

SINEL'NIKOVA, L.I.

Vitamin A and carotene content in the blood in gastric and duodenal ulcer. Ter. arkh., Moskva 24 no. 3:36-44 May-June 1952. (CLML 22:4)

1. Of the Faculty Therapeutic Clinic (Director -- Prof. V. N. Vinogradov, Active Member AMS USSR), First Moscow Order of Lenin Medical Institute.

SINEL'NIKOVA, L.L.; PASHKOVSKAYA, N.B.

Drying of milori blue paste in a fluidized bed. Trudy LTI
no.59:81-82 '61. (MIRA 17:9)

ROMANKOV, P.G.; RASHKOVSKAYA, N.B.; SINEL'NIKOVA, L.L.

Drying of some polymeric materials in a fluidized bed with the
air-lift method. Khim.prom. no.11:841-843 '63. (MIRA 17:4)

GURVICH, Temen Markovich; CHERNYAVSKIY, V.M., inzh., prof.; MAMUT, A.P., prof., red.; SINELNIKOVA, L.M., red.

[Water-treatment plant technician] Apparatusk vodopoi-
gotovki. Moskva, Energiia, 1964. 279 p. (MIRA 1847)

СИНДИКИФОВА С.В.

Reeling of studies and fatigue of first grade pupils. Sbornik
trud. TashCMI 22:481-487 '62. (MLA 18:10)

1. Kafedra obshchey gigiyony Tashkentskogo gosudarstvennogo medi-
tsinskogo instituta.

SHEVEL'KOV, Vasil'y Leont'yevich.; SINEL'NIKOVA, L.N., red.; VORONIN,
K.P., tekhn. red.

[Thermophysical characteristics of insulating materials]
Teplofizicheskie kharakteristiki izoliatsionnykh materialov.
Moskva, Gos. energ. izd-vo, 1958. 95 p. (MIRA 11:11)
(Insulation(Heat))

FLEKSERMAN, Yuriy Nikolayevich; SINEL'NIKOVA, L.N., red.; BOFUNOV, N.I.,
tekhn. red.

[Diagrams for the analysis of the combustion of Soviet fuels]
Diagrammy rascheta goreniiia topliv SSSR. Moskva, Gos.energ.izd-
vo, 1961. 124 p. (MIFA 14:12)

(Fuel--Analysis)

FRIDMAN, Saad'ya Lazarevich; SINEL'NIKOVA, L.N., red.; BORUNOV, N.I.,
tekh. red.

[Cost problems in power engineering]Voprosy sebestoimosti v
energeticheskom stroitel'stve. Moskva, Gosenergoizdat, 1962.
271 p. (MIRA 15:12)

(Power engineering--Costs)

KHIZHNYAKOV, Sergey Vasil'yevich; SINEL'NIKOVA, L.N., red.

[Practical calculations for the heat insulation of industrial equipment and piping] Prakticheskie raschety teplovoi izoliatsii promyshlennogo oborudovaniia i truboprovodov. Izd.2., perer. Moskva, Izd-vo "Energiia," 1964. 143 p. (MIRA 17:6)

GOLUBEV, Boris Pavlovich; SINEL'NIKOVA, L.N., red.; STOLYAROVA, Ye.L.,
red.; LARIGNOV, G.Ye., ~~tekhn.~~ red.

[Dosimetry and protection against ionizing radiations] Do-
zimetriia i zashchita ot ioniziruiushchikh izluchenii. Mo-
skva, Gosenergoizdat, 1963. 335 p. (MIRA 16:8)
(Radiation--Dosage) (Shielding (Radiation))

OSIHOVA, Varvara Aleksandrovna; SHLYKOV, Yu.P., kand. tekhn. nauk,
retsenzent; VUKALOVICH, M.P., doktor tekhn. nauk, prof.,
red.; SINEL'NIKOVA, L.N., red.

[Experimental study of heat-exchange processes] Eksperi-
mental'noe issledovanie protsessov teploobmen. Pod red.
M.P.Vukalovicha. Moskva, Izd-vo "Energiia," 1964. 327 p.
(MIRA 17:6)

VORONKOV, Sergey Timofeyevich. ISEROV, David Zinov'evich;
KAMENENKIN, Solomon Pavlovich, kandi. tekhn. nauk,
SHESTAKOVA, L.N., red.

[Heat insulation in electric power plants] Teplovaia izo-
liatsiia na elektricheskikh stantsiakh. Izd.2., perer.
i dop. Moskva, Energiia, 1965. 471 p. (MIRA 18.5)

AKSENOV, Mikhail Alekseyevich. Frinimal uchastiye GROMOV, N.K.,
kand. tekhn. nauk; SINEL'NIKOVA, L.N., red.

[Heating networks; sources and consumers of thermal energy.
Installation, maintenance, and repair of networks] Teplovye
seti; istochniki i potrebiteli tepla. Ustroistvo, obsluzhiva-
nie i remont setei. Moskva, Energiia, 1965. 351 p.

(MIRA 18:9)

SINEL'NIKOVA L. Ye.

"Biochemical and Technological Properties of Some Types of Winter Wheat Grains in Relation to Their Selection for the Irrigated Lands of the Southern Ukraine." Cand Tech Sci, Main Administration of Technological Vuzes; Odessa Technological Inst imeni I. V. Stalin, Min Higher Education USSR, Odessa, 1955, (KL, No 10, Mar 55)

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

SINEL'NIKOVA, L.Ye.; ROMENSKIY, N.V.

Effect of various irrigation standards on the quality of winter wheat of the southern Ukraine. *Izv.vys.ucheb.zav.;pishch.tekh.* no.5:8-12 '58. (MIRA 11:12)

1. Odesskiy tekhnologicheskii institut imeni I.V.Stalina, kafedra biokhimi zerna i zernovedeniya. (Ukraine--Wheat) (Irrigation)

KRIVOLAPOV, F.G.; SINEL'NIKOVA, L.Ye.

Splitting of starch in groats during boiling. Izv.vys.ucheb.zav.;
pishch.tekh. no.1:90-93 '59. (MIRA 12:6)

1. Odesskiy tekhnologicheskii institut imeni I.V.Stalina, kafedra
neorganicheskoy khimii.
(Starch)

KRIVOLAPOV, F.G.; SINEL'NIKOVA, L.Ye.

Effect of salt treatment on the fermentation activity of starch.
Izv.vys.ucheb.zav.; pishch. tekhn. no.6:33-36 '61. (MIRA 15:2)

1. Odesskiy tekhnologicheskii institut. kafedra neorganicheskoy
khimii.

(Starch)(Fermentation)

KRIVOIAPOV, F. G.; SINEL'NIKOVA, L. Ye.; SHILOVA, L. I.

Susceptibility of starch to attack by ferments during its aging. Izv. vys. ucheb. zav.; pishch. tekhn. no. 2:24-25 '64.
(MIRA 17:5)

1. Odesskiy tekhnologicheskii institut imeni Lomonosova, kafedra neorganicheskoy i analiticheskoy khimii.

BLYUGER, A.; KLEMBOVSKIY, A.; SINEL'NIKOVA, M.

Fine morphological manifestations of a shift in the metabolic processes of the liver in viral hepatitis. Izv.AN Latv.SSR no.11:101-106 '63. (MIRA 17:4)

SINEL'NIKOVA, M.M.; SHARUFICH, S., red.; SELIVERSTOVA, A., red.
izd-va; VORONINA, R., tekhn. red.

[Mechanization of calculating operations] Mekhanizatsiia
vychislitel'nykh rabot. Moskva, Vysshaia shkola, 1963.
251 p. (MIRA 17:2)

BLYUGER, Anatoliy Fedorovich; BEZIROZVANNYY, Boris Konstantinovich;
KLEBOVSKIY, Aleksandr Ivanovich; SINEL'NIKOVA, Mariya
Petrovna; SHUMKINA, Ol'ga Borisovna; DYMARSKAYA, O., red.

