RDP86-00513R000101720002-8"

"APPROVED FOR RELEASE: 06/05/2000 CIA-RDP86-00513R000101720002-8

KIRENSKIY, L.V.; SAVCHENKO, M.K.; DEGTYAREV, I.F.; KAN, S.V.; ANTIPIN, I.P.; TROPIN, Yu.D.; EBEL'MAN, I.S.

Domain structure of ferromagnetic crystals, films, and "whiskers" and its variation under various influence. Izv. AN SSSR. Ser. fiz. 28 no. 3:559-567 Mr '64. (MIRA 17:5)

1. Institut fiziki Sibirskogo otdeleniya AN SSSR i Krasnoyarskiy pedagogicheskiy institut.

APPROVED FOR RELEASE: 06/05/2000 CIA-RDP86-00513R000101720002-8"

"APPROVED FOR RELEASE: 06/05/2000 CIA-RDP86-00513R000101720002-8

CHERNIGOVSKIY, I.P.; ANTIPIN, K.I.; BISEROV, M.P., red.

[Masters of deep-sea mining with snurrevards from Ust'-Kamchatsk] Ust'-kamchatskie mastera glubokovodnogo sniurrevodnogo lova. Petropavlovsk-Kamchatskii, Knizhnaia red. "Kamchatskoi pravdy," 1963. 20 p. (MIRA 17:5)

APPROVED FOR RELEASE: 06/05/2000 CIA-RDP86-00513R000101720002-8"

"APPROVED FOR RELEASE: 06/05/2000 CIA-RDP86-00513R000101720002-8

ACCESSION NR: AP4039408 S/0070/64/009/003/0429/0432

AUTHORS: Antipin, I. P.; Kirenskiy, L. V.; Savchenko, M. K.

TITLE: The domain structure of nickel crystals, associated with mechanical deformations

SOURCE: Kristallografiya, v. 9, no. 3, 1964, 429-432

TOPIC TAGS: nickel, domain structure, domain reorganization, powder method, magnetization, plastic deformation, reorganization irreversibility

ABSTRACT: In nickel, in view of the large increase of magneto-stricture and the small anisotropic constant associated with an increase in stress, a significant reorganization of the domain structure takes place. The existence of 71 and 109 degree spatial relationships of the domains determines the unique character of this reorientation. The nickel samples used here were parallelepipeds with a maximum grain diameter of 4 mm selected from a list of electrolytic nickel. The crystals were chosen with surfaces lying on or near to the (211) and (110) planes, in accordance with the criterion of M. Yamamoto and T. Iwata (Sci. Repts Res Inst. Tohoku Univ. A5, 433, 1958; A8, 293, 1956). Observations were made by the powder method. All stresses were unidirectional. Four sets of pictures showed the

Card 1/2

APPROVED FOR RELEASE: 06/05/2000 CIA-RDP86-00513R000101720002-8"

"APPROVED FOR RELEASE: 06/05/2000 CIA-RDP86-00513R000101720002-8

ACCESSION NR: AP4039408

disappearance of domain structure under stress and its failure to reappear when the load was removed. Two sets of pictures dealt with the (211) plane which has one axis of simple magnetization along which the domain structure lay. Stress was applied parallel to the domain boundary line in one case and perpendicular in another. The other two sets of pictures dealt with the (110) plane in which there are two directions of simple magnetization lying at 71 or 109 degrees to each other. Stress, in this case, produced at first dendritic domain structures when applied perpendicular to the original domain. The domain structure in nickel crystals is very sensitive to mechanical stress. The distinctive property of the domain structure is its irreversibility. Even after the action of very small stresses (less than 0.01 kg/mm^2), the domain structure did not return to its initial state. The irreversibility was explained by plastic deformation which probably could not be observed except by the powder method. Orig. art. has: 4 figures.

ASSOCIATION: Institut fiziki SO AN SSSR (Institute of Physics, SO AN SSSR)

SUBMITTED: 17Jul63 DATE ACQ: 18Jun64 ENCL: 00

SUB CODE: MM NO REF SOV: 001 OTHER: 001

Card 2/2

APPROVED FOR RELEASE: 06/05/2000 CIA-RDP86-00513R000101720002-8"

"APPROVED FOR RELEASE: 06/05/2000 CIA-RDP86-00513R000101720002-8

ACCESSION NR: AP4023407 S/0048/64/028/003/0559/0567

AUTHOR: Kirenskiy, L.V.; Savchenko, M.K.; Degtyarev, I.F.; Kan, S.V.; Antipin, I.P.; Tropin, Yu.D.; Edel'man, I.S.

