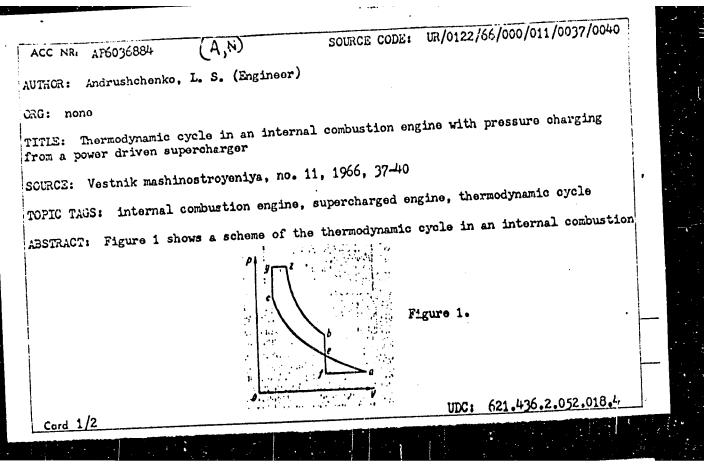
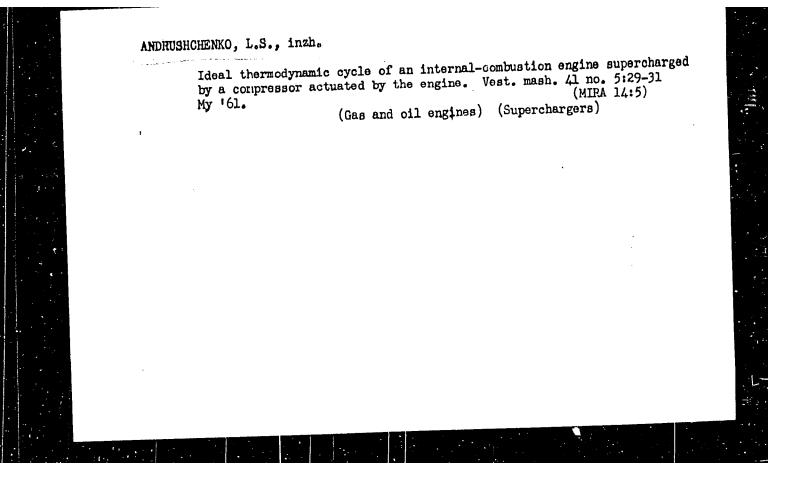
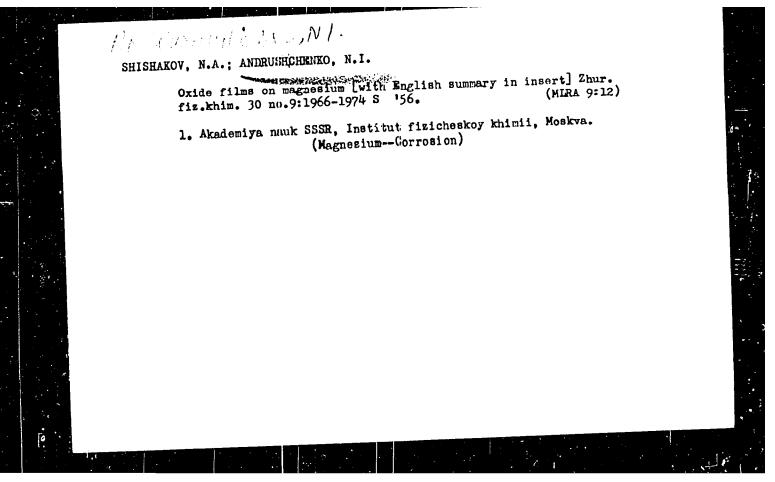
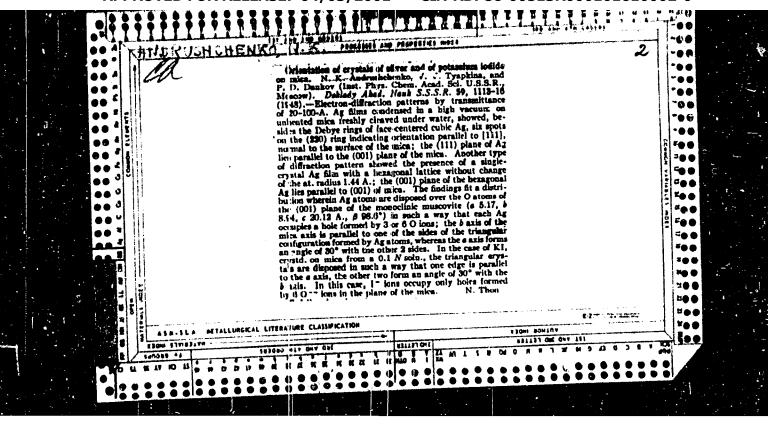
"APPROVED FOR RELEASE: 04/03/2001 CIA-

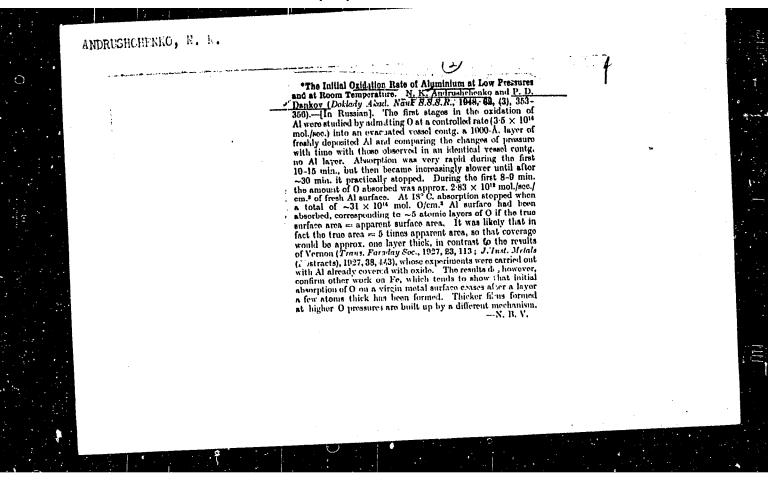
CIA-RDP86-00513R000101610002-0











ANDRUSHCHENKO, N. K.

USSR/Chemistry

Card 1/1

Authors

Dankov, P. D., and Andrushchenko, N. K.

Title

Investigation of exidation processes of powdered iron at increased temperatures

Periodical

2 Zhur. Fiz. Khim, 28, Ed. 3, 519-524, March 1954

Abstract

Report presents quantitative data characterizing the rate of oxidation of objects made of powdered iron at temperatures of 200, 400, 600, 800 and 1000°C. The rate of oxidation can be characterized by the parabolic law. X-rays showed that the phase composition of the sinter formed at various oxidation temperatures corresponds to the phase composition of sinter formed on massive corresponds to the phase composition of sinter formed on massive iron. At a temperature of about 800°C the rates of oxidation of both solid and powdered iron differ very slightly from each other. Oxidation is more intensive during slow heating than during rapid heating, because rapid heating causes the pores to close. Three U.S.S.R. references; tables, graphs.

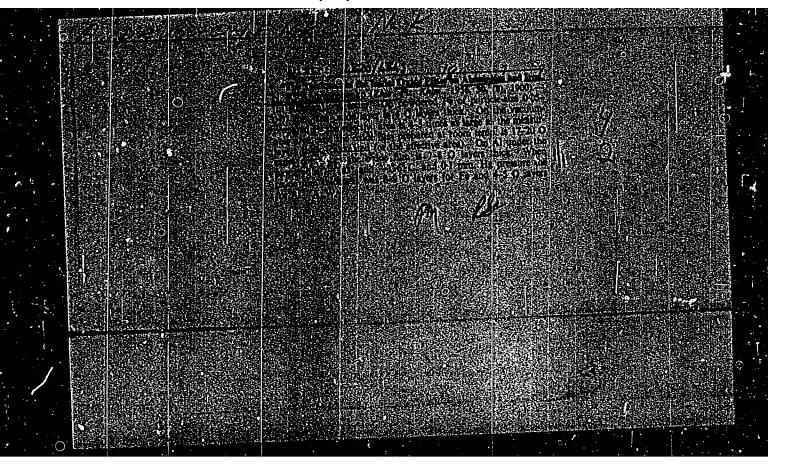
Institution

Academy of Sciences U.S.S.R. Institute of Physical Chemistry, Moscow

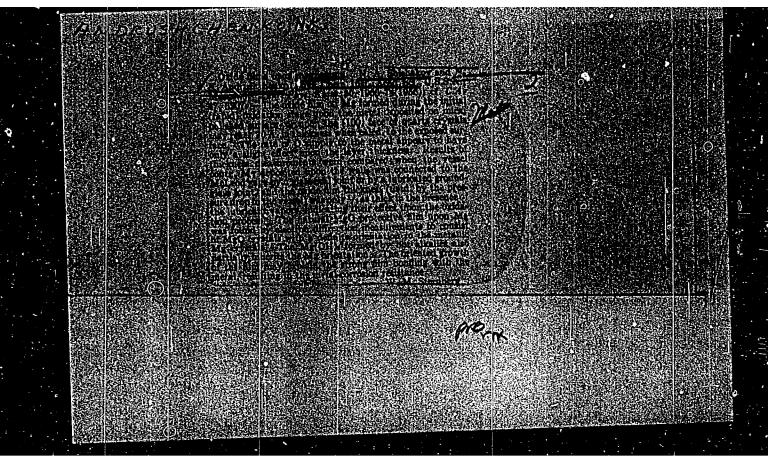
Submitted

June 17, 1953

"APPROVED FOR RELEASE: 04/03/2001 CIA-RDP86-00513R000101610002-0



"APPROVED FOR RELEASE: 04/03/2001 CIA-RDP86-00513R000101610002-0



ANDRUSHCHENKO, NK

7)

PHASE I BOOK EXPLOITATION

sov/3399

Shishakov, Nikolay Alekseyevich, Valentina Vladimirovna Andreyeva, and Nina Konstantinovna Andrushchenko

Stroyeniye i mekhanizm obrazoveniya okisnykh plenok na metallakh (Structure and Mechanism of Formation of Oxide Films on Metals) Moscow, AN SSSR, 1959. 194 p. Errata slip inserted. 2,500 copies printed.

Sponsoring Agency: Akademiya nauk SSSR. Institut fizicheskoy khimii

Resp. Ed.: V.I. Kasatochkin, Doctor of Chemical Sciences; Ed. of Publishing House: A,A. Babad-Zakhryapin; Tech. Ed.: V.V. Bruzgul'.

PURPOSE: The book is intended for students and workers in the field of metallography, particularly those interested in the study of the structure of the surface of metals and the mechanism of their interaction with oxygen.

COVERAGE: Having analyzed the various existing theories on the structure of oxide films on metals, the authors arrived at the conclusion that all existing theories were inadequate and had to be supplemented with new experimental data.

Card 1/7

Structure and Mechanism of Formation (Cont.) SOV/3399

The main purpose of the book is therefore the systematization of experimental data in this field. Basically, the work presents the investigation of the interaction of metals and pure oxygen or air. Considerable attention has been given to the investigation of the surface of the metal itself, since this knowledge is the prerequisite for a correct understanding of the mechanism of oxide film formation on metal surfaces. Included are 57 tables and 17 photographs. There are 132 references, of which 49 are Soviet.