[Fine structure of the liver in some pathological processes;
an electron microscopy atlas] Tonkaia struktura pecheni pri
nekotorykh patologicheskikh protsessakh; elektronmikrosko-
picheski atlas. Riga, Izd-vo AN Latviiskoi SSR, 1964.
165 p. (MIRA 17:12)

1. Kafedra infektionnykh bolezney Rzhskogo meditsinskogo
instituta (for Blyuger, Sinel'nikov.). 2. Universitet
druzhy narodov im. Patrisa Lumumby (for Klembovskiy).
3. Institut virusologii ANI SSSR (for Bezirozvanny, Shumkina).

BLYUGER, A.F.; KLEMBOVSKIY, A.I.; SINEL'NIKOVA, M.P. (Riga)

Distribution of mitochondria and ergastoplasm of hepatic cells
in epidemic hepatitis. Arkh. pat. 27 no.11:44-47 '65.

(MIRA 18:12)

1. Problemnaya laboratoriya klinicheskoy biokhimi i infektsionnykh
bolezney, kafedra infektsionnykh bolezney (zav. - dotsent A.F.
Blyuger) Rizhskogo meditsinskogo instituta. Submitted November
11, 1961.

SINEL'NIKOVA, O.L.

Using electrolytic gel models for studying the advance of a
water-oil boundary. Neft.khoz. 35 no.3:40-43 Mr '57.

(MIRA 10:4)

(Petroleum geology--Electromechanical analogies)

SINEL'NIKOVA, O.L., kand. tekhn. nauk

Solving some of the problems of underground coal gasification
with help of an electrolytic model. Podzem. gaz. ugl. no.4:43-46
'58. (MIRA 11:12)

1. Vsesoyuznyy nauchno-issledovatel'skiy institut Podzemgaz.
(Coal gasification, Underground--Electromechanical analogies)

SINEL'NIKOVA, O.L.

Changes in gas pressure in a main pipeline under conditions of ir-
regular flow of gas. Gaz. prom. no.5:48-50 My '58. (MIRA 11:5)
(Gas, Natural---Pipelines)

SINEL'NIKOVA, O.L., kand. tekhn. nauk

▲ Approximate calculation of water inflow to boreholes in inclined
medium thickness seams. Podzem. gaz. ugl. no. 1:50-53 '59.

(MIRA 12:6)

1. VNIIPodzengaz.

(Drainage) (Water, Underground)

SINEL'NIKOVA, O.L., kand.tekhn.nauk

Residual water saturation of coal seams. Podzem.gaz.ugl. no.2:
38-79 '59. (MIRA 12:9)

1. Vsesoyuznyy nauchno-issledovatel'skiy i proyektnyy institut
podzemnoy gazifikatsii ugley.
(Coal gasification, Underground) (Water, Underground)

GUSEYN-ZADE, M.A., kand.tekhn.nauk, dots.; SINEL'NIKOVA, O.L., kand.
tekhn.nauk

Method of electric modeling of nonhomogeneous coal seams.
Podzem.gaz.ugl. no.4:17-19 '59. (MIRA 13:4)

1. Vsesoyuznyy nauchno-issledovatel'skiy institut Podzemgaz.
(Coal gasification, Underground--Electromechanical analogies)

SINAI, M. A., Ph.D., Inst. Tekhn. Sankh.

Appraising the effect of air-blast pressure on the change of water
level of the Upa formation. Trudy VNIIPodzemgaza no.13:85-88 '65.
(MIRA 18:8)

SINEL'NIKOVA, O.I., Eng. Techn. rank

Determining from pumping out data the radius of influence of an
underground water flow. Trudy VNI podzemnogo no.12:84-90 164.
(MIRA 18:9)

1. Laboratoriya gidrogeologicheskaya Vsesoyuznogo nauchno-
issledovatel'skogo instituta podzemnoy gazifikatsii ugley.

✓ The preservation of active protoanemonin in different solvents. O. P. Snel'nikova. *Mikrobiol. Zhur., Akad. Nauk Ukr. R.S.R.* 16, No. 2, 70-2(1054)(Russian summary).--In an 0.75% soln. in ether protoanemonin loses 30% of its activity in 7 months. In lower concns. its preservation is more effective. In a 0.2-1.0% soln. in abs. alc. it remains active for 10-12 months. In similar concns. in acetone it retains its original activity 6-8 months. In a 1.0% soln. in acetone it loses 13% of its activity in 1.5 months, remaining unaffected the first 7 days. Glycerol, petroleum oil, and petr. ether are unsuitable for the purpose. In castor oil 0.2-1.0% keeps for 12 months, in cottonseed oil it keeps 11 months, and in sunflower-seed oil, 8-11 months. Fish oil is a poor preservative, and peach and apricot oil manifest no preservative properties for the potency of protoanemonin. B. S. Levine

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GABRIEL'YANTS, Mikhail Agaronovich; PETROV, Vladimir Andreyevich; SINEL'NIKOVA,
P.B., red.; SUDAK, D.M., tekhn. red.

[Meat products; a handbook] Miasnye tovary; spravochnoe posobie.
Moskva, Gos. izd-vo torg. lit-ry, 1958. 273 p. (MIRA 11:7)
(Meat)

DUBROVA, Georgiy Borisovich; SINEL'NIKOVA, TS.B., red.; BRODSKIY, M.P.,
tekh. red.

[Using antibiotics for the preservation of food products] Pri-
menenie antibiotikov dlia sokhraneniia pishchevykh produktov.
Moskva, Gos. izd-vo torg. lit-ry, 1961. 87 p. (MIRA 14:8)
(ANTIBIOTICS) (FOOD--PRESERVATION)

ANDREYEV, I.V.; GANZBURG, M.D.; SOLOVYUSKIY, A.G.; CHESAROV, S.F.;
SINEL'NIKOVA, T.S.B., red.; MAKONTOVA, N.N., tekhn. red.

[Radio consumer goods]Radiotovary; spravochnik. Leningrad,
Gostorgizdat, 1962. 211 p. (MIRA 15:12)
(Radio--Equipment and supplies) (Phonograph)
(Television)

RYTOV, Nikolay Pavlovich; SINEL'NIKOVA, TS.B., red.; EL'KINA, E.M.,
tekhn. red.

[Storage of vegetables; advanced Practices]Khranenie ovo-
shchei; peredovoi opyt. Moskva, Gostorgizdat, 1961. 41 p.
(MIRA 15:11)

(Vegetables--Storage)

ALEKSEYEV, Nikolay Semenovich; SINEL'NIKOVA, TS. B., red.; GROMOV, A.S.,
tekhn. red.

[Building materials]Stroitel'nye tovary. Moskva, Gos.izd-vo
torg.lit-ry, 1962. 159 p. (MIRA 16:4)
(Building materials)

BULGAKOV, Nikolay Vasil'yevich; KUTYANIN, Georgiy Isaakovich;
SEBGEYEV, M.Ye., prof., retsenzeng; MESYACHENKO, V.T.,
dots., retsenezent; MAKSIMOVICH, A.G., red.; SIREL'NIKOVA,
TS.B., red.; MEDLISH, D.M., tekhn. red.

[Introduction, Plastics, Commercial Chemicals]Vvedenie,
Plasticheskie massy, Khimiko-moskatel'nye tovary. Moskva,
Gostorgizdat, 1962. 368 p. (MIRA 15:10)
(Commercial products) (Plastics) (Chemicals)

BROZOVSKIY, Dmitriy Ivanovich; YAKOVLEVA, Valentina Nikolayevna;
SINEL'NIKOVA, TS.B., red.; VOLKOVA, V.G., tekhn. red.

[Commercial chemical and silicate wares] Khimiko-mosk~~o~~tel'-
nye i silikatnye tovary. Moskva, Gostorgizdat, 1963. 239 p.
(MIRA 16:7)

(Chemicals) (Silicates)

STEPANYAN, Mikhail Armenakovich; SINEL'NIKOVA, TS.B., red.;
VOLKOVA, V.G., tekhn. red.

[For the buyer of a television set] Pokupateliu o tele-
vizorakh. Moskva, Gostorgizdat, 1963. 111 p.
(MIRA 17:2)

SAVINA, Zoya Georgiyevna; SUSHAREV, Mikhail Ivanovich, SMEL'KIN,
Abram Fayvanovich; NEKOLAYEVA, N.G., red.; SIBEL'NIKOVA,
T.S.B., red.