TITLE: Domain structure of ferromagnetic crystals, films, and whiskers, and changes of the structure under the influence of different factors [Report, Symposium on Ferromagnetism and Ferroelectricity held in Leningrad 30 May to 5 June 1963]

SOURCE: AN SSSR. Izvestiya. Seriya fizicheskaya, v.28, no.3, 1964, 559-567

TOPIC TAGS: crystal domain structure, film domain structure, whisker domain structure, domain structure variation, demagnetization condition domain influence, iron crystal domains, iron film asymmetric hysteresis, iron whisker domain

ABSTRACT: This paper summarizes a large amount of information concerning the domain structure of crystals, films, and whiskers, and its change under the influence of magnetizing fields, stress, temperature, and conditions of demagnetization. The topics discussed include the changes in the domain structure of silicon iron crystals during magnetization in various directions; the effect of mechanical stress on the domain structure of silicon iron crystals; the influence of mechanical stress

Card 1/3

APPROVED FOR RELEASE: 06/05/2000 CIA-RDP86-00513R000101720002-8"

"APPROVED FOR RELEASE: 06/05/2000 CIA-RDP86-00513R000101720002-8

ACCESSION NR: AP4023407

on the domain structure in the (110) and (211) faces of nickel crystals; the effect of demagnetization rate on domain size in thin cobalt films; the effect of temperature on the variation of domain structure under the influence of magnetizing fields in thin cobalt films; the variations of domain structure in thin iron films during traversal of an asymmetric hysteresis loop in a transverse field; and the domain structure on the (001) surface of iron whiskers (100 to 200 micron diameter) grown in the [110] direction. The report is illustrated with 47 reproductions of domain structure photographs. Among the different kinds of behavior of domain structure mentioned or discussed are the following. When iron crystals are magnetized in the easy direction, the process of domain wall motion stops short of saturation, and the remaining narrow unfavored domains disappear suddenly. When the magnetizing field makes a sufficiently great angle with the preferred magnetization direction, initial magnetization takes place by domain wall shift; this is followed by a restructuring of the domains, after which further wall shifting occurs. The final approach to saturation is by ordinary rotation. The herring bone or fir tree domain structure on the (110) face of nickel crystals gives way under the influence of mechanical stress to a simple structure. At greater stresses the domains disappear entirely. At still greater stresses a simple domain structure reappears, but the domains are now relat-

Card 2/3

APPROVED FOR RELEASE: 06/05/2000 CIA-RDP86-00513R000101720002-8"

"APPROVED FOR RELEASE: 06/05/2000 CIA-RDP86-00513R000101720002-8

ACCESSION NR: AP4023407

ed to the other magnetization axis. The net result is thus a 109° rotation of the domains. The size of the domains in cobalt films increases with the rate of demagnetization by alternating field. This is related to the formation of wedge shaped domains, one within another. When a thin cobalt film is cooled from above the Curie point in a field free environment, an equilibrium domain structure is not formed. The domain structure of a thin iron film was found to change largely by wall shift during traversal of an asymmetric hysteresis loop in the presence of a constant transverse field. This is not in accord with the explanation of these asymmetric hysteresis loops given by V.V.Kobelev (Petli gisterezisa odnoosny*kh ferromagnitny*kh plenok. ITM i VT AN SSSR,M.,1961) on the basis of a model in which the magnetization was assumed to rotate uniformly. Orig.art.has: 9 figures.

ASSOCIATION: Institut fiziki Sibirskogo otdeleniya Akademii nauk SSSR(Institute of Physics, Siberian Division, Academy of Sciences,SSSR); Krasnoyarskiy pedagogicheskiy institut (Krasnoyarsk Pedagogical Institute)

SUBMITTED: 00 DATE ACQ: 10Apr64 ENCL: 00

SUB CODE: PH NR REF SOV: 005 OTHER: 003

Card 3/3

APPROVED FOR RELEASE: 06/05/2000 CIA-RDP86-00513R000101720002-8"

"APPROVED FOR RELEASE: 06/05/2000 CIA-RDP86-00513R000101720002-8

TOPIC TAGS

APPROVED FOR RELEASE: 06/05/2000 CIA-RDP86-00513R000101720002-8"

"APPROVED FOR RELEASE: 06/05/2000 CIA-RDP86-00513R000101720002-8

APPROVED FOR RELEASE: 06/05/2000 CIA-RDP86-00513R000101720002-8"

"APPROVED FOR RELEASE: 06/05/2000 CIA-RDP86-00513R000101720002-8

ANTIPIN, I.P.; KIRENSKIY, L.V.; SAVCHENKO, M.K.

Domain structure of mechanically deformed nickel crystals.
Kristallografiia 9 no.3:429-432 My-Je '64. (MIRA 17:6)

1. Institut fiziki Sibirskogo otdeleniya AN SSSR.

APPROVED FOR RELEASE: 06/05/2000 CIA-RDP86-00513R000101720002-8"

"APPROVED FOR RELEASE: 06/05/2000 CIA-RDP86-00513R000101720002-8

ANTIPIN, I.P.; SAVCHENKO, M.K.

Domain structure of nickel during magnetization. Fiz. met. i metalloved. 18 no.6:832-839 D '64.

(MIRA 18:3)

1. Institut fiziki Sibirskogo otdeleniya AN SSSR.

APPROVED FOR RELEASE: 06/05/2000 CIA-RDP86-00513R000101720002-8"

"APPROVED FOR RELEASE: 06/05/2000 CIA-RDP86-00513R000101720002-8

APPROVED FOR RELEASE: 06/05/2000 CIA-RDP86-00513R000101720002-8"

"APPROVED FOR RELEASE: 06/05/2000 CIA-RDP86-00513R000101720002-8

domain structure under stress occurs, the hysteresis loop also remains the same.