TABLE OF CONTENTS:

| Introduction | | 3 |
|--|---|----------------------|
| Ch. I. Methods of Investigation 1. Electronography 2. Optical polarization method 3. Volumetric methods | : | 7 7 13 19 |
| Ch. 2. Oxide Films on Magnesium 1. Metallic magnesium 2. Oxide film on the surface of magnesium 3. Adsorption of oxygen by magnesium | | 25 25 26 33 |
| Card 2/7 | • | |

| Structure and Mechanism of Formation (Cont.) SOV/ | ['] 3399 |
|--|-------------------|
| 1. Metal. 4c gold | 63 |
| 2. Gold oxidation | 64 |
| 3. Preparation of specimens for the electronographic | |
| investigation of gold | 68 |
| 4. Gold oxidation at temperatures over 500° C | 69 |
| 5. Gold oxidation at 500° C | 69 |
| 6. Gold oxidation at temperatures under 500° C | 80 |
| 7. Optical investigations | 85 |
| 8. Adsorptional investigations | 90 |
| 9. Conclusion | 91 . |
| Th. 6. Oxide Films on Platinum | 92 |
| 1. Metallic platinum | 92 |
| 2. Platinum oxides | 94 |
| 3. New electronographic investigations | 101 |
| 4. Optical investigations of oxide films on platinum | 104 |
| 5. Adsorptional investigations on condensed platinum | 107 |
| 6. Conclusion | 109 |
| Ch. 7. Oxide Films on Iron | 111 |
| 1. Metallic iron | 111. |
| Card 4/7 | |

| | sov/3399 | |
|-----|--|-------|
| 4 - | Structure and Mechanism of Formation (Cont.) | 153 |
| | Structure data | 153 |
| | Ch. 10. Adsorption of Oxygen at Low Temperatures | 154 |
| | 1. Aluminum | 155 |
| | A T | 155 |
| | 3. Nickel and magnesium | 156 |
| | 4. Copper | 1)0 |
| | n man | 157 |
| . 8 | or Oxide Films on Metals | 159 |
| | Ch. 11. Mechanism of Formation of side of the change of the content of the change of t | 159 |
| | | • 166 |
| q e | 2. Ideas on orientational generational generational generational | 167 |
| | 3, Basic indicquast investigations | 168 |
| -: | 4. Basic results of our investigation of sorption phenomena 5. Classification of sorption phenomena and formation of ion lattices | 170 |
| | | 173 |
| | 6. Chemical sorption 7. Monomolecular chemical sorption 7. Monomolecular adsorption | 174 |
| | 7. Monomolecular chemical borption 8. Reversible polymolecular adsorption | 174 |
| • | | 176 |
| `.; | 9. Reversible polymore layer 10. Structure of the oxygen layer | 177 |
| | 10. Structure of the oxygen layer 11. Mechanism of the formation of oxide films | |
| | 11. Mechanism of the | |
| | | |
| | Card 6/7 | |
| : | Cara of i | |
| | | |

SHISSHAKOV, N.A.; ANDRUSHCHENKO, N.K.

Isomorphism of the peroxides and carbonyls of platinum.

Zhur. fiz. khim. 35 no.7:1593-1599 Jl '61. (MIRA 14:7)

SHISHAKOV, N.A.; ANDRUSHCHENKO, N.K.; ASANOV, U.A.

Role played by oxygen in the formation of textures on the surface of metals. Izv. AN SSSR. Otd.khim.nauk no.7:1234-1240 J1 '61.

(MIRA 14:7)

1. Institut fizioheskoy khimii AN SSSR.

(Metallic oxides)

ANDRUSHCHENKO, O.A.

KOMLYAR, 2. I. ANDRUSHCHENKO, O. A.

Excavating pump 1000-80. Vest. mash. 31 no. 12, 1951.

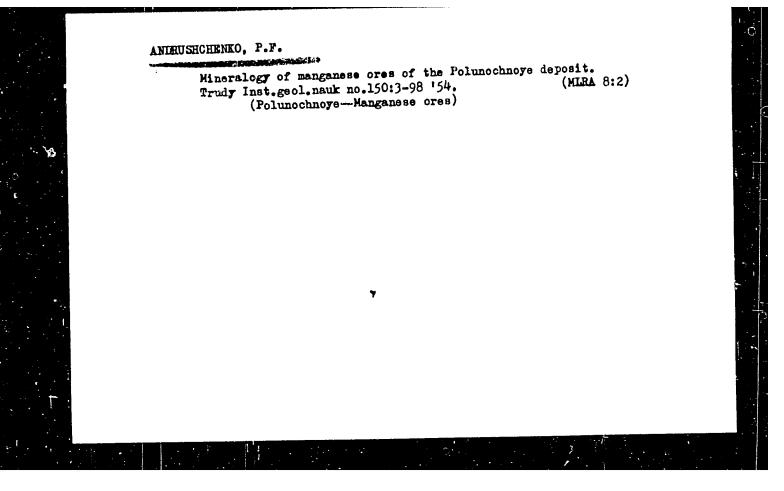
SO: MLRA, September 1952.

ANDRUSHCHENKO, P. F.

"Mineralogy of the Manganese Ores of the Polunochnoye Deposit"
Trudy In-ta geol, nauk, AN SSSR, ser. rudnykh mestrorozhdeniy, No 16, 1954,100 pp

The Polunochnoye manganese deposits in the Urals are composed of pyroxeno-plagioclase tuffas of the Paleozoic and Tertiary flask-shaped clays. The manganese-bearing layers consist of interstratified friable siliceous sediments with beds of hard manganese ores. In the deposits are distinguished phases of pyrolucite ores, manganese ores, and carbonate ores. (RZhGeol, No 6, 1955)

SO: Sum-No 787, 12 Jan 56



15-57-12-17339

Translation from: Referativnyy zhurnal, Geologiya, 1957, Nr 12,

p 96 (USSR)

AUTHORS: Andrushchenko, P. F., Khalilova, T. A.

TITLE: Mineral Composition of Ores From the El'vorskoye

Ferromanganic Deposit (Mineral'nyy sostav rud El'vor-

skogo zhelezo-margantsevogo mestorozhdeniya)

PERIODICAL: Izv. AN AzerbSSR, 1957, Nr 3, pp 63-85

ARSTRACT: In view of their mineral composition, manner of

occurrence and structural peculiarities, El'vorskiye manganic ores can be classified as oxides. A very small number of minerals enter into their composition. Pyrolusite is widely distributed, and occurs in the form of continuous, finely-crystalline masses and also

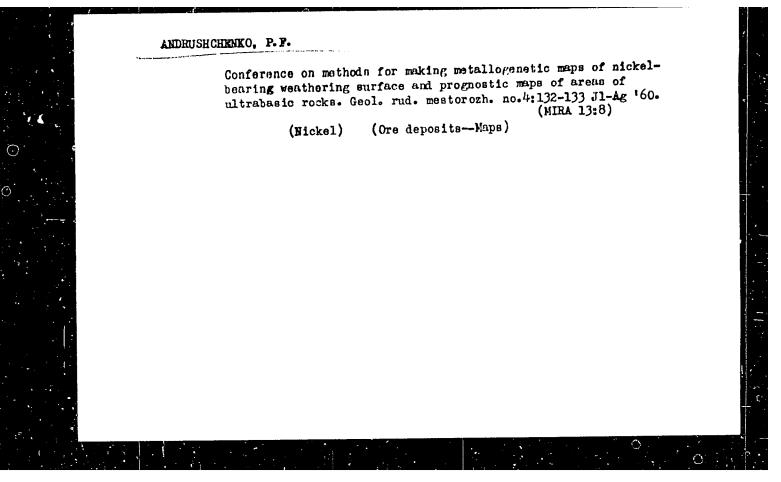
as aggregates of fairly large crystalline grains.
Ramsdellite (originally analyzed in the Soviet Union)
is found as coarsely-crystalline radial aggregates

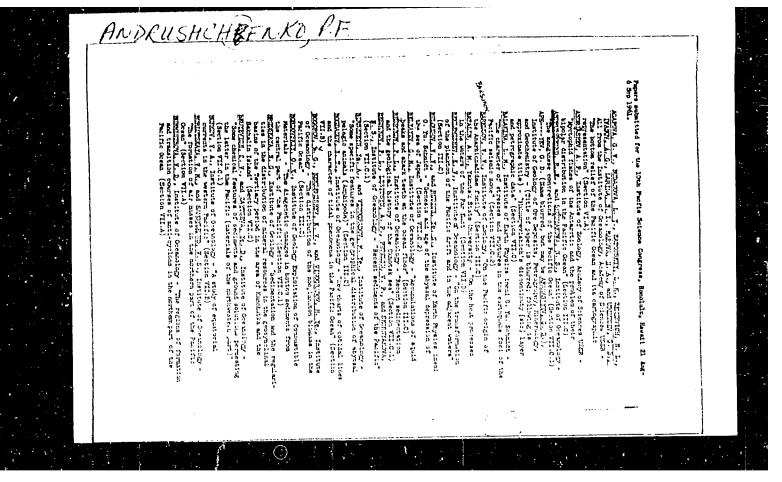
Card 1/2 forming layers in the massive, reddish brown iron-

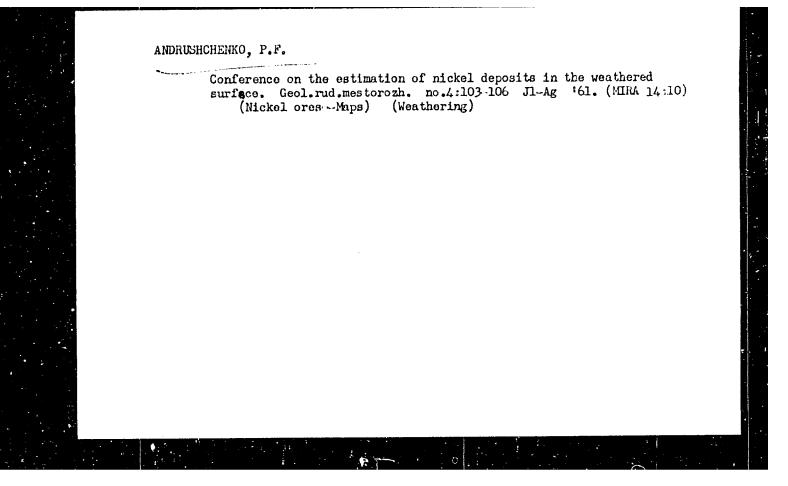
15-57-12-17339

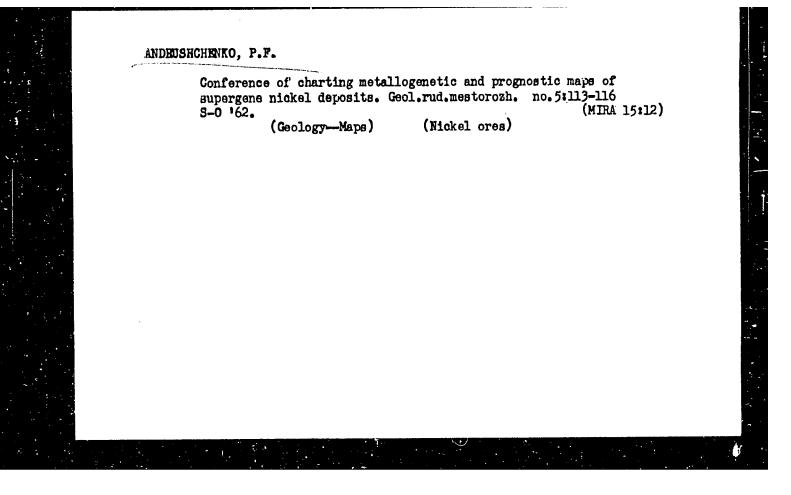
Mineral Composition of Ores From the El'vorskoye (Cont.)