[Guide for laboratory and practical studies of manufactured
goods] rukovodstvo k laboratornym i prakticheskim zaniatiyam
po tovarovedeniiu promyshlennykh tovarov. Moskva, Ekonomika,
1965. 230 p. (MIRA 28 2)

YEREMENKO, Vladimir Danilevich; SINEL'NIKOVA, TS.B., red.

[Storage and processing of onion and garlic] Khranenie
i pererabotka luka i chesnoka. Moskva, Ekonomika, 1965.
110 p. (MIRA 18:5)

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ГОДЕЛЬНИКОВА, Г. И., Пол.

Годовик, 1988. 134 стр. М., Эк-
с- (МПА, 1988)

L 33029-66 EWP(e)/I/EWP(t)/ETI/EWP(k) IJP(c) JN/JG
SOURCE CODE: 117/0226/66/000/004/0111/0111

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ACC NR: AF6024085

AUTHOR: Sinel'nikova, V.

ORG: none

TITLE: Seminar on intermetallic compounds, methods for producing them, and their physicochemical properties

SOURCE: Poroshkovaya metallurgiya, no. 4, 1966, 111

TOPIC TAGS: metallurgic conference, intermetallic compound, electron structure, metal physical property, metal phase system, crystal structure, metal, carbide

ABSTRACT: A scientific seminar organized by the Institute of Problems in Materials Science, Academy of Sciences UkrSSR, was held in Kiev on 26-28 Jan 66 to discuss intermetallic compounds, methods of producing them, and their physicochemical properties. Participating in the seminar were more than 100 people representing more than 20 scientific research organizations including the Institute of Metallurgy imeni A. A. Baykov, The Institute of Metal Physics, AS UkrSSR, Moscow and L'vov State Universities, Leningrad Physicotechnical Institute imeni A. F. Ioffe, Moscow "Order of the Red Banner of Labor" Institute of Steel and Alloys, Kharkov Physico-technical Institute, Zhdanov Metallurgical Plant and Urals Polytechnical Institute. I. I. Kornilov gave a report in which he reviewed problems in the classification of metallides with respect to the position of metals in

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the periodic system² according to general and special characteristics on the basis of generally accepted hypotheses for the behavior of electrons in the outer shell in the compounds and the nature of the chemical bond. A report by G. V. Samsonov was devoted to the chemistry of metals and the classification of beryllides² based on hypotheses for the formation of stable electron configurations in solids. Several papers were devoted to new intermetallic phases, refinement of phase diagrams and phase transformations¹ in binary and ternary systems, and the crystal structures of metallides. Many reports were also heard on new methods for producing metallides and on improving the present methods. V. R. Pokryshev and V. I. Marchenko gave a report on producing compact articles from refractory metallides with ultrasonic activation. Selective isolation of intermetallic and carbide phases from nickel² alloy was considered in a paper by R. B. Golubtsova. A report by V. B. Fedorus, T. Ya. Kosolapova and Yu. B. Kuz'ma was devoted to interaction between the carbides of transition metals and zirconium oxide. A resolution was passed at the seminar which emphasized the achievements made in the field of metallides and called attention to the necessity for further development in studies to determine the relationships involved in the formation of metallides with regard to the electron and crystal structures of the initial components, research on interactions between metallides and reactions of metallides with pure metals, and investigation of the physical, chemical and mechanical properties of intermetallic systems. It was resolved that the next scientific seminar on intermetallic compounds should be convened in two years. [SPRS]

SUB CODE: 11 7 SUBM DATE: none

Card 2/2 50

Sinel'nikova, V.A.

N.M. Yakobf, V.A. Sinel'nikova, and others. Obtaining high-purity vanadium and niobium by electron-beam melting.

Title: Seminar on refractory metals, compounds, and alloys (Kiev, April 1963).

Source: Atomnaya energiya, v. 15, no. 3, 1963, 266-267

L 6199-66 EWT(m)/EPF(c)/EWP(t)/EWP(b) IJP(c) JD/JG

ACC NR: AP5025721

SOURCE CODE: UR/0286/65/000/018/0075/0075

INVENTOR: Sinel'nikova, V. A.; Yudin, Ye. A.; Balyasov, Yu. F.; Kiseleva, N. M.; Piskunov, A. V. 10
B

TITLE: Treatment of nitrogen¹containing vanadium². Class 40, No. 174793 [Announced by the State Scientific Research and Construction Institute of the Rare-Metals Industry (Gosudarstvennyy nauchno-issledovatel'skiy i proyektnyy institut redkometalliche-cheskoy promyshlennosti)]

SOURCE: Byulleten' izobreteniy i tovarnykh znakov, no. 18, 1965, 75

TOPIC TAGS: vanadium, nitrogen containing vanadium, vanadium refining

ABSTRACT: This Author Certificate introduces a method of treating vanadium which contains nitrogen. Raw vanadium is first converted to hydride, which is ground, mixed with carbon black, and carbidized at about 1700C. [W]

SUB CODE: MM/ SUBM DATE: 06Mar64/ ATD PRESS: 4/40

PC

Cord 1/1

UDC: 669.292.33

MINI-NIKOVA, V.N.

Some Pleurotomariacea Gastropoda of the Middle Carboniferous of
Moscow Province. *Biul. MOIP. Otd.geol.* 39 no.5:145-146 S-O '62.
(MIRA 18:2)

SINEL'NIKOVA, V.N.

Some Pleurotomariacea of the Miachkovo horizon in the western
part of the Moscow syncline. *Byul.MOIP.Otd.geol.* 40 no.5:161-
172 S-0 '65. (MIRA 13:11)

SINEL'NIKOVA, V.P.; TSETSURA, I.A.

From experience of taking the routing-relay centralization devices into operation. Avtom.telem. i svyaz' 3 no.1:35-38 Ja '59.
(MIRA 12:1)

1. Nachal'nik oddela signalizatsii, tsentralizatsii, blokirovki sluzhby signalizatsii i svyazi Krasnoyarskoy dorogi (for Sinel'nikova). 2. Nachal'nik dorozhnoy laboratorii Krasnoyarskoy dorogi (for Tsetsura).

(Railroads--Train dispatching)

SOV/21-59-8-12/26

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Samsonov, H.V., Synechukova, V.S., Kyblyy, P. O.
(Samsonov: G. V., Sinechukova, V. S., Kyblyy, P. S.)

AUTHOR:

TITLE:

Alloys of the Boron Carbide - Molybdenum Disilicide System

PERIODICAL:

Dopovidi Akademii nauk Ukrain's'koj RSR, 1959, Nr 8,
pp 866 - 868 (USSR)

ABSTRACT:

The alloys of boron carbide with molybdenum disilicide possess a high and stable thermal e. m. f. which is used when creating high-temperature thermocouples [Ref. 1]. The boron carbide, however, is, at its high resistance to heat, [Ref. 2] not yet sufficiently resistant to oxidation at high temperatures. This calls forth the necessity to add components to the alloy which avert or stop its oxidation. In connection with this, the properties of boron carbide - molybdenum disilicide alloys were subjected to investigations based upon the method of metallography, X-ray patterns, conductivity and thermal e. m. f. Formation of the quadrivalent phase $Mo(B_1C_1, Si)$ is found. It has a very wide homogeneous region across which (from 10 to 50 mol.% $MoSi_2$ in alloys with boron carbide) electrical resistance

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Alloys of the Boron Carbide - Molybdenum Disilicide System

SOV/21-59-8-12/26

increases and thermal e. m. f. decreases, in accordance with the degree of defectiveness of the lattice of this phase. The investigation of alloys in view of their resistance to oxidation has shown (Photo 2), that an alloy which according to its composition corresponds approximately to the quadripartite chemical compound, possesses the highest resistance to oxidation. Additions of disilicide of less than 50 mol.% decrease the resistance of alloys to oxidation. There is one set of photos, 1 diagram and 5 references, 3 of which are Soviet, 1 American and 1 German.