APPROVED FOR RELEASE: 06/05/2000 CIA-RDP86-00513R000101720002-8"

"APPROVED FOR RELEASE: 06/05/2000 CIA-RDP86-00513R000101720002-8

APPROVED FOR RELEASE: 06/05/2000 CIA-RDP86-00513R000101720002-8"

"APPROVED FOR RELEASE: 06/05/2000 CIA-RDP86-00513R000101720002-8

L 15374-66 EWT(m)/T/EWP(t)/EWP(b) IJP(c) JD

ACC NR: AP6004465 SOURCE CODE: UR/0048/66/030/001/0046/0049

37

B

AUTHOR: Kirenskiy, L.V.; Pyn'ko, V.G.; Antinin, I.P.

ORG: Institute of Physics, Siberian Section of the Academy of Sciences, SSSR (Institut fiziki Sibirskogo otdeleniya Akademii nauk SSSR); Krasnoyarsk State Pedagogical Institute (Krasnoyarskiy gosucarstvennyy pedagogicheskiy institut)

TITLE: Domain structure of epitaxial iron films /Transactions of the Second All-Union Symposium on the Physics of Thin Ferromagnetic Films held at Irkutsk 10 July to 15 July 1964/

SOURCE: AN SSSR, Izvestiya, Seriya fizicheskaya, v.30, no. 1, 1966, 46-49

TOPIC TAGS: ferromagnetic film, magnetic thin film, iron, epitaxial growth, sodium chloride, magnetic domain structure

ABSTRACT: The domain structure of 600 to 1000 Å epitaxial iron films vacuum deposited on NaCl substrates was investigated by electron microscopy and by the powder pattern technique. The growth and crystal structure of the films are discussed elsewhere by V.G.Pyn'ko and R.V.Sukhanova (Izv. AN SSSR, Ser. fiz., 30, 43 (1966)/ see Abstract AP6004464/). The films were transferred in water from the NaCl substrate to glass for examination by the powder pattern technique or to 50 x 50 μ grids for examination with the electron microscope. The films could be roughly classified into three types: 1) fully oriented films with the (001) plane in the plane of the film; 2) films with

Card 1/2

APPROVED FOR RELEASE: 06/05/2000 CIA-RDP86-00513R000101720002-8"

"APPROVED FOR RELEASE: 06/05/2000 CIA-RDP86-00513R000101720002-8

L 15374-66

ACC NR: AP6004465

crystallites oriented in two or three different ways with the (001) face in the film parallel to the (001) face of the substrate and the [100] axis in the film parallel to the [110] or the [100] axis in the substrate, or with the (110) face in the film parallel to the (100) face in the substrate and the [100] axis in the film parallel to the [100] axis in the substrate; and 3) films containing a large number of randomly oriented crystallites. It was very difficult to obtain a checkerboard domain structure in type 1) films; under the influence of an ac field there usually appeared large rectangles or squares of different sizes. A regular checkerboard structure was obtained in type 2) and 3) films, but the "squares" were rectangular. These checkerboard structures developed in two stages, the domain walls perpendicular to the ac field forming first. Type 1) films initially had a fine domain structure with 180° and modified 90° walls; type 2) films regularly had an initial mottled domain structure; the initial domain structure of type 3) films was like that of type 1) or type 2) films, depending on the substrate temperature and deposition rate. After demagnetization the domains of type 3) films always showed substructure and those of type 1) films did not. The 180° domain walls were continuous except those in type 3) films containing a large number of randomly oriented crystallites. It is concluded that substructure in epitaxial films is associated with anisotropy dispersion, and that 180° domain walls in epitaxial iron films always have an internal structure which, however, may not appear in the electron microscope image. It was not possible to observe the domain structure of the 600 A films. Orig. art. has: 4 figures.

SUB CODE: 20 SUBM DATE: 00 ORIG. REF: 002 OTH REF: 008

Card 2/2

APPROVED FOR RELEASE: 06/05/2000 CIA-RDP86-00513R000101720002-8"

"APPROVED FOR RELEASE: 06/05/2000 CIA-RDP86-00513R000101720002-8

ANTIPIN, L., insh.; KOLPAKOV, A., insh.

Polymers grown by aluminum. IUn.Tekh. 4 no.5:22-26 My '60. (MIRA 13:7)
(Polyethylene) (Aluminum organic compounds)

APPROVED FOR RELEASE: 06/05/2000 CIA-RDP86-00513R000101720002-8"

"APPROVED FOR RELEASE: 06/05/2000 CIA-RDP86-00513R000101720002-8

ZHIGACH, A.F.; POPOV, A.F.; VISHNEVSKIY, L.D.; ANTIPIN, L.M.