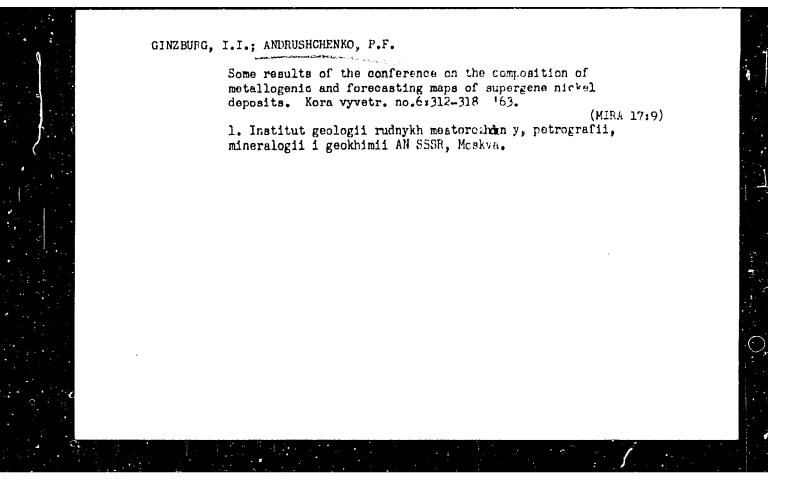
bearing siliceous rock. Radial aggregates reach 5 cm to 6 cm in size and 2 cm to 4 cm in thickness. Ramsdellite is usually found in an intimate mixture with pyrolusite. Chemical composition of the mineral (in percent) is: Si0₂--1.25; Al₂0₃--0.27; Fe₂0₃--0.6; Mn0₂--95.97; Mn0--0.60; Ca0--0.50; H₂0--1.19; P₂0₅--0.13; total--100.46. One exothermic point at 5000 and two endothermic ones at 6900 and 10100 were found on the heating curve. Manganite occurs in geodes in the form of aggregates of fairly large crystals of allotriomorphic granular structure. Psilomelane has a limited distribution and is found in an intimate association with pyrolusite. Iron hydroxides are found chiefly in the iron-silica rock and usually form small, flaky segregations which intensely color the chalcedony. Manganese carbonate occurs only as remnant aggregates of spherulites in quartz-iron ore and is almost completely replaced by chalcedony. The latter is also found in numerous geodes and forms thick streaks of various crusts; it partially replaces accumulations of iron hydroxides, in which it produces a net of very fine veins. Quartz, barite and chlorite are present in the ores, but their occurrence is limited. K. N. Ryabicheva Card 2/2

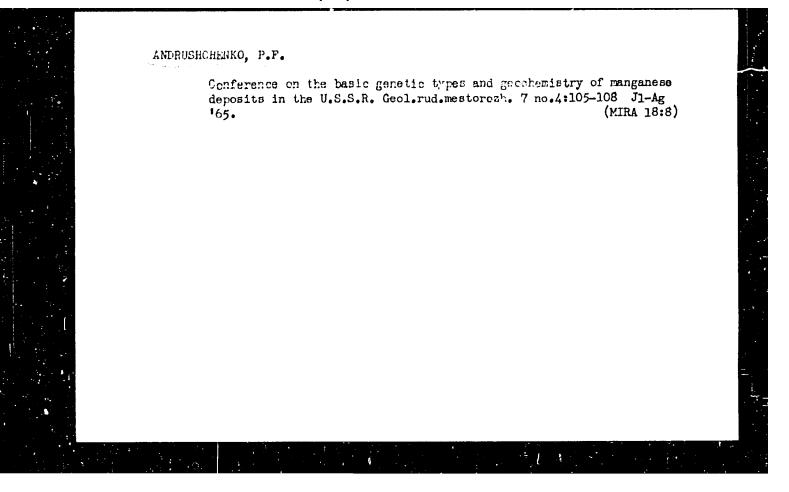












ANDRUSHCHENKO, V.

KOLOTOV, Stepan Mitrofanovich, prepodavatel; DOL'SKIY, Yevgraf Yevgen'yevich, prepodavatel; MIKHAYLENKO, Vsevolod Yevdokimovich, prepodavatel; GUSEV, Nikolay Aleksandrovich, prepodavatel; GOHLENKO, Boris Sergeyevich, prepodavatel; ANDRUSHCHENKO, V., red.; IOAKIMIS, A., tekhn.red.

[Course in descriptive geometry] Kurs nachertatel noi geometrii. Kiev, Gos.izd-vo lit-ry po stroit. i arkhit. USSR, 1958. 321 p.
(MIRA 12:2)

l.Kiyevskiy inzhenerno-stroitel nyy institut (for Kolotov, Dol'skiy, Mikhaylenko, Gusev, Gorlenko). (Geometry, Descriptive)

BELYAYEVA, G.M. inzhener; MINTSKOVSKIY, M.Sh., kandidat tekhnicheskikh nauk, redaktor; KLINDUKH, A.M., kandidat tekhnicheskikh nauk, redaktor; ANDEDCTORPERO, V., redaktor; BERBENETS, P., tekhnicheskiy redaktor

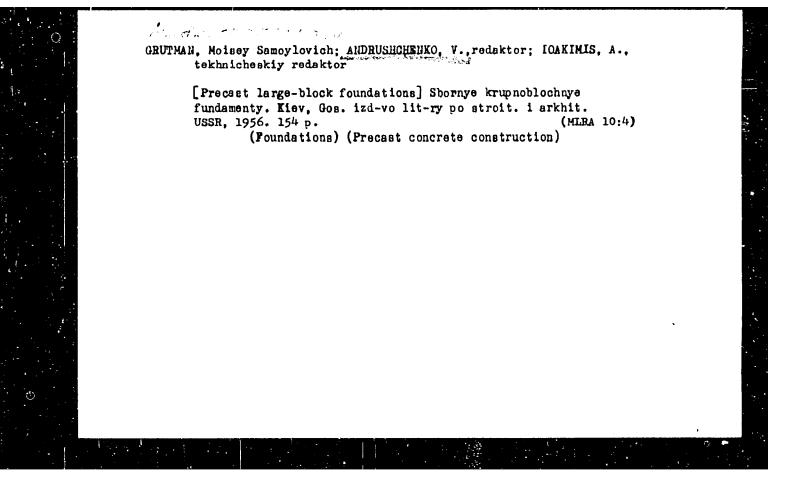
[Provisional specifications for the use of ceramic facings on the facedes of buildings] Vremennye ukazaniia po primenaniu keramicheskoi oblitsovki dila fasadov zdanii. Kiev, Gos. izd-vo lit-ry po stroit. i arkhit. USSR, 1956. % p. (MIRA 10:5)

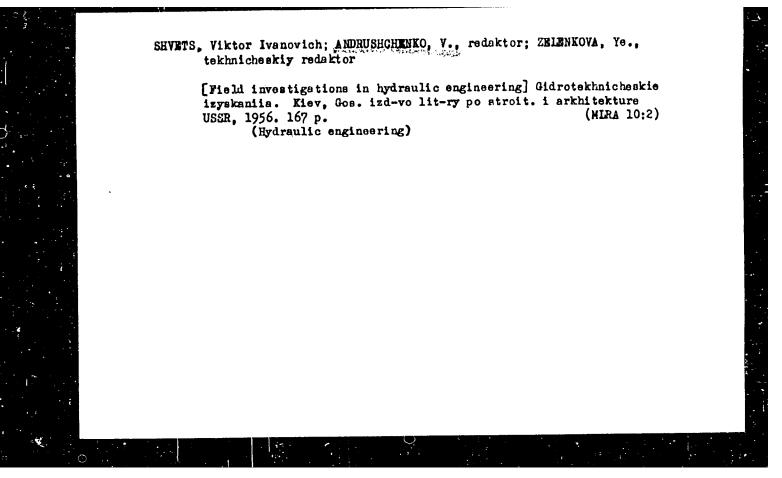
1. Ukraine. Gosudarstvennyy komitet po delam stroitel'stva i arkhitektury. (Geramics) (Facedes)

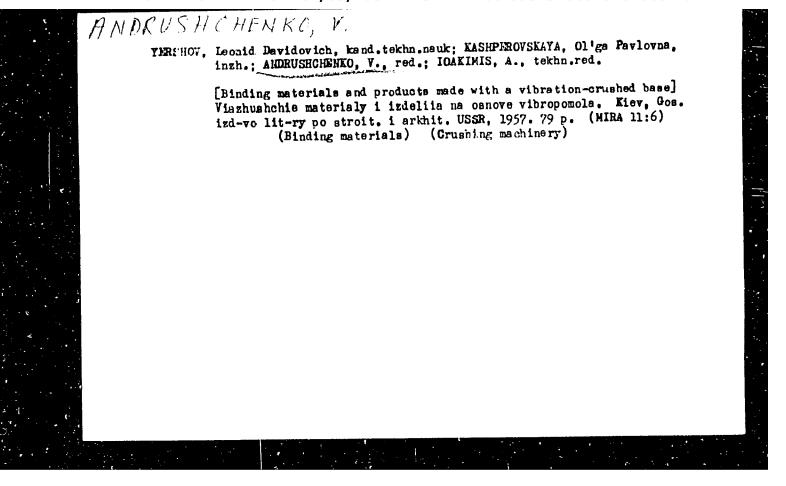
ANDRUSHCHENKO, V.
DUBINSKIY, Abram Markovich, kandidat tekhnicheskikh nauk; LIBERMAN, Al'fred

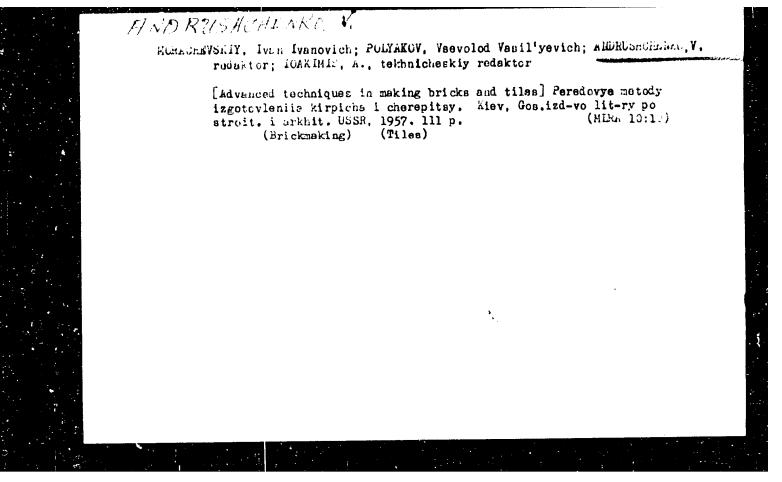
Davidovich, kandidat tekhnicheskikh nauk; Andress Alle redaktor; IOAKIMIS, A., tekhnicheskiy redaktor

[Production of precast reinforced concrete in construction yards]
Izgotovlenie sbornogo zhelezobetona na poligonakh. Kiev. Gos.
izd-vo lit-ry po stoit. i arkhitekture USSR, 1956. 109 p.(MIRA 10:2)
(Precast concrete)









KHOKHOLEV, K.I.; F. HAL'SXIY, G.V.; DUDNIK, F.S.; LAPSHIM, N.G.; ANDRUSHCHEVLKO, V. redaktor; ZELEHKOVA, Year tekhnicheskiy redsktor

[Experience in using blest-furnace gramulated slegs at construction projects of the Dnieger Valley] Coyu ispol'zovaniis domennykh gramulirovannykh shlekov na stroikakh Fridnaprov'is. Kiev, Gos.
izd-vo lit-ry po stroit. i srknit. USSR, 1957. 121 p. (MLFA 10:10)

(Dnieper Valley—Slag cament)

ANPILOSHCHENKO, V.

YEKEL CHIK, Mikhail Solomonovich; ALEKSANDROVSKIY, A., red.; ANDRUSHCH NKO, V., red.; IOAKIMIS, A., tekhn.red.; NEMCHENKO, I., tekhn.red.

[Manual for the norm setter in the construction industry] Spravochnik normirovshchika-stroitelia. Kiev, Gos.izd-vo lit-ry po stroit.1 arkhit. USSR, 1957. 183 p. (MIRA 10:12) (Construction industry)

BLAGOVIDOV, D.F.; POMEL'TSOV, A.N.; FINK, A.S.; ANDRUSHCHENKO, Ye.S.