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

PERIODICAL: By V. M. Svechnikov, Member of AS UkrSSR

SUBMITTED: December 22, 1958

Card 2/2

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E021/E406

AUTHORS: Zhuravlev, N.N., Makarenko, G.N., Samsonov, G.V.,
Sinel'nikova, V.S. and Tsebulya, G.G. (Kiyev)

TITLE: The Question of the Properties and Phase Composition of
Alloys of Boron and Carbon ↑

PERIODICAL: Izvestiya Akademii nauk SSSR, Otdeleniye tekhnicheskikh
nauk, Metallurgiya i toplivo, 1961, No.1, pp.133-141

TEXT: The aim of the work was to find a method of preparing relatively pure alloys of boron with carbon and to investigate their physical properties and phase composition. The initial materials were powders of amorphous boron (98.5 to 99.5%) and lamp black (99.8% C). The powders were mixed in alcohol, dried and sieved through 150 mesh. Several methods of preparation were tried, the most acceptable being to hot-press a mixture of the powders in an argon atmosphere in graphite press-formers. Some carburization took place (chemical analyses were made by T.N.Nazarchuk). This could be overcome by using a molybdenum lining but it resulted in contamination with 1.3 to 1.9% molybdenum. Boron nitride linings avoided this contamination. The alloys prepared were examined metallographically, etching by anodic treatment in a
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The Question of the Properties ...

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40% KOH solution at 0.9 to 1.2 A/cm² and 10 to 20 V. The structures obtained are shown in Fig.1. The alloy with 6.4% carbon had a eutectic structure. At about 8% carbon, the structure was practically single-phased and at 10.2% carbon the whole field appeared as a eutectic. It is proposed that a compound forms at about 8% carbon with the formula B₁₂C. A second compound begins to appear at about 10% carbon and is either B₁₃C₂ or B₁₂C₃. X-ray analysis of the alloys was also carried out and confirmed the metallographic observations. Fig.2 shows the photograph of the phases B₁₂C and B₄C. The B₄C phase had a rhombohedral structure. Between 20.9 and 80% C, the alloy consisted of two phases: the rhombohedral phase, with maximum carbon content in the cell, and graphite. At 61% carbon, an X-ray photograph with a large number of lines, the intensity and position of which did not correspond to B₄C, was obtained. It is proposed that a compound richer in carbon than B₄C exists at high temperatures, which decomposes to B₄C and graphite at low temperatures. Micro-hardness measurements showed that in the unannealed state there is a maximum corresponding to the proposed phase B₁₂C (about 6000 kg/mm²). After annealing, the hardness curve is smoothed out and the hardness Card 2/9 .

The Question of the Properties ...

S/180/61/000/001/012/015
E021/E406

of $B_{12}C$ was 4000 kg/mm^2 whilst that of B_4C was about 5000 kg/mm^2 . Electrical resistance measurements showed that there were sharp maxima at 8 and 21.7% carbon. After annealing, the first maximum was retained although the absolute value decreased; a high maximum was observed at about 15% carbon ($B_{13}C_2$). The resistance of alloys containing more than 30% carbon was low and practically independent of composition. Studies of temperature dependence of resistance of B_4C confirmed the semiconducting character of this carbide (see Fig.5). Thermal e.m.f. measurements showed that the highest values corresponded to defect structures of the compounds $B_{12}C$ and $B_{12}C_3$ deficient in carbon. Two possible variations of the phase diagram of the boron-carbon system at the boron-rich end are given in Fig.4. There are 5 figures, 3 tables and 19 references: 14 Soviet and 5 non-Soviet. X

SUBMITTED: August 24, 1960

Card 3/9

SINEL'NIKOVA, V. S.

30335

S/185/61/006/005/012/019
D274/D303

24.7700 (1035, 1043, 1144)

AUTHORS: Samsonov, H.V.; and Synel'nykova, V.S.

TITLE: On the width of the forbidden gap in boron carbide

PERIODICAL: Ukrayins'kyy fizychnyy zhurnal, v. 6, no. 5, 1961,
687 - 689

TEXT: The temperature dependence is investigated of the resistivity of commercial boron carbide and of relatively pure boron carbide. The specimens were prepared by hot-pressing in graphite molds. The width of the forbidden gap was calculated from the temperature dependence of the resistivity; it was found to be approximately 1.64 ev. The commercial B₄C contained Fe, Si, and Cr impurities, as well as traces of Zn, Sb, Cu and Ni. The pure boron-carbide was obtained by hot-pressing in an argon atmosphere. The temperature dependence of the resistivity of commercial B₄C was measured up to 2000°C, and of the pure B₄C up to 1600°C; the measurements were conducted by a method given in the references. The results of the measurements are shown in figures. The character of the curves is in both cases ana-

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30335
S/185/61/006/005/012/019
D274/D303

On the width of the Forbidden ...

logous to the curves for silicon carbide, i.e. first, the resistivity decreases owing to the excitation of the impurity electrons, then it increases due to scattering by thermal fluctuations, and then it decreases again on transition to intrinsic conductivity. The temperatures of the corresponding transitions are however different for each of the boron-carbide types, as well as for the silicon carbide. Thus, the transition to intrinsic conductivity of pure B₄C takes place at 1100-1150°C as compared to 1600°C for SiC. The activation energy of the electrons, calculated from the temperature dependence of the resistivity, is approximately 0.7 eV for pure B₄C in the temperature range 1400 - 1550°C and in the temperature range 1700 - 2000°C - approximately 1.64 eV. In the authors' opinion, 0.7 eV is not the width of the forbidden gap, but the transition energy of electrons. Intrinsic conductivity appears at a temperature of nearly 1700°C, and the width of the forbidden gap is approximately 1.64 eV. The energy bands of B₄C are shown in a figure, and the transition between bands is explained. The electrical conductivity in B₄C is mainly due to the flow of holes in the filled band, and of electrons - in the conduction band. There are 5 figures

Card 2/3

30335

S/185/61/006/005/012/019
D274/D303

On the width of the forbidden ...

and 6 references: 2 Soviet-bloc and 4 non-Soviet-bloc. The referen-
ces to the English-language publications read as follows: R. Ridg-
way, Trans. Am. Electrochem. Soc., 63, 369, 1953; 66, 117, 1954;
M. Yamaraki, J. Chem. Phys., 27, 3, 746-51, 1957; G. Fetterley, J.
Electrochem. Soc., 24, 1, 746, 1957.

ASSOCIATION: Instytut metalokeramiky i spetsial'nykh splaviv AN
URSR m. Kyiv (Institute for Powder Metallurgy and
Special Alloys AS UkrSSR, Kyiv)

SUBMITTED: January 2, 1961

X

Card 5/3

26393
S/032/61/027/008/018/020
B'24/B215

18 8100

AUTHORS: Sinel'nikova, V. S., and Virovtsev, V. A

TITLE: Device for measuring electrical resistance at temperatures of 2000-2500°C

PERIODICAL: Zavodskaya laboratoriya, v. 27, no. 8, 1961, 1043-1044

TEXT: The authors designed a special device for measuring the electrical resistance of high-melting substances at 2000-2500°C (Fig. 1). The adjusting screw 2 fixes the specimen 1 between two molybdenum contacts. The upper contact 3 is connected with a water-cooled feeder 5 by a cross bar 4 made of heat-resistant steel. The lower contact 6 rests on a molybdenum spring 7 which guarantees continuous connection with the specimen. The lower contact is supplied with current through the flexible copper bar 8 which is connected to the water-cooled support 9. The feeders are insulated from the water-cooled table 10 by ebonite pads 11 and vacuum seals 12. The system is provided with one tungsten and three molybdenum shields to reduce the heat loss. For pyrometric temperature measurements, opening 14 is provided for the thermocouple, and two more openings for probes.
Card 1/4

X

2019
S/052/51/027/008/018/020
B124/B215

Device for measuring...