Direct synthesis of triisobutyl aluminum. Khim.prom. no.1:24-26 Ja '62. (MIRA 15:1)

(Aluminum organic compounds)

APPROVED FOR RELEASE: 06/05/2000 CIA-RDP86-00513R000101720002-8"

"APPROVED FOR RELEASE: 06/05/2000 CIA-RDP86-00513R000101720002-8

33440

11.2223 also 2209
11.1250

S/064/62/000/001/003/008
B110/B138

AUTHORS: Zhigach, A. F., Popov, A. F., Vishnevskiy, L. D., Antipin, L. M.

TITLE: Direct synthesis of triisobutyl aluminum

PERIODICAL: Khimicheskaya promyshlennost', no. 1, 1962, 24 - 26

TEXT: Triisobutyl aluminum (I) was directly synthesized according to

$$Al + 2Al(i\text{-}C_4H_9)_3 + 1^1/_2H_2 \rightarrow 3AlH(i\text{-}C_4H_9)_2$$
$$3AlH(i\text{-}C_4H_9)_2 + 3CH_2{=}CH(CH_3)_2 \rightarrow 3Al(i\text{-}C_4H_9)_3$$
$$Al + 1^1/_2H_2 + 3CH_2{=}CH(CH_3)_2 \rightarrow Al(i\text{-}C_4H_9)_3$$

As isobutylene hardly reacts with I, the reaction can take place in one stage. It has been achieved by L. I. Zakharkin, O. Yu. Okhlubystin and V. V. Gavrilenko (Ref. 4: Izv. AN SSSR, OKhN, 100, (1957)) at 130 - 140°C and 150 atm with almost quantitative Al conversion and by other investigators at various temperatures and with lower yield. The authors studied the effect of pressure and temperature on Al conversion, output,

Card 1/3

APPROVED FOR RELEASE: 06/05/2000 CIA-RDP86-00513R000101720002-8"

"APPROVED FOR RELEASE: 06/05/2000 CIA-RDP86-00513R000101720002-8

33440

S/064/62/000/001/003/008

Direct synthesis of triisobutyl... B110/B138

and optimum reaction conditions. They used Al powder type PAK-3 (PAK-3) (GOST 5194-50 (GOST 5194-50)) ground for 50 hrs in an M-10 (M-10) vibratory mill, isobutylene (II) (0.001% by weight of aldehyde, 0.045% by weight of isobutyl alcohol), and rubber solvent spirit GOST 443-56 (GOST 443-56). An Al solvent spirit suspension, I, and II were synthesized in a rotating (2 rpm) 2.5-liter autoclave at 80 - 165°C with H_2 passing through, until the pressure ceased to drop. Al conversion increased with the temperature. At low temperatures, the synthesis took 1.5 - 3.5 hrs with Al conversion <50%. Al conversion increased from 33.2 to 71.0% with H_2 pressure rising from 31 to 60 atm, reaction time decreased from 10 - 3.3 hrs, and the output increased from 7.4 to 78.3 g/kg·hr. Further pressure increase caused no more changes; so 50 - 60 atm is taken as the optimum. 0.41 - 0.57 kg of finely dispersed, active, ground Al in the solvent, 0.35 - 0.36 kg of I dissolved in 1 - 2 kg of solvent, and 3 - 4 kg of II were put into autoclave 3 and stirred under an H_2 pressure of 40 - 60 atm at 140 - 150°C. Maximum H_2 absorption (4 liter/min) was observed after 1 hr. After absorption, residual H_2 and II were passed through 4, and II was condensed.

Card 2/[illegible]

APPROVED FOR RELEASE: 06/05/2000 CIA-RDP86-00513R000101720002-8"

"APPROVED FOR RELEASE: 06/05/2000 CIA-RDP86-00513R000101720002-8

33440

S/064/62/000/001/003/008
B110/B138

Direct synthesis of triisobutyl...

The reaction mass was passed into centrifuge 6 via 5. Average Al conversion was 81.9%, and the consumption of raw material somewhat exceeded stoichiometric amounts. There are 2 figures, 3 tables, and 9 references: 5 Soviet-bloc and 4 non-Soviet-bloc.

Fig. 1. Flow sheet for triisobutyl aluminum production.
Legend: (1) vibratory mill; (2) and (5) portable vessels; (3) reaction vessel; (4) cooler; (6) centrifuge; (7) collector for triisobutyl aluminum solution; (a) nitrogen; (b) aluminum; (c) benzine; (d) hydrogen; (e) heat-transferring medium; (f) isobutylene; (g) ammonia; (h) slime; (i) isobutylene solution; (k) isobutylene.

Card 3/3

APPROVED FOR RELEASE: 06/05/2000 CIA-RDP86-00513R000101720002-8"

"APPROVED FOR RELEASE: 06/05/2000 CIA-RDP86-00513R000101720002-8

S/062/62/000/006/002/008
B117/B101

AUTHORS: Zakharkin, L. I., Savina, L. A., and Antipin, L. M.