Experimental sclerosing pancreatitis caused by munctate thermocoagulation. Eksper. khir. i anest. 9 no.6:38-41 N-D 164.

(MIRA 18:7)

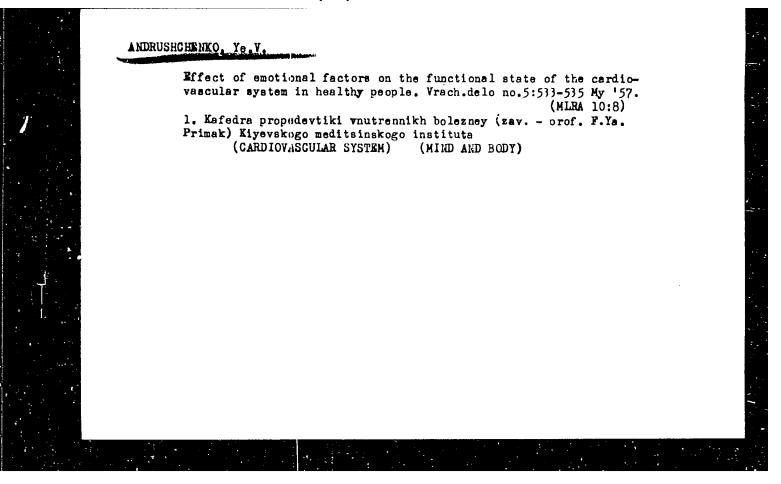
1. Patofiziologicheskaya laboratoriva TSentral'ney klinicheskoy bol'nitsy (glavnyy vrach - A.I.Khrumljan), 1.-ya bol'nitsa (glavnyy vrach - dotsent V.G.Bezzubik) 4-go glavnogo upravleniya pri Ministerstve zdravockhraneniya SSSR i Otdel patologicheskoy anatomii (zav. - prof. D.S.Sarkisov) Instituta khirurgii imeni A.V.Vishnevskego (direktor - deystvitel'nyy chlen AMN SSSR prof. A.A.Vishnevskiy) AMN SSSR, Moskva.

LERNER, I.P., dotsent; KREYLICH, A.M.; ANDRUSHCHENKO, Ye.V., kard.med.neuk.

Mlood eosinophilia i some diseases of the digestive organs. Vrach. delo no.9:133-135 3'63. (MIRA 16:10)

l. Kafedra terapii (zav. - dotsent I.P.Lerner) III Kiyevskogo instituta usovershenstvovaniya vrachey.

(EOSINOPHIIS) (DIGESTIVE ORGANS—DISEASES)



ANDRUMCHENKO, Ye.V

USSR/Human and Animal Physiology. Circulation

Abs Jour : Ref Zhur - Biol., No 14, 1958, No 65287

Author : Andryshchenko Ye.V.

Inst : Dist

: Disturbances in Coronary Circulation in Patients with Hypertensive Disease and Their Connection with Hypoxia.

T-5

Orig Pub: Sov. Maditsina, 1957, No 7, 66-69

Abstract: The functional state of the coronary circulation was studied in 215 patients with hypertensive disease; electrocardio-grams were made during physical exertion and nitroglycerine administration and under orthostatic conditions. The composition of the blood gases was examined in 123 of the patients. Coronary insufficiency often appears in the first stage of hypertensive disease, even among young people.

stage of hypertensive disease, even among young people.
According to the degree to which the hypertension has progressed, the symptoms of cornary insufficiency are seen to increase, frequently paralleling the development of hypoxic

Card : 1/2

52

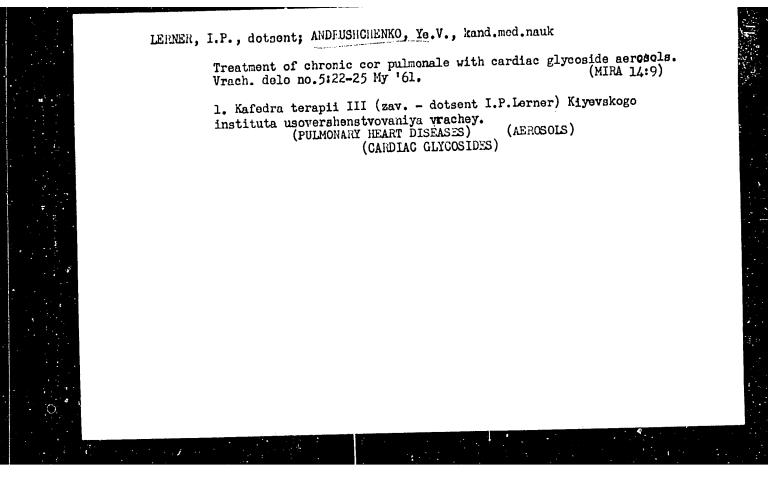
USSR/Human and Animal Fhysiology. Circulation T-5

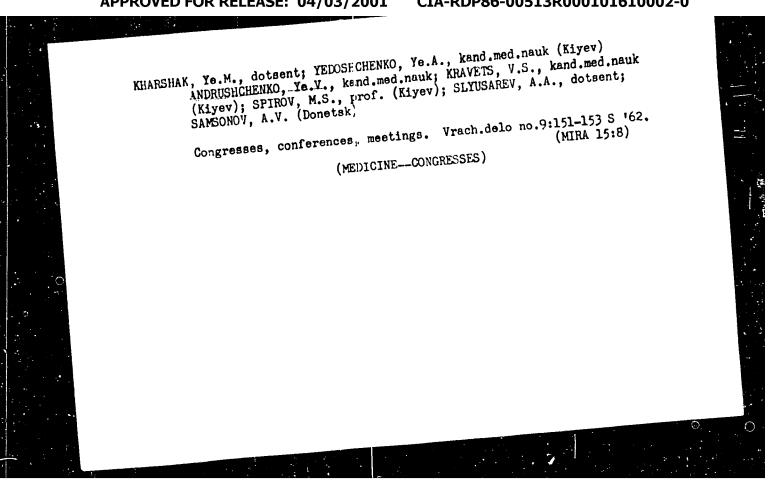
Abs Jour : Ref Zhur - Bioli, No 14, 1953, No 65287

manifestations in the organism. In the first stage, treatment with conditioned-reflex electronarcosis proved effective, and in the second and third stages--oxygen therapy in combination with medication.--E.V. Andruxhchenko

card : 2/2

ANDRUSHCHENKO, Ye. V.: Master Med Sci (diss) -- "Clinical aspects of coronary insufficiency in hypertension disease". Kiev, 1950. 15 pp (Kiev Order of Imbor Red Banner Med Inst in Acad A. A. Beremelets), 200 ceptes (KL, No 5, 1959, 155)





CIA-RDP86-00513R000101610002-0" APPROVED FOR RELEASE: 04/03/2001

BEREZEITSKAYA, S.A.; KLDNOVA, M.S.; GRIGOR'YEVA, A.A.; STANTSEV, I.A.; PROTSKO, G.N.

Effect of schedule and feeding on development of infants from one to three years of age. Pediatria, Moskva no.6:18-25 Nov-Dec 1953.

1. Deceased for Butovskiy. 2. Of the Ukrainian Scientific-Research Institute for the Care of Mother and Child inent Hero of the Soviet Union Prof. P. M. Buyko (Director -- M. D. Burova, Honored Physician Ukrainian SSR) and the Ukrainian Scientific-Research Institute of Nutrition (Director -- Camidate Medical Sciences A. T. Stovdun).

Andrushchuk A.A.

Animals.

USSR/Microbiology - Microorganisms Pothogenic to Humans and

F-5

Abs Jour

: Ref Zhur - Biol., No 3, 1958, 9939

Author

: Andrushchuk, A.A.

Inst Title : Alteration of Intestinal Microflora Composition in Very

Young Children Affected by Dysentery.

Orig Pub

: V sb.: Tr. 2-go s"ezda vrachey-pediatrov, USSR. 1955 6.

Kiev, Gosmedizdat USSR, 1956, 81-87

Abstract

Predominant intestinal microflora of breast-fed children during the first 6 months are chiefly grampositive acilli (acidophilus and bifidobacteria), while gramnegative flora

(Bacterium coli) range within the limits of 1 - 20%.

The quantity of grammegative flora increases with introduction of extra feeding, and in weaned children Bact. coli

tion of extra feeding, and in weahed children back. Collicommune prevails. When affected by dysentery the grampositive flora, as well as typical Bact. coli, disappear, while

Card 1/3

during the disease and even later is the cause of functional disturbances in the organism and thus aids in prolonging the course of dysentery. Syntomycin improves the intestinal microflora even from the 3rd-4th day, exerting a

APPROVED FOR TRELEASE: 94/93/2001 cula CTA RDP86-00513R000101610002-0"

Card 2/3

USSR/Microbiology - Microorganisms Pathogenic to Humans and Animals.

F-5

. Abs Jour

: Ref Zhur - Biol., No 3, 1958, 9939

Bact. coli. Total reestablishment of the intestinal microbial picture appears after the course of treatment is completed. The rapidest normalization of flora is observed in breast-fed children. A favorable effect on the course of disease and normalization of intestinal flora is exerted not only by breast milk, but also by kefir.

| M W D R USH C HUK USSR/Medicine | | | FD-2787 | |
|---------------------------------|----|---|---|--|
| Card 1/1 | Pu | b 154-8/19 | | |
| Author | : | Klimova, M. S.; Bereznitskaya, S. A.; Ayzikovich, and Andrushchuk, A. A. | R. S.; | |
| Title | : | The effect of regimen and nutrition on the state higher nervous activity of children of nursery ag | | |
| Periodical | : | Zhur. vys. nerv. deyat. 5, 219-226, Mar-Apr 1955 | | |
| Abstract | : | (From a report presented at the 6th Summing-Up Co of the Institute OKhMD, 12 Jan 1953). Investigat effect of variations in the nursery regimen and n on the state of the higher nervous activity of ch ranging in age from 1 to 3 years, as evidenced by in the conditional nutritional motor reflexes. The Nine references, all USSR (4 since 1940). | ed the utrition ildren changes | |
| Institution | : | Kiev Scientific-Research Institute for the Protect Maternity and Childhood imeni P. M. Buyko | tion of | |
| Submitted | : | June 20, 1953 | | |

ANDRUSHCHUK, A. A., Cand of MedSci -- (diss) "Changes in the composition of enteric microflora in children of an early age who are ill with an acute disturbance of digestion and nutrition of various etiology."

Kiev, 1957, 11 pp (Dnepropetrovsk State Medical Institute), 200 copies (KL, 35-57, 108)

ANDAUSHCHUK, A.A.

DYSENTERY

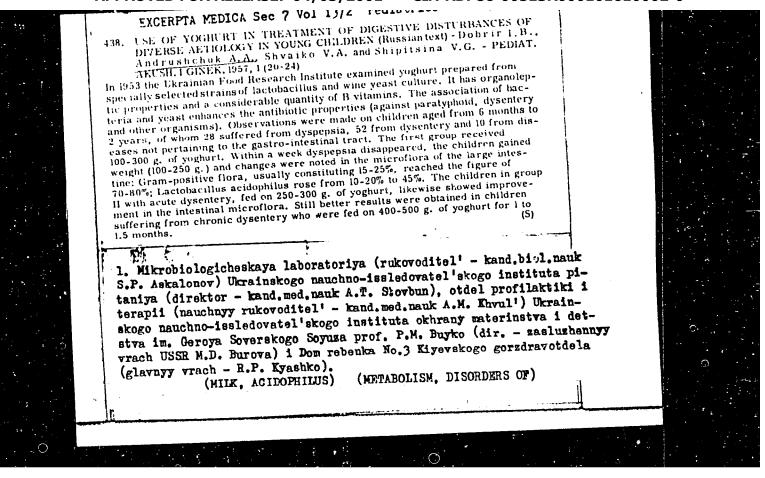
"The Changes in the Composition of Intestinal Microflora in Infants Suffering from Dysentery", by A.A. Andrushchuk, Trudy 2-go S'yezda Vrachey-Pediatrov USSR, 1956, pp 81-87 (from Meditsinskiy Referativnyy Zhurnal, Section 1, No 2, 1957, p 67.)