The shields are adjusted by guides 16 and fixed in position by stop screws 17. The probes, made of pointed molybdenum or tungsten wire are 27 mm in length and 0.5 mm in diameter, and are insulated from the shields by lundum tubes. Tantalum plates press the probes into the specimen. The whole system is placed in a molybdenum glass envelope. The current passing through the specimen is measured by a УТТ-6 (UTT-6) transformer and an ЭРА. АСТ (ELA, AST) ammeter. Amperage is controlled by a ПНО-20 (PNO-20) autotransformer. The voltage drop at the specimen is controlled with an ЛВ-9-2 (LV-9-2) tube voltmeter, and its temperature is regulated by a tungsten-rhenium thermocouple and an ММ(МР) micropyrometer. The device may be used for measuring the resistivity of specimens 10 mm long and 4 mm in diameter. The error of measurement is 5-2%. The results obtained for titanium carbide (linear dependence of resistivity on temperature) are in good agreement with those obtained by N. V. Kolomojets, V. S. Neshpor, G. V. Samsonov, and S. A. Semenkovich (Ref. 2: Zhurnal tekhnicheskoy fiziki, 28, 1282 (1952)). There are 3 figures and 2 references: 1 Soviet-bloc and 1 non-Soviet-bloc. The reference to English-language publications reads as follows: F. Glaser, D. Moskowitz, Powd. Met. Bull. 6, 178 (1953).

Card 2/4

0373
S/032/61/027/008/018/020
B124/B215

Device for measuring...

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

Card 3/4

15.2200

41899
S/226/62/000/004/008/012
1003/1203

AUTHOR: Shchegolev, G.I., and Shchel'manova, V.S.
TITLE: Electric resistance of refractory compounds at elevated temperatures
PERIODICAL: Poroshkovaya metallurgiya, no.4, 1962, 50-62

ABSTRACT: There are either no data or only contradictory on the above subject, despite its great practical importance. The temperature dependence of the electric resistance of the carbides of titanium, zirconium, hafnium, molybdenum, and tungsten as well as of the oxides of titanium and zirconium, up to 2300 C was investigated and some thermal coefficients calculated. The samples to be investigated were prepared by sintering metal powders. The relationship is discussed between the electric resistance and the behavior of the electrons of both the metallic and the non-metallic atoms of the above compounds. There are 2 figures and 1 table.

ASSOCIATION: Institut Metallovedeniya i Spetsial'nykh Splavov AN USSR (The Institute

Card 1/2

5/226/62/000/004/003/012
1003/1203

Electric resistance of...

of Metal Powders and Special Alloys of the AS USSR)

SUBMITTED: January 15, 1962

X

SAMSONOV, G.V.; SINEL'NIKOVA, V.S.

Preparation and properties of titanium aluminides. TSvet. met.
35 no.11:92-95 N '62. (MIRA 15:11)
(Titanium compounds)

ACCESSION NR: AP4017568

S/0149/64/000/001/0145/0150

AUTHOR: Samsonov, G. V.; Sinel'nikova, V. S.; L'vov, S. N.; Nemchenko, V. F.

TITLE: Physical properties of titanium, zirconium, and vanadium aluminides

SOURCE: IVUZ. Tsvetnaya metallurgiya, no. 1, 1964, 145-150

TOPIC TAGS: titanium alloy, zirconium alloy, vanadium alloy, aluminum alloy, aluminide, physical property, electrical conductivity, thermal conductivity, Hall effect, Wiedemann Franz ratio, thermal expansion, hardness, magnetic susceptibility

ABSTRACT: The physical properties determined were resistivity, thermal coefficient of resistivity, coefficient of thermo-emf, Hall constant effective current carrier mobility, effective current carrier concentration, heat conductivity, Wiedemann Franz ratio, coefficient of thermal expansion, microhardness, and magnetic susceptibility. The alloys TiAl, *TiAl₃, Zr₃Al, Zr₂Al, ZrAl₃, V₅Al₈, VAl₃, VA₆, and VAl₁₁ were prepared by arc melting in argon or by sintering from AV000 aluminum and 99.98% pure iodide titanium, zirconium, and vanadium. The greater hardness, lower resistivity, and lower thermal expansion of TiAl₃ compared to TiAl indicate greater electron density in the Ti 3d-electron level. The specific conductivity of Zr-aluminides increases as the ratio of Al:Zr increases.

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ACCESSION NR: AP4017568

which process is linked to a gradual electron influx into the Zr d-level. V-aluminides show a similar pattern. Minimum current carrier concentrations and maximum current carrier mobilities for all $MeAl_3$ alloys are noted. Except for Ti-aluminides, the Wiedeman-Franz ratio for the alloys was found to be greater than theoretical, which is accounted for by significant lattice contributions to the electrical conductivity. From the donor-acceptor theory, it is concluded that the probability of an Al-valence electron influx into the d-level decreases as the accepting ability of the latter decreases in the order $Ti \rightarrow Zr \rightarrow V$. Orig. art. has: 2 figures and 3 tables.

ASSOCIATION: Institut metallokeramiki i spetsial'ny*kh splavov AN UkrSSR (Institute of Powder Metallurgy and Special Alloys); Khersonskiy pedagogicheskiy institut (Kherson Pedagogical Institute)

SUBMITTED: 19Jul63

ENCL: 00

SUB CODE: MM

NO REF SOV: 012

OTHER: 001

Card^{2/2}

L 14808-65 EWT(m)/EPF(n)-2/EWA(d)/EWP(t)/EWP(k)/EWP(b) Pf-4/PB-4/Pu-4
AFWL/ASD(m)-3/AS(mp)-2/AFTC(p) JD/HW/JG S/0136/64/000/010/0069/0073
ACCESSION NR: AP4047428

AUTHOR: Sinel'nikova, V. S.

TITLE: Production of aluminides of refractory metals ²⁷

SOURCE: Tsvetny*yemetally*, no. ²⁷10, 1964, 69-73

TOPIC TAGS: aluminide, aluminum alloy, hafnium containing alloy,
molybdenum containing alloy, niobium containing alloy, tantalum con-
taining alloy, vanadium containing alloy, zirconium containing alloy,
sintering, arc melting, hot extrusion, induction melting ⁴

ABSTRACT: ¹⁶Aluminides, alloys of Al with various amounts of Hf, Mo, Nb, Re, Ta, V, or Zr, were prepared by TIG or induction melting, by sintering in an argon atmosphere, or by hot extrusion of the powdered components. The advantages and limitations of each preparation method have been studied. Results of the study showed hot extrusion to be the best method in that it produces homogeneous single-phase alloys without heating above the melting temperature of the corresponding aluminides; the ease of mixing powdered ingredients facilitates formation of homogeneous alloys, and rapid cooling produces no cracks since

Card 1/3

L 14808-65

ACCESSION NR: AP4047428

hot extruded alloys can be cooled at practically any cooling rate. A disadvantage of this method is a slight contamination of the alloys by oxygen present in the oxide film on powder particles. Single-phase aluminides are also readily obtained, without prolonged homogenizing treatment, by sintering powdered components in an argon atmosphere. Since most sintered aluminides are brittle, they are easily powdered, and test specimens of the required shape can be made by subsequent cold compacting and sintering in an inert atmosphere or by hot extrusion. TIG melting of pure initial ingredients produces poreless ingots of aluminides of practically stoichiometric composition. However, a prolonged homogenizing treatment at near-melting temperatures is necessary to obtain single-phase alloys, making difficult the production of large ingots of the aluminides of refractory metals. Also, rapid cooling of the ingots results in cracks which hamper measurement of the alloy properties. The use of induction melting in an argon atmosphere has the advantages and limitations similar to those met with TIG melting, except that the induction-melting process makes it possible to avoid overheating of the alloy, and thus to obtain the required alloy composition by eliminating the vaporization loss of aluminum. Orig. art. has: 5 figures and 5 tables.