TITLE: Addition order of some aluminum hydrides to butadiene-1,3

PERIODICAL: Akademiya nauk SSSR. Izvestiya. Otdeleniye khimicheskikh nauk, no. 6, 1962, 996 - 998

TEXT: The addition of lithium aluminum hydride (I), diethyl aluminum hydride (II), and aluminum hydride (III) to butadiene-1,3 was investigated. When lithium aluminum hydride is heated with butadiene-1,3 at 120 - 125°C, an amorphous substance is formed consisting of 80% by weight of C_4 hydrocarbons and 20% by weight of polymeric hydrocarbons (di- and trimers). Chromatographic separation of the C_4 hydrocarbons gave n-butane, butene-1, trans- and cis-butene-2. Thus, I was added to butadiene-1,3 both in 1,2(3,4) and in 1,4 position. The same holds for II which, when heated with butadiene-1,3 at 90-100°C gave an adduct consisting of 20% by weight of C_4 hydrocarbons and 80% by weight polymers. The addition of III to butadiene-1,3 in hexane at 70°C results in a solid powdery adduct. De-

Card 1/2

APPROVED FOR RELEASE: 06/05/2000 CIA-RDP86-00513R000101720002-8"

"APPROVED FOR RELEASE: 06/05/2000 CIA-RDP86-00513R000101720002-8

S/062/62/000/006/002/008
B117/B101

Addition order of ...

composition of this substance with water yielded n-butane only. Therefore, addition of III to butadiene-1,3 occurs exclusively in 1,2(3,4) position.

ASSOCIATION: Institut elementoorganicheskikh soyedineniy Akademii nauk SSSR (Institute of Elemental Organic Compounds of the Academy of Sciences USSR)

SUBMITTED: December 28, 1961

Card 2/2

APPROVED FOR RELEASE: 06/05/2000 CIA-RDP86-00513R000101720002-8"

"APPROVED FOR RELEASE: 06/05/2000 CIA-RDP86-00513R000101720002-8

S/191/63/000/001/016/017
B117/B180

AUTHORS: Antipin, L. N., Vishnevskiy, L. D., Zhigach, A. F., Popov, A. F.

TITLE: Chemical activation of aluminum powder by triisobutyl aluminum

PERIODICAL: Plasticheskiye massy, no. 1, 1963, 73

TEXT: The effect of activation conditions on the conversion of PAK-3 (PAK-3) aluminum powder was studied, as also on the productivity of the direct synthesis of triisobutyl aluminum (TIBA). The test conditions were: Al:TIBA 0.45-0.48; activation at 30÷40 atm for 3 hrs; synthesis at 150-160°C and 120-80 atm until complete conversion of the aluminum. Maximum productivity of the synthesis was reached at 195°C, the yield decreasing with a further temperature rise up to 230°C. The synthesis is improved by longer activation. The synthesis time depends on the Al:TIBA ratio. Optimum activation conditions are: 160-195°C, 10 hrs, 30 atm, in which case, the synthesis can be carried out at reduced pressure (60-45 atm). The method is simple and requires no special apparatus and can be used to produce reactive aluminum industrially.

Card 1/1

APPROVED FOR RELEASE: 06/05/2000 CIA-RDP86-00513R000101720002-8"

"APPROVED FOR RELEASE: 06/05/2000 CIA-RDP86-00513R000101720002-8

S/064/63/000/002/002/005
B117/B186

AUTHORS: Antipin, L. M., Zhigach, A. F., Larikov, Ye. I., Popov, A. F.

TITLE: Study of the direct one-stage synthesis of triisobutyl aluminum

PERIODICAL: Khimicheskaya promyshlennost', no. 2, 1963, 17 - 20

TEXT: A study was made of how aluminum conversion during the one-stage synthesis of triisobutylaluminum (TIBA) depends on the preceding activation of aluminum as well as on the temperature and duration of the process. The following Al powders were used: ПАК-3 (PAK-3) activated by TIBA, the mechanically and chemically activated ПА-4 (PA-4) and non-activated powder obtained by granulation in the inert gas current. The experiments were made at 50 - 60 atm in a hermetically sealed autoclave with a shielded drive for the mixer. The device has been described earlier (A. F. Zhigach, A. F. Popov, L. D. Vishnevskiy, L. M. Antipin, Khim. prom. no. 1, 24 (1962)). The kinetic curves obtained show that when mechanically activated aluminum is used hydration sets in after an induction period during which the inhibiting admixtures are removed from the Al surface. The activated Al enters the reaction without inhibiting oxide layer. The reaction rate is

Card 1/3

APPROVED FOR RELEASE: 06/05/2000 CIA-RDP86-00513R000101720002-8"

"APPROVED FOR RELEASE: 06/05/2000 CIA-RDP86-00513R000101720002-8

very high and the dependence of the aluminum conversion on the duration of the process is almost linear like the curves of hydrogen consumption. The further S-shaped course of the curves is characteristic of successive reactions. The total rate of the process decreases as a result of the decreasing rate of hydration. With chemically activated aluminum the synthesis sets in spontaneously, but it proceeds more slowly. This is probably due to a partial removal of the inhibiting oxide layer during the activation of Al. If the powder granulated in the inert gas current is used the synthesis is preceded by an induction period. The duration of this depends on the temperature of the process, being 3 hr at 110°C and 0.5 hr at 150°C. A comparison of the linear sections of the kinetic curves obtained showed that the amount of aluminum conversion in the initial state of the synthesis ($\sim$3 hr) can be used as criterion for estimating the reactive power of Al. Aluminum conversion depends on the synthesis temperature. At higher temperatures (150°C), its effectiveness is about 1.5 to 2 times higher than at 110°C. When mechanically and chemically activated aluminum is used the rate of the synthesis is determined by processes of mass transfer. The reaction proceeds in the diffusion range. The activation energy is 3.6 to 5.7 kcal/mole. In the case of the powder granulated in inert gas the rate of the synthesis is determined by one of the stages of direct synthesis.