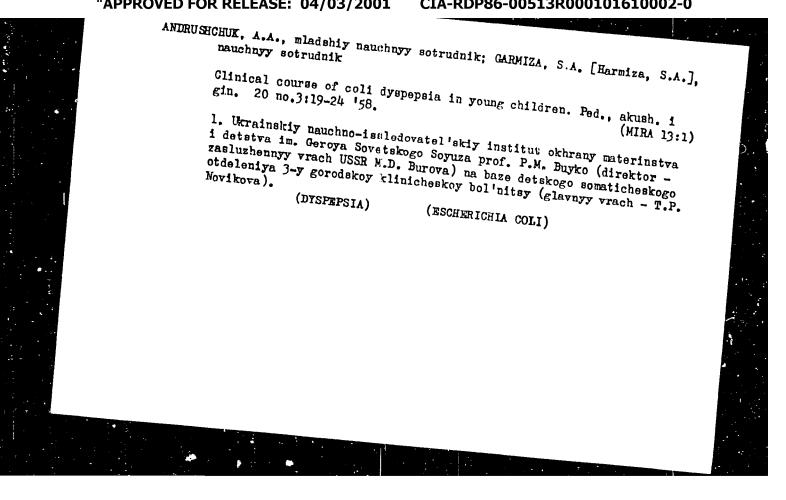
One huncred five children were examined of whom 38 had dysentery, 35 were healthy, and 32 were suffering from acute indigestion of a non-dysenteric ctiology. The following conclusions are drawn:

The composite picture of intestinal microflora in a healthy infant is stable, but this picture may easily become irregular. If the oraganism is in an unfavourable condition, a "disbacteriosis" sets in. Whatever the etiology of the disease may be, the disorder of microflora is almost always the same; this fact proves that the responding reaction of the intestines depends, not on the disease as such, but rather on the condition of the organism changed by the disease. When the general condition of an infant improves, so does the intestinal microflora. The data of a dynamic examination of the microflora in

Card 1/2

- 30 -



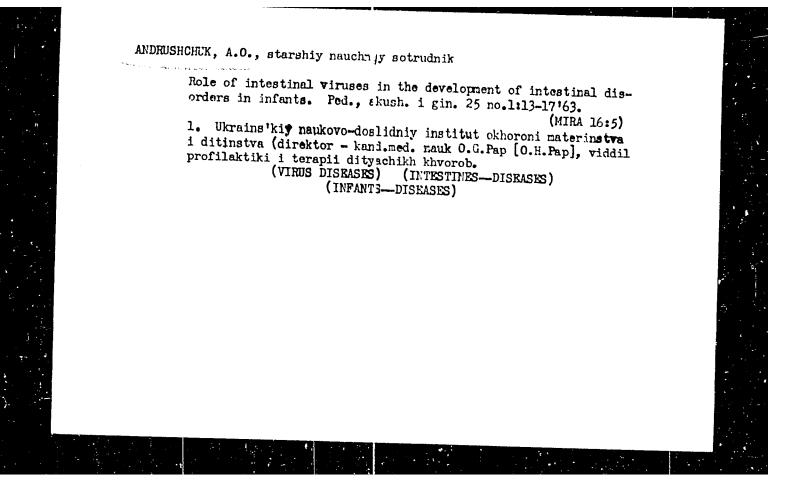


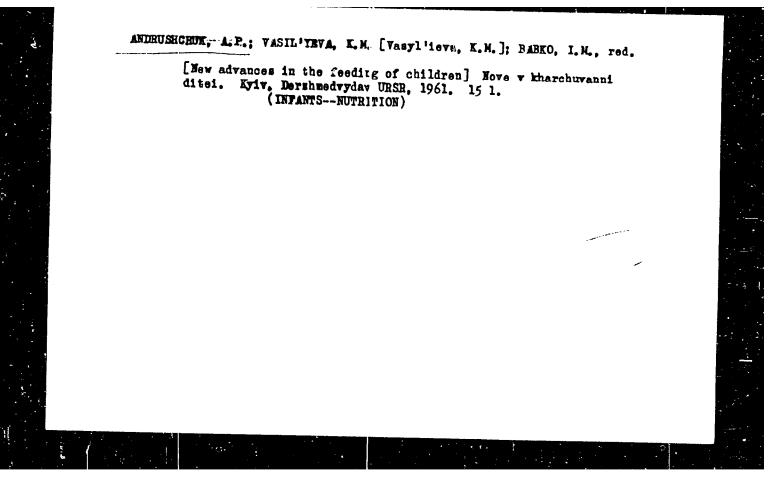
KHOKHOL, Ye.N., prof., red.; BALABAN, V.G., prof., red.; KOL'NER, R.Yu.; SIGA-LOV, D.L., red.; LUK'YANOVA Ye.M., kand.med.nauk, red.; ANDRUSHCHUK, A.A., kand.med.nauk, red.; BABKO, I.M., kand.med.nauk, red.; EYKOV, N.M., tekhn.red.

[Acute gastrointestinal diseases of non-dysenterial etiology in young children; proceedings of & Republic Meeting and Broadened Plenum of the Pediatrics Society of the Ukraine] Ostrye zheludochno-kishechnye zabolevania nedizenteriinoi etiologii u detei rannego vozrasta; trudy. Red. koll.: E.N.Khokhol i dr. Kiev, Gos.med.ird-vo USSR, 1961. 199 p.

1. Respublikanskoye soveshchaniye i rasshirennyy plenum nauchnogo obshchestva detskikh vrachey Ukrayny, Odessa, 1959. 2, Chlen-korrespondent AMN ·

(DIGESTIVE ORGANS-DISEASES)





KOVCHIN, Sergey Aleksandrovich, kind.tekun.neuk; ANDRUSHCHJK, Viktor
Vasil'yevich, inzh.

Transfer functions of a louded amplidyne with feedback. lzv.vys.
ucheb.zav.; elektromekh. 7 no.12:1245-1454 164.

(MIRA 18:2)

1. Leningvadskiy politekhnicheskiy institut.

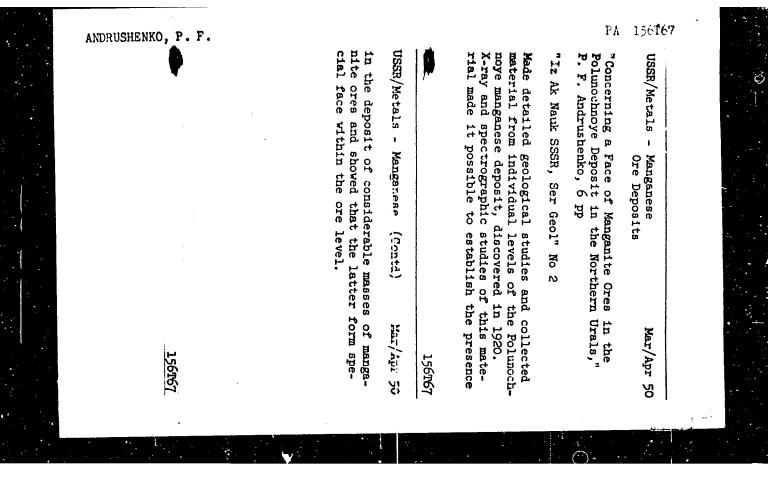
ANDRUSHENKO, L.M.; CHAYKA, V.Ye.

Matching devices for ridge-type delay systems. Izv.vys.ucheb.
zav.; radiotekh. 5 no.61736-737 N.D '62. (MIRA 16:1)

1. Rekomendovano Institutom radiotekhnicheskikh problem
AN IKrSSR. (Microwaves) (Delay lines)

"APPROVED FOR RELEASE: 04/03/2001

CIA-RDP86-00513R000101610002-0



ANDRUSHENKO, P. M.

Performance indicator for tube dischargers. Rb. energ., 1, No. 2, 1951.

SO: MLRA, October 1952.

FUYANOV, R.A.; ANDRUSHKEVICH, M.M.; KARAKCHIYEV, L.G.

Nature and causes of aging of a chromium-iron-zine catalyst. Kin. i kat. 6 no. 6:1069-1072 N-D *65 (MIRA 19:1)

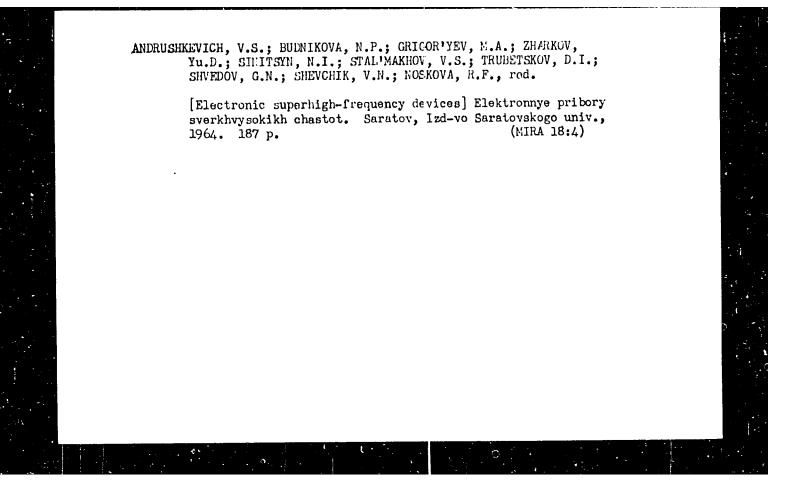
1. Institut kataliza Sibirskogo otdeleniya AN SSSR. Submitted July 7, 1965.

ANDRUSHKEVICE, T.V.; POPOVSKIY, V.V.; BORESKOV, G.K.

Catalytic properties of oxides of metals of the IV period of the periodic system with respect to exidation reaction. Part 1: Oxidation of methane. Kin.i kat. 6 no.5.860.863 S.-3 *65.

(MIRA 18:11)

1. Institut kataliza Sibirskogo otdelaniya AN SSSB.



L 45830-66 EWT(1) JM SOURCE CODE: UR/0275/65/000/011/A025/A025 AR6015969 ACC NRI AUTHOR: AndrushKevich, V.S.; Toreyev, A.I. TITLE: Some problems in the theory of an O-type backward-wave oscillator tube in the presence of reflections SOURCE: Ref. zh. Elektronika i yeye primeneniye, Abs. 11A156 REF SOURCE: Sb. Vopr. elektron. sverkhvysok. chastot. Vyp. I. Saratov, Saratovsk. un-t, 1964, 47-56 TOPIC TAGS: backward wave tube, space charge, electron beam ABSTRACT: The effect of reflections under linear operating conditions in a backwardwave oscillator tube is determined with regard to attenuation in the system and with simultaneous consideration to the space charge of the beam and attenuation. The equation for line excitation by grouped current and the equation for perturbation of the electron beam by the line field are solved by the method of successive approximations to give a system of equations which defines starting conditions. A comparison of these conditions with those for a tube without reflections gives a relationship for the starting currents of resonance and nonresonance backward-wave oscillator tubes and the change in signal phase. Polar diagrams are given for these parameters as a function of the modulus and phase of the reflection coefficient for various space charges and attenuations. Bibliography cf 13 titles. A. B. [Translation of abstract] SUB CODE: 09

UDC: 621.385.633

APPROVED FOR RELEASE: 04/03/2001 CIA-RDP86-00513R000101610002-0"

Card 1/1.