Card 2/3

L 14808-65

ACCESSION NR: AP4047428

0

ASSOCIATION: none

SUBMITTED: 00

ENCL: 00

SUB CODE: MM, IE

NO REF SOV: 007

OTHER: 000

ATD PRESS: 3140

Card 3/3

L 39466-65 EPF(n)-2/EPR/EWT(m)/EWP(m)/EWP(b)/T/EWA(d)/EWP(e)/EWP(w)/EWP(t) Ps-4/
Pa-4 TJP(c) AT/WH/JD/JG 41

ACCESSION NR: AP4047876

S/0279/64/000/005/0121/0126 37

AUTHOR: Sinel'nikova, V.S. (Kiev); Samsonov, G.V. (Kiev); L'vov, S.N. (Kiev) 8

TITLE: Physical properties of aluminides of transition metals of the fifth group
of the periodic system of elements 27

SOURCE: AN SSSR. Izvestiya. Metallurgiya i gornoye delo, no. 5, 1964, 121-126

TOPIC TAGS: transition metal aluminide, vanadium aluminide, niobium aluminide, tantalum aluminide, specific electrical resistance, Hall constant, thermal electromotive force, thermal conductivity, magnetic susceptibility, microhardness, work function

ABSTRACT: The specific electrical resistance, Hall constant, thermal- e. m. f., thermal conductivity, magnetic susceptibility, concentration and mobility of current carriers, Wiedemann-Franz ratio, and microhardness were determined at room temperature for the following aluminides: V_3Al , V_5Al_8 , VA_3 , VA_6 , VA_{11} , Nb_3Al , Nb_2Al , $NbAl_3$, $TaAl_3$, Ta_2Al and $TaAl_3$. The work function at 1500 K was determined for $ZrAl_3$, Zr_5Al_8 , V_5Al_8 , $TaAl_3$ and $NbAl_3$. "(Work

Card / 2

L 39466-65

ACCESSION NR: AP4047876

2

function) Measurements were carried out by B. Ch. Dyubya and O. K. Kultashev"
Orig. art. has: 4 tables .

ASSOCIATION: None

SUBMITTED: 01Feb64

ENCL: 00

SUB CODE: MM

NR REF SOV: 012

OTHER: 009

Card 2/2

L 56024 65 EWP(a)/EWT(m)/EWP(i)/EFF(n)-2/EWG(m)/EPR/EWP(t)/EWP(k)/EWP(z)/EWP(b)
PP-4/Ps-4/Pu-4 IJP(c) JD/JG/AT/WH

ACCESSION NR: AP5016032

UR/0226/65/000/006/0010/0017

AUTHOR: Sinel'nikova, V. S.

TITLE: Production of aluminides of refractory metals

SOURCE: Poroshkovaya metallurgiya, no. 6, 1965, 10-17

TOPIC TAGS: refractory metal, aluminide, refractory metal aluminide, aluminide production method, aluminide arc melting, aluminide induction melting, aluminide synthesis

ABSTRACT: Experiments have been made to find the best method of producing aluminides of refractory metals. 99.99%-pure Al, 99.99%-pure Mo and Nb and iodide Ti and Zr, 99.2%-pure V and 99.4%-pure Ta were used in making aluminides by melting. High-purity aluminides with a composition close to the stoichiometric were obtained by induction or arc melting with a nonconsumable electrode in an argon atmosphere. But the alloy ingots had many cracks and cavities and their structure was inhomogeneous, requiring prolonged annealing at near-melting temperatures to obtain a single-phase structure. Sound solid specimens of high-purity aluminides can be obtained by grinding/arc- or induction-melted ingots and subsequent hot compacting. Synthesizing by the powder-metallurgy method was best for producing aluminides of refractory metals where high purity is not required. Thorough mixing of the initial
Card 1/2

48
47
3

AP5016032
ACCESSION NR: AP5016032

components ensured alloy homogeneity. The required sintering temperature, which was not higher than the melting temperature of a particular aluminide, was readily maintained, and the easily controlled rate of cooling practically eliminated ingot cracking. In the experiments, green compacts were further compacted in an argon atmosphere at 600C for 3-5 min, after which the temperature was raised to the required sintering temperature. The optimum temperatures for compacting aluminides under a pressure of 10⁴ dan/cm² with a holding time of 10 min were

(°C): VA1₁₁ 660-680, VA1₆ 720-730, VA1₃ ~1200, V₅Al₆ ~1500,
NbAl₃ ~1600, Nb₃Al 1740-1870, TaAl₃ ~1400, HfAl₃ ~1260,
Mo₃Al ~1600, ZrAl₃ ~1470, ZrAl₂ ~1520, Zr₃Al₂ ~1420.

Single-phase aluminides of refractory metals were also successfully synthesized by sintering below melting temperatures. Orig. art. has: 6 figures and 2 tables. [MS]

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

SUBMITTED: 14Jul64
NO REF SOV: 006
Card 2/2 Coc

ENCL: 00
OTHER: 001

SUB CODE: MN, IE
ATD PRESS: 4034

L 4025-66 EWP(e)/EWT(m)/EWP(t)/EWP(k)/EWP(z)/EWP(b) IJIN(e) JD
ACCESSION NR: AP5022256 UR/0363/65/001/007/1071/1078
546.3'621:541.5

79
73
B

AUTHOR: Samsonov, G. V.; Sinel'nikova, V. S.
44.5 44.5

TITLE: Study of the nature of chemical bonding in aluminides of certain transition metals 27

SOURCE: AN SSSR. Izvestiya. Neorganicheskiye materialy, v. 1, no. 7, 1965, 1071-1078

TOPIC TAGS: aluminum compound, transition element, chemical bonding, electric conductivity, electric resistance, thermoelectromotive force

ABSTRACT: Compact samples of aluminides of certain transition metals (Ti, V, Cr, Mn, Ni, Zr, Nb, Mo, Hf, Ta, Re) were prepared by sintering of powdered aluminides. The electrical resistivity was measured as a function of temperature between 20 and 1100C, and relationships were established between the electrical resistivity and the relative content of aluminum, probability of scattering of charge carrier by the transition metal atoms, and the acceptor capacity of these atoms. The temperature dependence of the absolute differential thermo-emf of the aluminides was also investigated. The results obtained are explained in terms

Card 1/2

L 4025-66
ACCESSION NR: AP5022256

of the concept of formation of stable configurations approaching the d^5 type in transition metal atoms and the sp^2 type in aluminum atoms upon the formation of aluminides. Orig. art. has: 6 figures and 2 tables. ^{44.55}

ASSOCIATION: Institut problem materialovedeniya Akademii nauk UkrSSR, Kiev
(Institute of Materials Science Problems, Academy of Sciences UkrSSR) ^{44.55}

SUBMITTED: 21Oct64

ENCL: 00

SUB CODE: *bc, MM*

NO REF SOV: 012

OTHER: 003

Card ^{11/1} 2/2

L 3082-66 EWP(e)/EWT(m)/EPF(c)/EWP(1)/EWP(t)/EWP(b) IJP(c) JD
 AM5026188 BOOK EXPLOITATION UR/ 7
 6P3.4 L71
 S38

Sinel'nikova, Vera Semenovna; Podergin, Veniamin Alekseyevich; Rechkin, Viktor
Nikolayevich 44.55

Aluminides (Alyuminidy), Kiev, Izd-vo "Naukova dumka", 1965. 240 p. illus.,
 biblio., tables. 1,700 copies printed. (At head of title: Akademiya nauk
 Ukrainskoy SSR. Institut problem materialovedeniya) 44.55

TOPIC TAGS: aluminum, aluminum alloy, aluminum compound, refractory compound,
 halide, metal property, boron compound, carbon compound, aluminum oxide, ✓
 aluminum nitride ✓

PURPOSE AND COVERAGE: This book presents the characteristics of interaction
 between aluminum and all elements of the periodic system. A classification
 of aluminides based on the nature of their interaction is given, and classes
 of elements not chemically interacting with aluminum are specified. The
 physico-chemical nature of aluminides is explained in relation to electronic
 interaction. This book is useful for scientists and technical engineers
 specializing in refractory compounds and in research of materials for new
 technology. It also can be used by students and university aspirants in

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L 3082-66
AM5026188

physics, chemistry and metallurgy.

TABLE OF CONTENTS (abridged):

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Bibliography -- 225

SUB CODE: IC,MM
NO REF SOV: 231
Card 2/2

SUBMITTED: 12Jul65
OTHER: 560

1. [Name], [Address], [City], [Country];
[Name], [Address], [City], [Country], [Country], [Country].