APPROVED FOR RELEASE: 06/05/2000 CIA-RDP86-00513R000101720002-8"

"APPROVED FOR RELEASE: 06/05/2000 CIA-RDP86-00513R000101720002-8

Study of the direct...

S/064/63/000/002/002/005
B117/B186

The activation energy attains 14.5 kcal/mol. There are 7 figures and 1 table.

Card 3/3

APPROVED FOR RELEASE: 06/05/2000 CIA-RDP86-00513R000101720002-8"

"APPROVED FOR RELEASE: 06/05/2000 CIA-RDP86-00513R000101720002-8

L 12430-63 EWT(m)/BDS AB

ACCESSION NR: AP3004300 S/0064/63/000/005/0069/0070 53

AUTHORS: Popov, A. F.; Pushkin, D. L.; Antipin, L. M.; Mal'kov, S. V.

TITLE: Airtight centrifuge for purifying liquids from finely-dispersed solid admixtures

SOURCE: Khimicheskaya promyshlennost', no. 5, 1963, 69-70

TOPIC TAGS: centrifuge, liquid purification

ABSTRACT: Authors designed a centrifuge with a shielded electric drive. Advantage of this is that contact of starting suspension, clarified solution and residue with air is eliminated during centrifuging. Toxic, self-igniting, oxidizable, and other liquids can be purified from solid finely-dispersed impurities in this centrifuge. Centrifuging can be effected at elevated pressures or under vacuum. An experimental centrifuge of this type was used for a long time to purify solutions of various pyrophoric aluminum alkyls of finely-dispersed aluminum and sodium chloride. Results were good. Orig. art. contains: 1 figure and 1 table.

ASSOCIATION: none

SUBMITTED: 00 DATE ACQ: 15Aug63 ENCL: 00

SUB CODE: CH NO REF SOV: 005 OTHER: 005 1/1

APPROVED FOR RELEASE: 06/05/2000 CIA-RDP86-00513R000101720002-8"

"APPROVED FOR RELEASE: 06/05/2000 CIA-RDP86-00513R000101720002-8

APPROVED FOR RELEASE: 06/05/2000 CIA-RDP86-00513R000101720002-8"

"APPROVED FOR RELEASE: 06/05/2000 CIA-RDP86-00513R000101720002-8

APPROVED FOR RELEASE: 06/05/2000 CIA-RDP86-00513R000101720002-8"

"APPROVED FOR RELEASE: 06/05/2000 CIA-RDP86-00513R000101720002-8

ASSOCIATION: none

SUBMITTED: 00 ENCL: 00 SUB CODE: OC, OC

NO REF SOV: 001 OTHER: 001

Card 2/2

APPROVED FOR RELEASE: 06/05/2000 CIA-RDP86-00513R000101720002-8"

"APPROVED FOR RELEASE: 06/05/2000 CIA-RDP86-00513R000101720002-8

3

L 65100-65 EWP(e)/EWT(m)/EWP(t)/EWP(k)/EWP(z)/EWP(b) IJP(c) JD
ACCESSION NR: AP5021971 UR/0286/65/000/014/0023/0023
669.71 : 547.419.6

AUTHOR: Zhigach, A. F.; Popov, A. F.; Sil'vestrov, D. N.; Aronov, N. I.; Larikov, Ye. I.; Antipin, L. M.; Nazarov, S. Ye.; Korneyev, N. N.

TITLE: A method for activating aluminum. Class 12, No. 172780

SOURCE: Byulleten' izobreteniy i tovarnykh znakov, no. 14, 1965, 23

TOPIC TAGS: aluminum, powder metal production, powder metallurgy, aluminum powder

ABSTRACT: This Author's Certificate introduces a method for activating aluminum by pulverizing it in a cavitation mill with a shielded electric drive. The method is simplified by grinding the aluminum for 3-10 hours until the particle size is 0.5-1 μ.

ASSOCIATION: none

SUBMITTED: 02Feb62 ENCL: 00 SUB CODE: MM

NO REF SOV: 000 OTHER: 000

Card 1/1

APPROVED FOR RELEASE: 06/05/2000 CIA-RDP86-00513R000101720002-8"

"APPROVED FOR RELEASE: 06/05/2000 CIA-RDP86-00513R000101720002-8

ACC NR: AP6035823 (N) SOURCE CODE: UR/0413/66/000/020/0030/0030

INVENTOR: Antipin, L. M.; Bondarevskaya, L. B.; Vladytskaya, N. V.; Danilov, S. I.; Zhigach, A. F.; Larikov, Ye. I.; Snyakin, A. P.