L 02245-67 EWT(1) SOURCE CODE: UR/0058/65/000/010/H032/H032 ACC NR: AR6013689 AUTHOR: Andrushkevich, V. S. TITLE: Influence of the form of electron static trajectories on the operation of 0type devices in the linear mode SOURCE: Ref. zh. Fizika, Abs. 10Zh220 Sb. Aelektron. sverkhvysok. chastot. Vyp. I. Saratov, Saratovsk. un-t, REF. SOURCE: 1964, 35-46 TOPIC TAGS: electron beam, traveling wave interaction, backward wave tube, electron motion ABSTRACT: By successive approximations, an analysis is made of the interaction of pulsating beams with the slow-wave field of traveling-wave and backward-wave tube systems. By way of illustration of the method, the author considers the interaction between a pulsating ribbon beam with the field of a plane slow-wave system. The applicability of this method for the analysis of the interaction of curvilinear beams with non-retarded waves is demonstrated. A. Denisov. [Translation of abstract] SUB CODE: 09,20

L 02244-67 EWT(1) JM

ACC NR AR6013691

SOURCI: CODE: UR/0058/65/000/010/HD33/HD3

AUTHOR: Andrushkevich, V. S.; Toreyev, A. I.

TITLE: Certain problems in the theory of O-type backward wave tubes in the presence

of reflections

SOURCE: Ref. zh. Fizika, Abs. 10Zh224

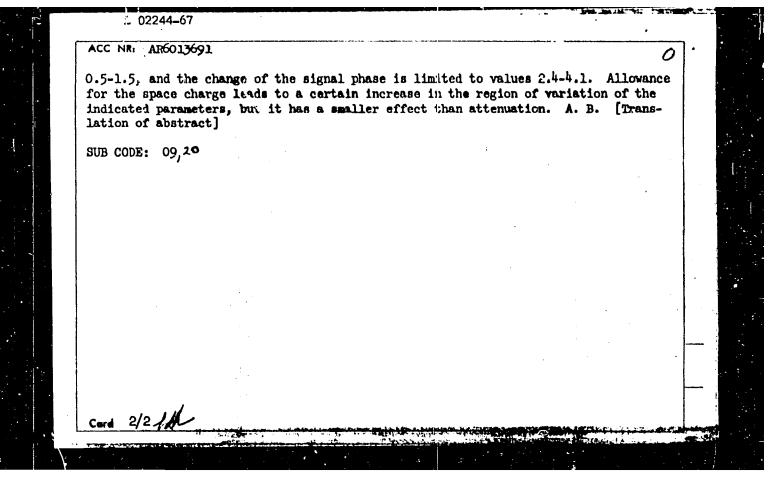
REF SOURCE: Sb. Vopr. elektron. sverkhvysok. chastot. Vyp. I. Saratov, Saratovsk.

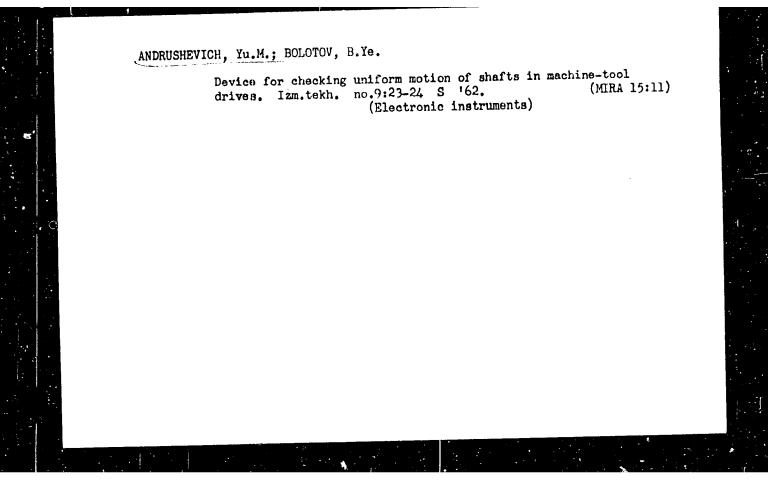
un-t, 1964, 47-56

TOPIC MAGS: Backward wave tube, space charge, electron beam, electron reflection

ABSTRACT: The authors analyze the influence of reflections in the linear mode of a backward wave tube, with allowance for damping in the system and simultaneous allowance for the space charge of the beam and attenuation of the system. The equation for the excitation of the line by the bunched current and the equation for the perturbation of the electron beam by the field of the line yield, when obtaining a solution by the method of successive approximation, a system of equations which determines the starting conditions. By comparing them with the starting conditions of a backward wave tube without reflection, it is possible to find the ratio of the starting currents of a resonant and nonresonant backward wave tube and the change in phase of the signal. Circle diagrams are presented, which give the dependence of these parameters on the modulus and on the phase of the reflection coefficient for different values of space charge and attenuation. Introduction of attenuation of the order of 4-5 db limits the region of variation of the ratio of the starting currents to a value

Card 1/2





AUTHOR:

Andrushevich, Yu.M. Engineer

SOV-117-58-4-3/21

TITLE:

Automated Work Loading in Automatic Thread Milling Machines (Avtomatizatsiya zagruzki rez'bofrezernogo avtomata)

PERIODICAL:

Mashinostroitel: 1958, Nr 4, pp 10-11 (USSR)

ABSTRACT:

The described loading arrangement for automatic thread milling machine "KT43" utilizes the reciprocal motion of & cylinder body which rotates the spindle of the machine. The work to be threaded is automatically charged into the machine by two discs with radial slots and an inclined trough. Detailed operation information and two drawings of the arrangement are given. This method has mechanized the distribution of work to the machine and synchronized it with the thread milling operation. There are

2 diagrams.

1. Machine tools-Operation 2. Machine tools-Equipment

Card 1/1

S/115/60/000/007/005/011 B019/B058

AUTHORS:

Andrushevich, Yu. M., Klebanov, M. K., Tslaf, M. Ya.,

Rabkin, A. L.

TITLE:

Cinematographic Measuring Instrument for Tapping Machines

PERIODICAL: Izmeritel'naya tekhnika, 1960, No. 7, pp. 27 - 28

TEXT: The measuring instrument described here is intended for studying the influence of the error of the individual tapping chains on the accuracy of the tapped threads. The scheme of the experimental arrangement shown in Fig. 1 consists of a self-recorder of the type 5B-662 (BV-662) and an inductive pickup, used for checking the relative motion of the support and the screw of the testifying thread. The screw of the testifying thread and the inductive pickup are discussed by the aid of Fig. 2. The inductive pickup consists of 3 identical units distributed at 120 on a circle around the thread axis. The setup and mode of operation of the experimental arrangement are described. It is finally reported that 2 types of tapping machines were checked with the instrument described here and that a reduction of manufacturing faults could thereby be achieved. There are 2 figures. Card 1/1

KLEBANOV, M.K., kandktekhn.nauk, dotsent; ANDRUSHEVICH, Yu.M., inzh.

Experimental investigation of transient processes in a machine tool with a separated drive. Izv.vys.ucheb.zav.; mashinostr. no.1:109-114'60. (MIRA 14:5)

1. Kuybyshevskiy industrial'nyy institut. (Lathes—Testing)

S/145/60/000/009/011/017 D221/D304

AUTHORS: Andrushevich, Yu.M., Assistent, Klebanov, M.K., Candi-

date of Technical Sciences, Docent, Sharapov, A.A.,

Assistent, and Shulikin, K.I., Assistent

TITLE: On the transient processes in a machine tool with

starting clutches

PERIODICAL: Izvestiya vysshikh uchebnykh zavedeniy. Mashino-

stroyeniye, no. 9, 1960, 104 - 112

TEXT: An experimental investigation was carried out to determine the effect of the friction clutch on transient processes in a screw cutting lathe, model 1K62. This was achieved with the use of capacitance transducer and oscillograph, and controlling the machine by both the frictional clutch and the motor. The reduced moments of inertia in respect to the starting shaft (link II) and the rotor of the motor (link I) were calculated. The changes due to different spindle speeds were plotted, and these demonstrate a stepped character. Minimum reduced moment of inertia and the least variations.

Card 1/3

On the transient processes in ...

S/145/60/000/009/011/017 D221/D304

riation is observed with starting and stopping the motor. Starting with the friction clutch increases the maximum moment reduced to link II and lowers the torque. The presence of overdrive in the reverse motion increases sharply the reduced moments. The ratio of nominal torque at the reduced shaft (link II with frictional clutches) to the reduced moment of inertia at n - 12.3 rpm, when starting and stopping with the friction clutch is

$$j = \frac{M_{\text{nom}}}{I_{\text{red}}} = \frac{12.0}{0.0106} \approx 1130 \text{ sec}^{-2}$$

At $n_{\rm sp}=167$ rpm, $j=43~{\rm sec^{-2}}$. During reversing at $n_{\rm sp}=12.3$ rpm $j=500~{\rm sec^{-2}}$. The maximum of this ratio is taking place when starting with clutch at steps that correspond to 12.3-100 rpm of the spindle. The investigation permits the following conclusions: The acceleration of the drive as well as its deceleration are uniform. The same can be said about the reversal. The duration of the transient processes increases with a higher speed of the spindle, and this is marked at 700 - 1000 rpm. The mechanical brake of the lathe Card 2/3

S/145/60/000/009/011/017 D221/D304

On the transient processes in ...

causes a longer period of acceleration than deceleration. The changes in dynamic moments indicate that loads during acceleration and reversal are significant. The former have a stepped character which corresponds to changes in the reduced moment of inertia. Consequently, the application of the friction clutch reduced the acceleration time up to the step of 1200 rpm. Beginning with the spindle speed of 1000 rpm, the duration of acceleration and deceleration with friction clutches sharply increases. The time of reversal exceeds that of acceleration or deceleration due to a marked increase of the reduced moment of inertia. The friction clutch relieves the electric motor from the starting current during transient periods. There are 7 figures and 2 Soviet-bloc references.

ASSOCIATION: Kuybyshevskiy industrial ryy institut (Kuybyshev In-

dustrial Institute)

SUBMITTED: July 7, 1959

Card 3/3

ANDRUSHEVICH, Yu.M., assistent

Speeding-up dynamics in machine tools with a divided drive.

Izv. vys. ucheb. zav.; mashinostr. no. 3:41-73 '61. (MIHA 14:5)

1. Kuybyshevskiy industrial nyy institut.

(Machine tools—Electric driving)

ANDRUSHEVICH, Yu.M., kand.tekhn.nauk

Comparing dynamic characteristics of various drives of medium
lathes during the start of the spindle. Izv.vys.ucheb.zzv.;
mashinostr. no.6190-94, '62. (MIRA 15:11)

1. Kuybyshevskiy industrial'nyy institut.
(Lathes—Electric driving)

ANDRUSHEVICH, Yu.M.; GULYACHKIN, K.N., inzh., retsenzent; KUDINOV, V.A., kand. tekhn. nauk, red.; SEMENCHENKU, V.A., red. 1zd-va; DEMKINA, N.F., tekhn. red.