([Name]) [Address]. Kiev, [Address], [Country], [Country].
(MIRA 18:11)
[Name]-Korrespondent AN Ukr.SSR (for [Country]).

SAMSONOV, G.V.; SINEL'NIKOVA, V.S.

Nature of chemical bonds in aluminides of some transition metals.
Izv. AN SSSR, Neorg. mat. 1 no.7:1071-1078 J1 '65. (MIRA 13:9)

1. Institut problem materialovedeniya AN UkrSSR, Kiyev.

ACC NR: AP6012838 SOURCE CODE: UR/0080/66/039/004/0729/0735

AUTHOR: Samsonov, G. V. ; Sinel'nikova, V. S. ; Kopylova, V. P.

36
B

ORG: Institute of Materials Science Problems, AN UkrSSR (Institut problem materialovedeniya AN UkrSSR)

TITLE: Aluminothermic reduction of ¹⁷titanium oxides

SOURCE: Zhurnal prikladnoy khimii, v. 39, no. 4, 1966, 729-735

TOPIC TAGS: chemical reduction, ~~aluminum~~, titanium oxide, ~~titanium dioxide~~, aluminum oxide, ~~aluminum compound~~ *titanium compound*

ABSTRACT: The conditions of reduction of titanium oxides (TiO₂ and TiO) by aluminum in a vacuum were studied in order to obtain titanium aluminides. ¹⁷The mechanism of the aluminothermic reduction was investigated by recording the corresponding thermograms for TiO₂ and TiO. In order to determine the phase composition of the products, the reduction was carried out at various temperatures, including 975C (the only temperature at which a peak appeared on the thermograms), and the products were analyzed by x-ray diffraction and chemical means. The following conclusions were reached: the reduction of TiO₂ by aluminum in a vacuum proceeds via the formation of TiO and Al₂O₃; the formation of aluminum titanate

Card 1/2

UDC: 546.824'136

ACC NR: AP6012838

was not observed. At 975C, the aluminides $TiAl$ and $TiAl_3$ are formed during the reduction of both TiO_2 and TiO . Up to 1300C, in addition to the aluminides, aluminum oxide is present in the products; it is reduced by the aluminides and driven off as Al_2O . The rate of heating to the reduction temperature has virtually no effect on the reduction processes. It is sufficient to carry out the heating for 80 to 100 min at about 975C. Aluminum oxide begins to be removed at 1300C, but this is a slow process. The reduction takes place at a rapid rate at 1400-1500C. Alloys of practically any composition can be obtained by changing the amount of excess aluminum in the initial batch. The chemical stability of $TiAl$ and $TiAl_3$ in HCl , HNO_3 , H_2SO_4 , and H_3PO_4 was determined. Orig. art. has: 6 figures and 3 tables.

SUB CODE: 07//SUBM DATE: 25May64 / ORIG REF: 010 / OTH REF: 002

Card 2/2

SIDEL'NIKOVA, Ye. F.; ROZINA, R. I.

Effect of PAS on liver function in tuberculosis. Prob.
tuberk., Moskva no.3:43-47 May-June 1951. (CLML 20:11)

1. Candidate Medical Sciences Sidel'nikova; Candidate
Biological Sciences Rozina. 2. Of the Biochemical
Division, Moscow Oblast Scientific-Research Tuberculosis
Institute (Director -- Prof. F. V. Shebanov).

SINEL'NIKOVA, Ye. P.

Dissertation: "Protoanemonin and Its Effect on Microorganisms." Cand Biol Sci,
Inst of Microbiology, Acad Sci Ukranian SSR, Kiev 1953

W-30928

SO: Referativnyy Zhurnal, N. 5, Dec 1953, Moscow, AN USSR (~~1953~~)

SINEL'NIKOVA, Ye.P.

Change in the concentration of streptomycin in animal blood and tissues effected by the action of different agents on the central nervous system. Probl.tub. 37 no.1:113 '59. (MIRA 12:2)

1. Iz Ukrainskogo nauchno-issledovatel'skogo instituta tuberkuleza.
(STREPTOMYCIN)

SINEL'NIKOVA, Ye.P. [Synel'nykova, O.P.]

Method of determining the viability of micro-organisms in experimental aerosols. Mikrobiol. zhur. 23 no.2:45-48 '61. (MI:A 14:7)

1. Kiyevskiy institut usovorshenstvovaniya vrachey.
(STAPHYLOCOCCUS) (AEROSOLS)

VERSHIGORA, Apollinariy Yefimovich [Vorshyhora, A.IU.], kand. med. nauk; GRIGOR'YEVA, Lyudmila Vladimirovna [Hryhor'ieva, L.V.], kand. med. nauk; SINEL'NIKOVA, Yelena Pavlovna [Synel'nykova, O.P.], dots.; YAROSHENKO, V.A., red.; LOYKO, V.P., tekhn.red.

[Practical handbook of medical microbiology] Praktychnyi posibryk z medychnoi mikrobiologii. Kyiv, Derzhmedvydav URSR, 1963. 194 p. (MIRA 16:12)
(MEDICAL MICROBIOLOGY—LABORATORY MANUALS)

SINEL'NIKOVA, Ye.P.

Liquid foamy filters for the adsorption of bacterial aerosols.
Zhur. mikrobiol., epid. i immu. 40 no.4:49-53 Ap '63.
(MIRA 17:5)

1. Iz Kiyevskogo instituta universitetskoyiya vrachey.

SINEL'NIKOVA, Ye.F.

Methodology of experimental streptococcal aerosol. Zhur. mikro-
biol., epid. i immun. 42 no.1:120-123 Ja '65. (MIRA 18:6)

1. Kiyevskiy institut usovershenstvovaniya vrachey.

L 11549-66

ACC NR: AP6005027

SOURCE CODE: UR/0105/65/000/001/0090/0090

AUTHOR: Aleksandrov, B. K.; Derman, B. A.; Drozdov, N. G.; Dubinskiy, L. A.; Zaleskiy, A. M.; Kamenskiy, M. D.; Kozlov, M. D.; Lisovski, G. S.; Sinelobov, K. S.; Trebulev, P. V.; Uspenskiy, B. S.; Kheyfits, M. D.; Shvetsov, M. A.

ORG: none

TITLE: Nikolay Nikolayevich Krachkovskiy

SOURCE: Elektrichestvo, no. 1, 1965, 90

TOPIC TAGS: electric power engineering, electric engineering personnel

ABSTRACT: Brief biography of subject, a senior scientific associate of the Institute of Power Engineering AS USSR, on the occasion of his 75th birthday on 18 Dec 64. He was graduated from the Leningrad Polytechnical Institute in 1916. Worked for a number of years in the planning, surveying, construction and operation of the first HV transmission lines and substations. From 1922 to 1928, participated in the planning and construction of the first Soviet hydroelectric station (Volkov GES im. Lenin) and 110 kv transmission line. In 1927-1932, designed transmission lines at the GET (State Electrical Engineering Trust) and the Leningrad branch of Dneprostroy. Chief of electric power and transmission section at Sverdlovsk, Volgostroy and Leningrad Energoprojekt (1932-1938); simultaneously studied 100-cycle current for AS USSR and participated in planning the Kuybyshev GES - Moscow transmission line. Worked at Leningrad Gidroprojekt until 1947, and at Moscow Gidrenergoprojekt until 1955. Among the first to propose

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ACC NR: AP6005027

converting the Kuybyshev - Moscow line from 400 to 500 kv. An ardent advocate of d-c for HV and EHV transmission. Authored over 75 scientific and technical articles, and two inventions. Awarded the Order of the Red Banner of Labor and other decorations. Orig. art. has: 1 figure. JPRS 14

SUB CODE: 09 / SUBM DATE: none

MW
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GOLUBTSOV, R.A.; KARASULIDZE, A.N.; KESEL'MAN, L.M.; SINELOBOV, K.S.