ORG: none

TITLE: Method of synthesizing lithium-aluminum hydride. Class 12, No. 186983

SOURCE: Izobreteniya, promyshlenyye obraztsy, tovarnyye znaki, no. 20, 1966, 30

TOPIC TAGS: lithium aluminum hydride, chemical synthesis

ABSTRACT: This Author Certificate introduces a method of synthesizing lithium-aluminum hydride by a reaction of sodium-aluminum hydride with lithium chloride in diethyl ether. To accelerate the process, it is carried out with additions of aluminum trialkyls. In a variant of the synthesizing process, aluminum-trialkyls are added in a quantity of 1—7%.

SUB CODE: 07 / SUBM DATE: 22Oct64/

Card 1/1 UDC: 661.968.546'621'34'11

APPROVED FOR RELEASE: 06/05/2000 CIA-RDP86-00513R000101720002-8"

"APPROVED FOR RELEASE: 06/05/2000 CIA-RDP86-00513R000101720002-8

FRANTSEVICH, I.N.; GNESIN, O.G.; SEMENOV, Yu.N.; BORODULIN, P.Ya.; ANTIPIN, L.N.; VAZHENIN, S.F.; MAKSIMENKO, V.M.; MASHNITSKIY, A.A.

Lining material for aluminum electrolytic cells. TSvet. met. 38 no.6:49-54 Je '65. (MIRA 18:10)

APPROVED FOR RELEASE: 06/05/2000 CIA-RDP86-00513R000101720002-8"

"APPROVED FOR RELEASE: 06/05/2000 CIA-RDP86-00513R000101720002-8

[illegible] N

Dissertation: "Investigation of Electrode Processes in an Aluminum Bath." Cand Tech Sci, Leningrad Technological Inst, Leningrad, 19[illegible]. (Referativnyy Zhurnal-Khimiya, No 10, Moscow, May 54)

SO: [illegible], 23 Dec 1954

APPROVED FOR RELEASE: 06/05/2000 CIA-RDP86-00513R000101720002-8"

"APPROVED FOR RELEASE: 06/05/2000 CIA-RDP86-00513R000101720002-8

ANTIPIN, L. N.

USSR/Chemistry - Physical chemistry

Card 1/1 Pub. 22 - 35/63

Authors : Antipin, L. N.

Title : Formation on the cathode of Al and Na sub-compounds during the electrolysis of cryolite melts

Periodical : Dok. AN SSSR 99/6, 1019-1022, Dec 21, 1954

Abstract : The relation between the cathode potential and the current density was investigated in cryolite ($NaF/AlF_3 = 3$), containing 2% of Al_2O_3. The existence of four potentials on the cathode polarization curve is explained by the gradual separation of the aluminum and sodium and the formation of intermediate Al^+ and Na_2^+ cations corresponding to AlF and Na_2F sub-compounds. The difference between the first and second potentials indicates incomplete discharge on the part of the Al^{3+} cations and their consequent conversion into a monovalent Al form. The difference between the second and third and fourth potentials indicates a uniform nature of processes connected with cation discharge. Five USSR references (1940-1953). Graphs.

Institution: The S. M. Kirov Ural Polytechnicum

Presented by: Academician A. N. Frumkin, May 10, 1954

APPROVED FOR RELEASE: 06/05/2000 CIA-RDP86-00513R000101720002-8"

"APPROVED FOR RELEASE: 06/05/2000 CIA-RDP86-00513R000101720002-8

ANTIPIN, L.N.

Remarks on the book by G.A. Abramov, M.M. Vetiukov, I.P. Gupalo, A.A. Kostiukov and L.N. Loshkin, "Theoretical principles of the electrometallurgy of aluminum." TSvet.met. 28 no.2:68-69 Mr-Ap '55. (MIRA 10:10)

(Aluminum--Electrometallurgy)

APPROVED FOR RELEASE: 06/05/2000 CIA-RDP86-00513R000101720002-8"

"APPROVED FOR RELEASE: 06/05/2000 CIA-RDP86-00513R000101720002-8

Antipin, L. N.

6

Study of the cathodic process in an aluminum bath. L. N. Antipin (Ural Polytech. Inst., Sverdlovsk). *Zhur. Fiz. Khim.* 29, 1668-77(1955).—The potential of a Mo cathode in cryolite at 1050° was detd. against a graphite reference electrode (previously anodically polarized to make it an O electrode). On the polarization curve, 4 relatively stable potentials E were found at 0.65, 0.9, 1.15, and 1.5 v. corresponding to reduction of Al^{+++} to Al^{+}, of Na^{+} to Na_2^{+}, of Al^{+} to Al, and of Na_2^{+} to Na vapor, resp. These steps were observed also during the decay of the polarization on switching off the current. In the equation $E - E_0 = (RT/nF)\ln(I_d - I)/I$, n was 2 between 0.6 and 0.9 v. and 0.5 between 0.9 and 1.15 v. (E_0 = the equil. potential, n = valency change of the reacting ion, I_d = limiting current, I = measured current). The polarization curve in molten NaF was similar to that in cryolite in the region of n = 0.5; apparently, Na_2^{+} ions existed in NaF also. When cryolite was satd. with Al metal, only the potential steps corresponding to electrodeposition of Al and Na remained. The values of E were corrected for the ohmic drop in voltage by assuming that, at high polarization, the increase of E with I was due to resistance only; measurements of resistance confirmed this. J. J. B.