[Designs of drives for medium-size lathes; the various types and their effect on the dynamics of speeding up and reversing] Konstruktsii privodov srednikh tokarnykh stankov; varianty, ikh vliianie na dinamiku razgona i reversirovaniia. Moskva, ikh vliianie na dinamiku razgona i reversirovaniia. Moskva, (MIRA 16:6)

Mashgiz, 1963. 88 p. (MIRA 16:6)

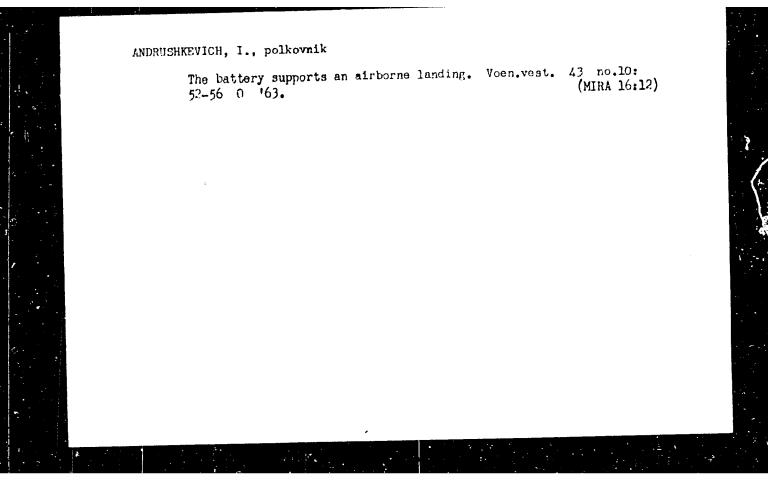
ANDRUSHKEVICH, A. Semi-automatic production lines in wood-processing enterprises. Na stroi. Ros. no.8:31-33 Ag '61. (MIRA 14:9) 1. Glavnyy inzhener derevoobdelochrogo kombinata No.6 Glavmospromstroymaterialov. (Woodworkirg industries)

ANDRUSHKEVICH, B., inzh.; SHEBEKO, N., inzh.

Prolong the life of fire engine bodiez. Pozh.delo 4 no. 7:18

J1 '58.

(Fire enginea--Maintenance and repair)



ANDRUSHKEVICH

\$/080/62/035/005/007/015 D204/D307

AUTHORS:

Kaplan, G. Ye., Mukhantseva, V. V., Filatkin, A. P.,

Andrushkevich, K. A. and Dushechkina, A. I.

TITLE:

Electrolysis of lithium sulphate solutions using a

mercury cathode

PERIODICAL:

Zhurnal prikladnoy khimii, v. 35, no. 5, 1962, 1043-

1048

TEXT: The authors wished to determine the possibility of producing LiOH by the electrolysis of aq. Li2SO4. The process was con-

ducted with a Pt anode, and a stream of Hg passing through the cell served as the cathode. The Hg/Li amalgam formed was collected and analyzed - the Li content was kept below 0.05%, and was generally ≤ 0.01%, to avoid the formation of a solid phase. The optimum conditions for the process were found to be: 200 - 300 g Li₂SO₄/l of electrolyte, cathode current density 1500 - 2000 amp/m² (the latter

value gave a current efficiency of 99.9% with 300 g Li2SO4/1),

Card 1/2

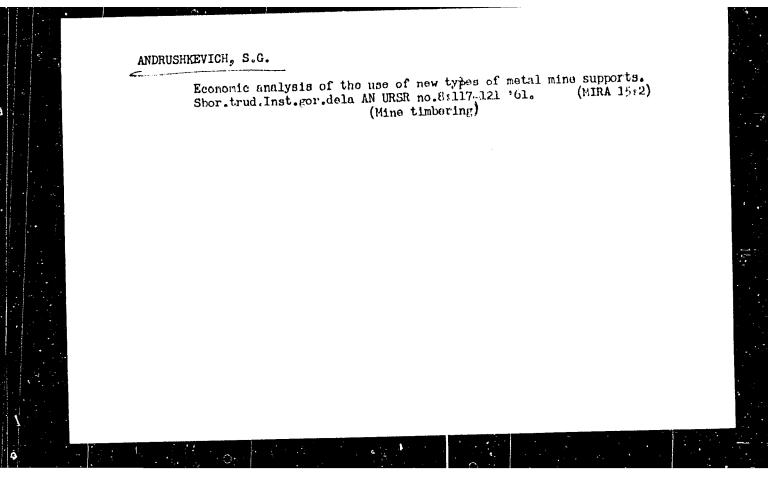
Electrolysis of lithium ...

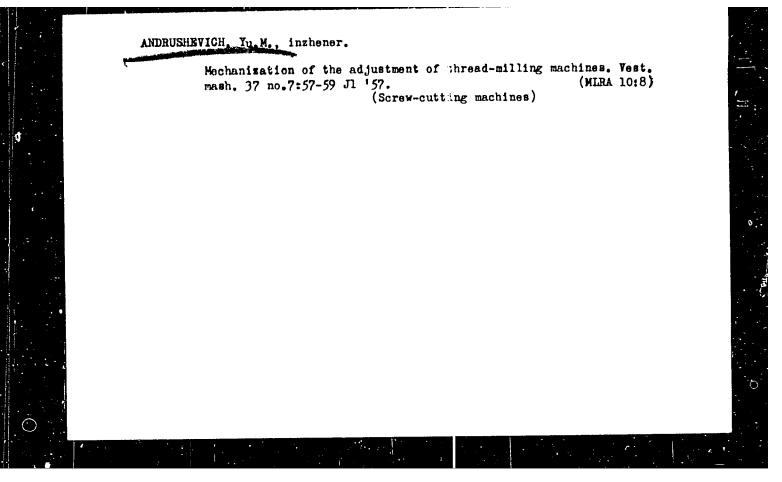
S/080/62/035/005/007/015 D204/D307

temperature 15 - 20° C, pH 3 - 6. Presence of Fe, Cr, Mn, Ca. Na, K and Al ions (separately) in the electrolyte at a concentration of 0.02 g/l, lowered the current efficiency η to 90 - 95%, while the same quantity of Mg decreased η to 47%. Simultaneous presence of the above impurities, in a total amount of 0.02 g/l, lowered η to 87%. Higher concentrations of these metals (0.2 - 0.4 g/l) gave current efficiencies of 62.0 - 43.0%. LiOH obtained from electrolytes containing the above ions contained only a trace of Na and K. There are 5 figures and 1 table.

SUBMITTED: January 27, 1961

Card 2/2





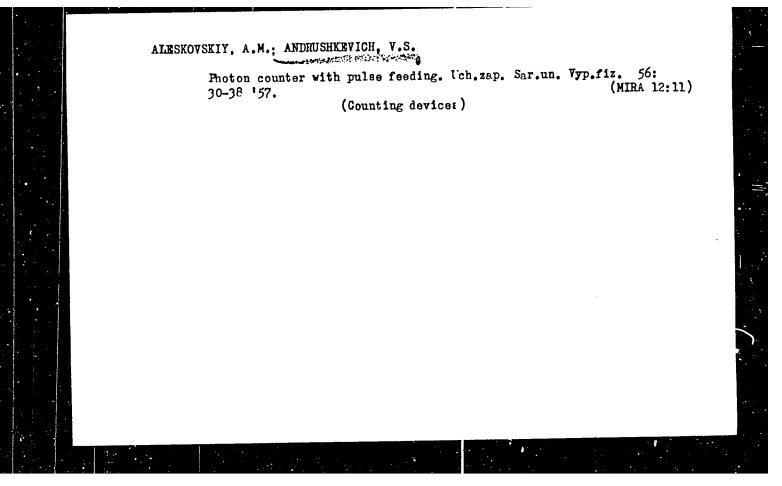
ALESKOVSKIY, A.M.; SOLOV'YEV, Yu.V.; ANDRUS HEVICH, V.S.

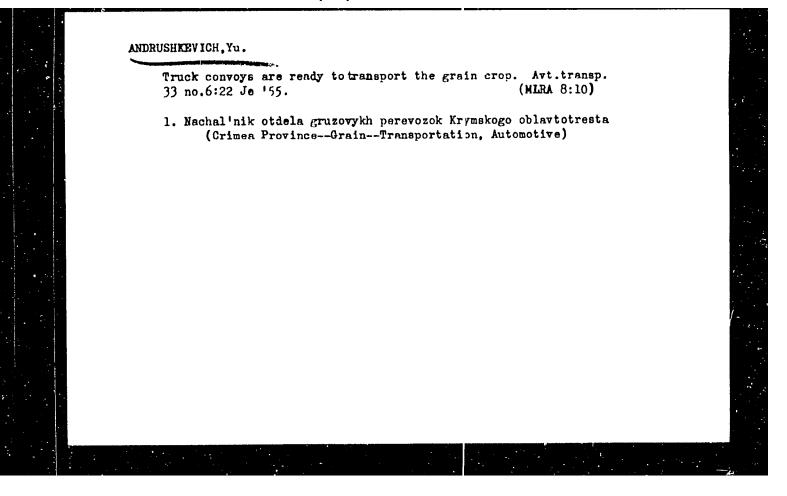
Magnetic compensating manometers. Frib. 1 tekh. eksp. no.1:110-112

Ja-7'57. (MIRA 10:6)

1. Saratovskiy gosudarstvennyy universitet im. N.G. Chernyshevskogo.

(Manometer)





AUTHORS:

Andrushevich, Yu'.M., and Bayanov, V.I.

604

TITLE:

Taps for Long Acme Threads (Metchiki Dlya Dlinnykh Trapetsoidal'

nykh Rez'b).

PERIODICAL:

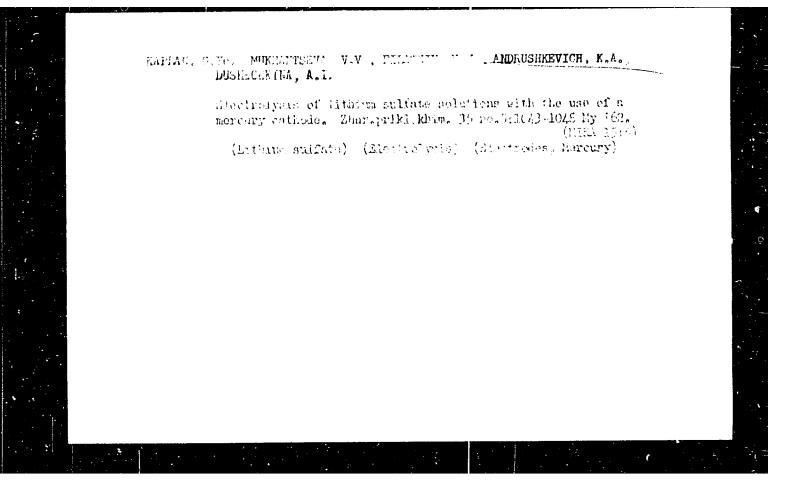
"Stanki i Instrument" (Machine Tools and Cutting Tools, No.3,

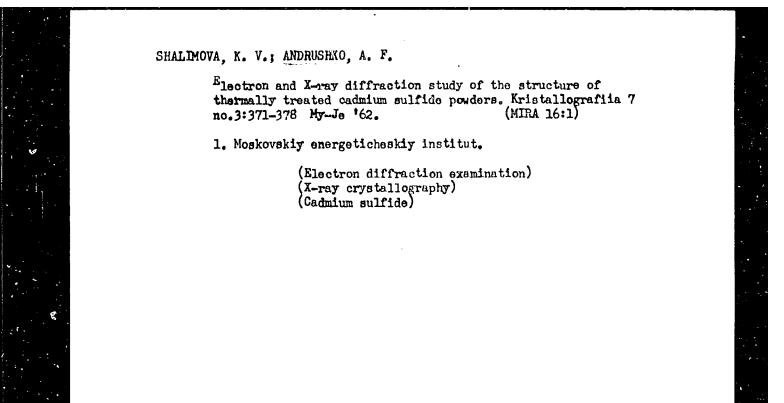
1957, pp.39-40 (U.S.S.R.).

ABSTRACT:

The research work carried out by the Kuibyshev Aviation Institute has shown that the nature of the auxiliary cutting edge angle in plan-form reduces the cutting force and leads to lower wear of the cutting tool. These results obtained on cutting off tools has been used to improve the geometry of tap design. The dimensions of four 31 mm diameter acme taps are shown, the last being the finishing tap. The metal removed by the first tap constitutes 44%, by the second 27%, by the third 17% and by the fourth 12% of the total.