"Fundamentals of the mechanical section of overhead power transmission lines" by A.A.Glazunov, A.A.Glazunov. Reviewed by R.A.Golubtsov.
Elektrichestvo no.6:91-96 Je '61. (MIRA 14:10)

1. Vsesoyuznyy gosudarstvennyy institut po proyektirovaniyu teplovykh elektrostantsiy, Moskva (for Golubtsov). 2. Vsesoyuznyy nauchno-issledovatel'skiy institut elektroenergetiki, Moskva (for Karaulidze). 3. Vsesoyuznyy gosudarstvennyy institut po proyektirovaniyu teplovykh elektrostantsiy, Tashkent (for Kesel'man). 4. Vsesoyuznyy trest po proyektirovaniyu gidroelektrostantsiy i gidroelektrozlov, Leningrad (for Sinelobov).

(Electric power distribution)

BOSHPNYAKOVICH, Andrey Dragomirovich; SINELOBOV, K.S., retsenzent;
KRYUKOV, K.P., red.; ZHITNIKOVA, O.S., tekhn. red.

[Mechanical calculation of lines and wires for overhead power
transmission lines] Mekhanicheskii raschet provodov i trosov li-
nii elektroperedachi. Moskva, Gosenergoizdat, 1962. 253 p.
(MIRA 16:3)

(Electric lines--Overhead)

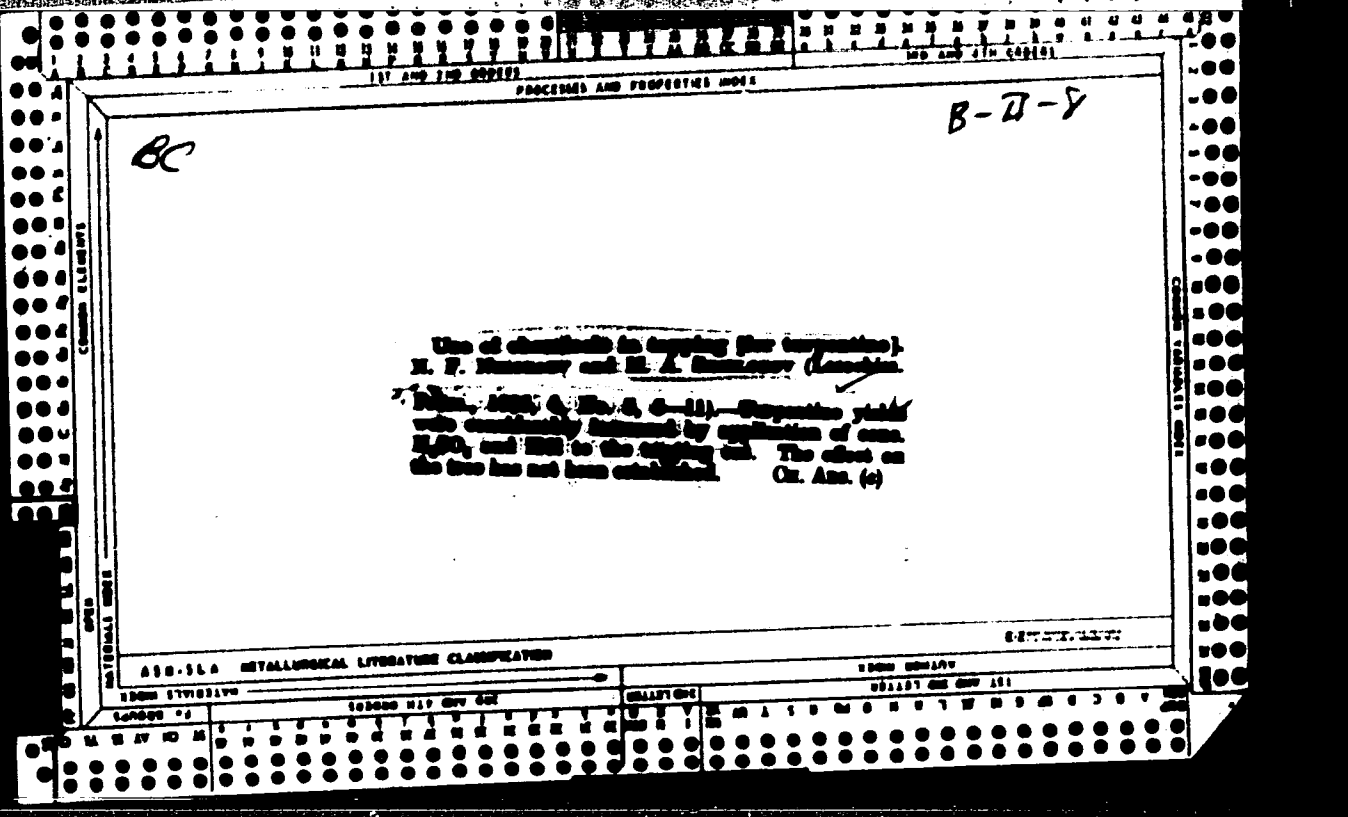
EMYUKOV, Kirill Petrovich; KURNIKOV, Aleksey Ivanovich; KOLCHAKOV, Boris Pavlovich; NIKOLAEV, K.S., inzh., retirement;
BOGHIYAKOVICH, A.D., inzh., red.

[Construction and design of metal reinforced concrete power transmission line supports] Konstruktsii i raschet metallicheskikh i zhelezobetonnykh opor liniy elektroperedachi. Moskva, Energiia, 1964. 585 p. (IR: 17:10)

TSALKIN, V.I.; SINELOBOV, M.A., vedushchiy red.

[Siberian mountain goat (*Capra sibirica sibirica*)] Sibirskii gornyi kozel. Moskva, Izd-vo Mosk. ob-va ispytatelei prirody, 1950. 108 p.
(Materialy k poznaniyu fauny i flory SSSR. Otdel zoologicheskii, no.21). (MIRA 11:4)

(Asia, Central—Goats)



TOLKACHEV, A.N., kandidat sel'sko-khozyaystvennykh nauk; SINELOBOV, M.A.

Methods of carrying out tree tapping experiments. Der.1 lesokhim. prom.
3 no.2:12-14 P '54. (MLA 7:1)

1. TSNILKHI.

(Tree tapping)

ИЗВЕЩАНИЕ ИЛИ ОТЧЕТ

TOLKACHEV, A.K.; SINELOBOV, M.A.

Some regularities of exudation in tapping pines. Der.i lesokhim.
prom. 3 no.3:13-16 Mr '54. (MLBA 7:3)

1. TsNILKhI.

(Tree tapping)

SINELBOV, A. A.

Influence of streak depth on the yield of oleoresin in pine turpentine. A. K. Tolkachev and M. A. Sinelobov. *Derevooperabatyayushchaya i Lesokhim. Prom. S. No. 5, 8-10(1954).*—The effect of streak depth (I) on the yield of oleoresin (II) was studied; for 1 group of pines (3.5 days chipping interval) the av. yield was 13.3 g. II per streak for I = 4.8 mm. (4-8 mm. range) and 12.2 g. for I = 9.3 mm. (8-11 mm. range). For another group of pines, the increased yield of II when the I was reduced from approx. 1 to 0.5 cm. was 16% for trees with wide (1.7-2.5 mm.) and av. (0.8-1.5 mm.) growth rings, and 9% for trees with narrow (0.6-0.7 mm.) growth rings.
John Lake Keays

TOLKACHEV, A.K.; SINELOBOV, M.A.

Intensive method of tapping firs. Der. i lesokhim. prom. 3 no.12:
12-13 D '54. (MLRA 8:1)

1. Tsentral'nyy nauchno-issledovatel'skiy lesokhimicheskiy institut.
(Tree tapping)

TOLKACHEV, Andrey Kirillovich, SINELBOV, Mikhail Alekseyevich; USTINOVICH,
B.P., redaktor; SARMATSKAYA, G.I., redaktor izdatel'stva; SHITS, V.P.,
tekhnicheskij redaktor

[Innovations in the tapping of pine and spruce] Novoe v podsochke
sosny i eli. Moskva, Goslesbumizdat, 1956. 61 p. (MLBA 9:11)
(Pine) (Spruce) (Tree tapping)