APPROVED FOR RELEASE: 06/05/2000 CIA-RDP86-00513R000101720002-8"

"APPROVED FOR RELEASE: 06/05/2000 CIA-RDP86-00513R000101720002-8

ANTIPIN, L.N.

USSR/ Chemistry - Physical chemistry

Card 1/1 Pub. 22 - 24/50

Authors : Antipin, L. N., and Khudyakov, A. N.

Title : Electrolytic oxidation of carbon in cryolite-alumina fusions

Periodical : Dok. AN SSSR 100/1, 93-96, Jan 1, 1955

Abstract : A detailed investigation was conducted to determine the relation between the composition of anodic gases, magnitude of polarization and the current density The basic cause for polarization was found to be the retardation in the decomposition of the intermediate carbon-oxygen complexes formed as result of discharge on the oxygen containing anion anode. It was found that the electrolysis of cryolite-alumina fusions is always followed by the separation of the oxygen on the anode, and the process of anodic oxidation of carbon is accompanied by considerable oxidation. Seven references: 5 USSR and 2 German (1934-1953). Graphs.

Institution : The S. M. Kirov Ural Polytechnicum

Presented by: Academician A. N. Frumkin, July 23, 1954

APPROVED FOR RELEASE: 06/05/2000 CIA-RDP86-00513R000101720002-8"

"APPROVED FOR RELEASE: 06/05/2000 CIA-RDP86-00513R000101720002-8

APPROVED FOR RELEASE: 06/05/2000 CIA-RDP86-00513R000101720002-8"

"APPROVED FOR RELEASE: 06/05/2000 CIA-RDP86-00513R000101720002-8

APPROVED FOR RELEASE: 06/05/2000 CIA-RDP86-00513R000101720002-8"

"APPROVED FOR RELEASE: 06/05/2000 CIA-RDP86-00513R000101720002-8

ANTIPIN, L. N

Category: USSR B-12

Abs Jour: R Zh--Kh, No 3, 1957, 7683

Author : Antipin, L. N. and Khudyakov, A. N.
Inst : Not given
Title : Investigation of Anode Reactions in the Aluminum Bath

Orig Pub: Zh. Prikl. Khimii, 1956, Vol 29, No 6, 908-914

Abstract: The composition of the gas liberated at the anode (AG) and the magnitude of the polarization have been investigated as a function of the current density i during the electrolysis of a cryolite-alumina melt (40 percent NaF, 57 percent AlF_3, and 3 percent Al_2O_3) at 790°. Depending on the i, the AG composition changes from 100 percent CO at i = 0 to 85 percent CO_2 at i > 0.3 amps/cm^2; the variation is not uniform. The curve giving the composition of the AG as a function of i shows two breaks at 0.1 and 0.3 amps/cm^2. In the opinion of the authors the first section of the curve corresponds to the formation of adsorption complexes by the most active atoms of the graphite electrode. At i > 0.1 amps/cm^2 the neutralization of oxygen-containing ions occurs not only in the most active regions of the carbon lattice

Card : 1/2 -16-

APPROVED FOR RELEASE: 06/05/2000 CIA-RDP86-00513R000101720002-8"

"APPROVED FOR RELEASE: 06/05/2000 CIA-RDP86-00513R000101720002-8

APPROVED FOR RELEASE: 06/05/2000 CIA-RDP86-00513R000101720002-8"

"APPROVED FOR RELEASE: 06/05/2000 CIA-RDP86-00513R000101720002-8

ANTIPIN, L. N.

Category: USSR

B-12

Abs Jour: R Zh--Kh, No 3, 1957, 7684

Author : Antipin, L. N.
Inst : Not given
Title : A High-Temperature Aluminum-Oxygen Galvanic Cell

Orig Pub: Zh. Fiz. Khimii, 1956, Vol 30, No 6, 1425-1426

Abstract: The emf of a galvanic cell using a bead of liquid aluminum (sic) at 1,000° as one electrode and a Cu tube, one end of which is immersed in the electrolyte (40.5% AlF_3 + 57.85% NaF + 2.65% Al_2O_3) with the other end open to the atmosphere, as the other electrode has been measured. The end of the tube which is immersed in the electrolyte was coated with an insulating carbon-carborundum coating. The cell produced a current of over 0.5 amp at an emf of 0.15 v. It is shown that the current-producing process is the reaction $2Al + 3/2\ O_2 \rightarrow Al_2O_3$.

Card : 1/1

APPROVED FOR RELEASE: 06/05/2000 CIA-RDP86-00513R000101720002-8"