Card 1/1

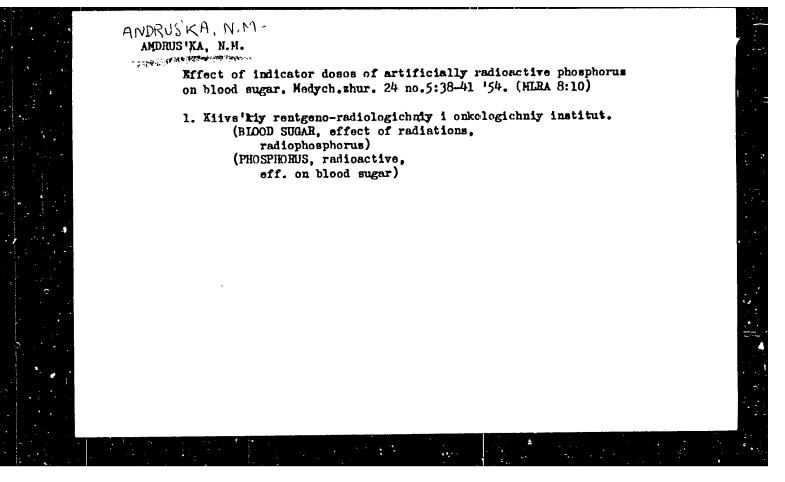


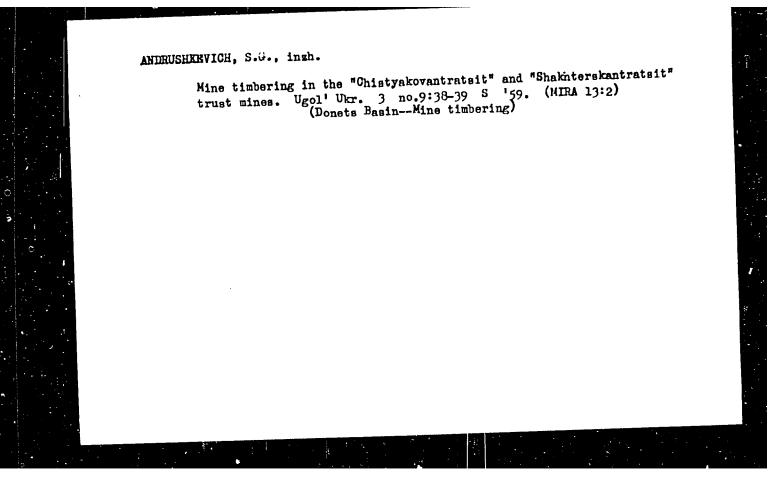


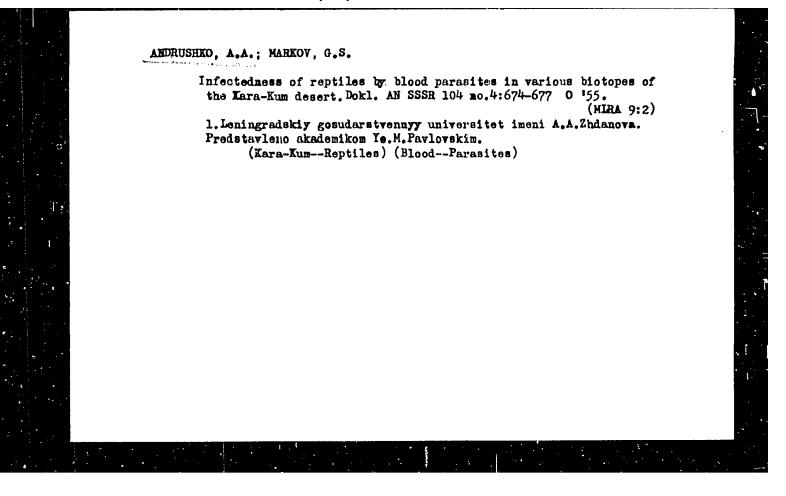
ANDRUSIKTEWICZ, J.

ANDRUSIKIEWICZ, J. The village of a heroic uprising. p. 9, No. 2, Feb. 1956. Warszawa, Poland Turysta

SOURCE: East European Accessions List (EEAL) Vol. 6, No. 4--April 1957







ANDRUSHKO, A.F., prepodavatel'; VORONKOV, E.N., prepodavatel',

NUEETSKIY, G.A., prepodavatel', NALYSHEV, A.A., prepodavatel';

KHRIN, A.A., prepodavatel'; SIALEOVA, K.V., prof.; ENIUTIN, V.V.,

reu., LARIONOV, G.Ye., tekhu. red.

[Specialized guide to semiconductors and semiconductor devices]

Spetsial'nyi praktikum po poluprovodnika: i poluprovodnikovym priboram. Koskva, Cos. energ. izd-vo, 1962. 303 p.

(MIRA 15:2)

(Semiconductors) (Transistors)

361.65

26.2421

S/181/62/004/003/001/045 B102/E104

AUTHOR:

Andrushko, A. F.

TITLE:

Packing defects in cadmium sulfide crystals

PERIODICAL: Fizika tverdogo tela, v. 4, no. 3, 1962, 582-586

TEXT: The lattice structure of CdS powder was studied by means of Debye patterns. The powder was produced by depositing CdS from a mixture of aqueous solutions of Cd(NO₃)₂ and Na₂S₂O₃·5 H₂O, and then subjected to a heat treatment of some hundred °C. The Debye patterns consisted of three sharp and two unsharp lines with the indices (0002), (1120), (1122), (1124), and (3030). Also CdS powder obtained by passing H₂S through Cd(NO₃)₂ solutions was investigated. From the results the following has been concluded: (1) Amorrhous CdS precipitated from Cd(NO₃)₂ and Na₂S₂O₃ solutions crystallizes above 370-390°C to α-CdS, the crystallization period being equal to the heating time. (2) Between 350 and 370°C amorphous CdS forms a highly irregular hexagonal structure of anionic layers. (3) CdS powder

Card 1/2

S/181/62/004/003/001/045 Packing defects in cadmium... B102/B 04

produced by precipitation from Cd(NO₅)₂ durin; the passage of H₂S may have an α or β structure, or also an intermediate one. The structural type depends on the mode of cooling. (4) Annealing of CdS powders of the intermediate structure at 350-520°C leads to a structural ordering toward α-CdS. (5) After annealing in air at above 550°C all CdS powders display a distinct hexagonal structure. Professor K. V. Shalimova is thanked for discussions and V. A. Shcherbinin for having prepared the specimens. There are 1 figure, 1 table, and 14 references: 1 Soviet and 13 non-Soviet. The four most recent references to English-language publications read as follows: F. Schossberger. Proc. 6th Annual Conference on Industrial Applications of

F. Schossberger. Proc. 6th Annual Conference on Industrial Applications of X-ray Analysis, Denver, 73, 1957; M. S. Paterson. J. Appl. Phys., 23, 805, 1952; T. R. Annantharaman. Current Sci., 27, No. 7, 238, 1958; 27, No. 8, 287, 1958.

ASSOCIATION: Moskovskiy energeticheskiy institut (Moscow Power Engineering Institute)

SUBMITTED: September 11, 1961

Card 2/2

vara z/z

"APPROVED FOR RELEASE: 04/03/2001

CIA-RDP86-00513R000101610002-0

5/070/62/007/002/003/022 E132/3100

24.7100

TITLE:

Andrushko, A.F. AUTHOR:

The orientation of microcrystals in thin layers

of CdS

PERIODICAL: Kristallografiya, v.7, no.2, 1902, 220-225

(+ 1 plate)

CdS was evaporated on to a crystalline base (NaC1) and an amorphous one (glass) in the temperature range 350 to TEXT: 450 °C. The layer was stripped and powdered, and flakes were examined by X-ray powder methods. The resulting photographs showed preferred orientation and this is analysed geometrically. The texture shows a spread of 8-100 when evaporated on to NaCl and 15-200 when evaporated on to glass. The author thanks Professor K.V. Shalimova for proposing the subject and

commenting on the results of the work.

There are 3 figures and 1 table.

ASSOCIATION: Moskovskiv energeticheskiy institut (Moscow Power Engineering Institute) Card 1/1

May 23, 1961 SUBMITTED:

S,'070/62/007/003/004/026 E:.32/E460

AUTHORS:

Card 1/2

Shalimova, K.V., Andrushko, a.F.

TITLE:

Electron and X-ray diffraction studies of the structures of thermally treated powders of cadmium

sulphide

PERIODICAL: Kristallografiya, v.7, no.3, 1962, 371-373 + 1 plate

TEXT: CdS can occur with either the hexagonal, alpha, hightemperature form (wurtzite type) or with the cubic, beta, lowtemperature structure. The effect of heat treatment in various
atmospheres (H₂S, He, H₂, air) on mixtures of the two forms
has been studied by X-ray and electron diffraction. It was
concluded that at temperatures below 490 to 520°C both forms are
substantially stable. At higher temperatures the cubic form goes
substantially stable. At higher temperature is 525 ± 5°C
to the hexagonal. In air the transition temperature is 525 ± 5°C
and in vacuo 495 ± 5°C. At temperatures above 700°C in vacuo
and in air recrystallization proceeds strongly and the particles
of alpha-CdS grow from 0.1 - 1.0 to 10 - 30 microns or more.
On heating in air at 520 to 660°C, considerable oxidation takes
place with the formation of sulphates. After heating at 700°C,

5/070/62/007/003/004/026 E132/E460

Electron and X-ray diffraction ...

the chief impurity in the powder is cadmitum oxide which is not topochemically related to the CdS. There are 2 figures.

ASSOCIATION: Moskovskiy energeticheskiy institut (Moscow Power Engineering Institute)

March 27, 1961 SUBMITTED:

Card 2/2

SHALIMOVA, K.V.; ANDRUSHKO, A.F.; DMITRIYEV, V.A.; PAVLOV, L.P.

Effect of the conditions of producing thin cadmium sulfide films on their crystalline structure. Kristalografiia 8 no.5:774-777 S-0 163. (MIRA 16:10)

1. Moskovskiy energeticheskiy institut.

| | | SD(va)/PSD(t) |
|---|--|--|
| | A COSSIDION NEL ALOVA CALLANDO DE LA CONTRACTOR DE LA CON | 00/005/0008/UULL |
| | AUTHORS: Shalimova K. V.; Andrushko, A. F.; Khir: | |
| | TITLE: Option properties of powders of padmium Stanton at 77.3K | ulfide of hexa- |
| | SOURCE: IVUZ, Fizika, no. 5, 1964, 811 Topic TAGS: cadmium Bulfide, luminescence spectru | m, luminescence |
| | analysis; polycrystal; reflection | structure in the |
| 0 | ABSTRACT: Inasmuch as earlier research of the absorption, reflection, emission and excitation of absorption, reflection cadmium sulfide was limited hexagonal-modification cadmium sulfide was limited samples and thin films deposited on heated substractions are undertaken to determine the dependence of the have undertaken to determine the dependence of the ties of the hexagonal modification of cadmium sulfides of the hexagonal modification of cadmium sulfides. | to single-crystal ates, the authors contical proper- |
| | Cord 1/3 | |

L 12432-65

ACCESSION NR: AP4047340

tions under which it is obtained. o-cds powders with fine crystalline structure, obtained by different means at different temperatures and with different reagents, were used in the investigations. All the spectra were cotained in unpolarized light at liquid-nitrogen temperature. The reflection spectra were obtained with the ISP-51 spectrograph with TF-84 camera, while the radiation and excitation spectra were investigated with the same spectrograph but with an FER-1 photoelectric attachment. The testil were made in the 4600-5400 A range. The powders have five reflection bands at liquidnitrogen temperature, and the luminescence excitation spectra display six maxima. A comparison of these spectru indicates that each maximum of reflection corresponds to a maximum of excitation. The emission of cadmiumesulfide powders lies in the blue and green regions of the spectrum. The blue band has two maxima with positions that vary from sample to sample, while the green band has four maxima at 5146, 5223, 5295, and 5390 Å. The differences in the spectra depend on the preparation. The results indicate that the opti-

Card 📑