"APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001652510020-9

ACCESSION NR: AT4016321 S/0000/62/000/000/0377/0380

AUTHOR: Konorova, Ye. A.; Sorokina, L. A.

TITLE: Photoconductivity stimulated by a strong electric field in colorless alkali halide crystals

SOURCE: Vses. soveshch. po fiz. shchelochnogaloidn. kristallov. 2d, Riga, 1961. Trudy*. Fiz. shchelochnogaloidn. kristallov (Physics of alkali halide crystals). Riga, 1962, 377-380

TOPIC TAGS: alkali halide, alkali halide crystal, photoconductivity, colorless alkali halide crystal, crystal photoconductivity, electron charge

ABSTRACT: In order to establish the occurrence of an electric-field-induced electron charge in colorless alkali halide crystals, a 1 — 5 x 10^5 v/cm voltage was passed through KBr, KCl- and NaCl-crystals at temperatures ranging from room temperature to that of liquid nitrogen. The crystals were then routed through a measuring device. As the current set up by the weak polarization field in the specimen became constant, the electron charge was established by the presence of the photoelectric current which it generates under illumination. This photoelectric current, superimposed on the polarization field current, vanishes as the 10^{-9}- 10^{-10} coulomb (in NaCl) or 10^{-11} coulomb

Card 1/2

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ACCESSION NR: AT4016321

(in KBr and KC1) electron charge is annihilated by illumination of the crystals in the F-band. The electron charge is believed to be responsible for the failure of strong field currents to obey Ohm's law. Orig. art. has: 3 graphs.

ASSOCIATION: Fizicheskiy institut im. P. N. Lebedeva AN SSSR (Institute of Physics AN SSSR)

SUBMITTED: 00 DATE ACQ: 06Mar64 ENCL: 00

SUB CODE: NP, IC NO REF SOV: 002 OTHER: 000

Card 2/2

APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001652510020-9"

"APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001652510020-9

L 52593-65 EWT(1)/EWP(e)/EWT(m)/EWP(1)/EEC(t)/EWP(t)/EWP(b)/ Pz-6 IJP(c)
JD/AT/WH

ACCESSION NR: AP5010716 UR/0181/65/007/004/1092/1094

41
39
0

AUTHOR: Konorova, Ye. A.; Sorokina, L. A.; Shevchenko, S. A.

TITLE: Photoconductivity of diamonds in the ultraviolet part of the spectrum

SOURCE: Fizika tverdogo tela, v. 7, no. 4, 1965, 1092-1094

TOPIC TAGS: diamond, nitrogen content, photoconductivity, absorption coefficient, ultraviolet property

ABSTRACT: In an attempt to identify the transitions with which the near-ultraviolet absorption in diamonds is connected, and to ascertain whether it is due to excitation of nitrogen atoms present in the lattice or the lattice atoms themselves in the nearest vicinity of the nitrogen atoms, the authors investigated the photoconductivity spectra and absorption spectra of 25 natural diamonds containing from $\sim 10^{18}$ to 1.8×10^{20} atoms of nitrogen per cubic centimeter. The spectra were plotted in the intervals 0.22—1 and 5—10 μ. The coefficient of absorption in the visible region was found to be 0 down to 400 nm. The absorption coefficient did not exceed 2 cm^{-1} above 320 nm, after which it started to increase at different rates for different samples. The photoconductivity spectra displayed

Card 1/2

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L 52593-65

ACCESSION NR: AP5010716 2

two maxima, at 225 and 255 nm, the former for all diamonds and the latter only for diamonds containing nitrogen. The coefficient of absorption at long wavelengths (7.8 μ) was appreciable (31.5) only for the sample with the maximum nitrogen concentration (1.8×10^{20}). The spectral dependence of the photocurrent does not agree with the spectral dependence of the absorption coefficient, and it is assumed that part of the light of the crystal is absorbed without excitation of the photoconductivity. In the case of large nitrogen content, which may be present in the diamond in the form of layers (rather than individual donors), the photoconductivity may be due to detachment of an electron from the nitrogen atom in the layer. "The authors thank V. S. Vavilov for interest in the work." Orig. art. has: 2 figures and 1 table. [02]

ASSOCIATION: Fizicheskiy institut im. P. N. Lebedeva AN SSSR, Moscow (Physics Institute, AN SSSR)

SUBMITTED: 09Oct64 ENCL: 00 SUB CODE: OP, SS

NO REF SOV: 000 OTHER: 008 ATD PRESS: 4008

Card 2/2

APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001652510020-9"

"APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001652510020-9

L 00766-66 EWT(1)/T IJP(c) GG

ACCESSION NR: AP5012560 UR/0181/65/007/005/1475/1479

AUTHOR: Konorova, Ye. A.; Sorokina, L. A.

TITLE: Temperature dependence of the electric strength of alkali-halide crystals

SOURCE: Fizika tverdogo tela, v. 7, no. 5, 1965, 1475-1479

TOPIC TAGS: alkali halide, electric conductivity, electric breakdown, pn junction

ABSTRACT: The authors discuss the mechanism of electric breakdown in alkali-halide crystals in the 50--200C temperature range, which has not been thoroughly investigated in the past and in which the breakdown mechanism is still debatable. Account is taken of the features of the electric conductivity in a strong electric field. The processes occurring in the electric field directly before the breakdown are considered from the point of view of the heat balance of the system. A relation $U_{br}^2\gamma = \text{const}$ (U_{br} -- breakdown voltage, γ -- electric conductivity of the sample) is derived on this basis, subject to the condition that the electric conductivity of the sample depends both on the temperature and on the applied voltage. The formula is found to be in satisfactory agreement with the experimental data, and it is concluded that in the temperature range in question the breakdown has primarily a thermal nature. The deductions hold true for a constant applied voltage, and must be modified in the case of pulsed voltages. "The authors thank B. M. Vul for

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"APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001652510020-9

L 00766-66

ACCESSION NR: AP5012560

valuable remarks." Orig. art. has: 3 figures and 3 formulas.

ASSOCIATION: Fizicheskiy institut im. P. N. Lebedeva, Moscow (Physics Institute)

SUBMITTED: 29Jul64 ENCL: 00 SUB CODE: EC, SS

NR REF SOV: 006 OTHER: 004

Card 2/2

APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001652510020-9"

"APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001652510020-9

SOROKINA, L.D.

LUKANIN, Ye.A., polkovnik; CHEREDNICHENKO, V.T., polkovnik; LESNEVSKIY, S.A., polkovnik; KOLOTOV, V.I., kapitan 1 ranga; KORKESHKIN, A.P., polkovnik; FOROFONOV, I.F., podpolkovnik; ROZANOV, I.S., podpolkovnik; LISENKOV, M.M., podpolkovnik; SAPRONOV, A.T., mayor; BELASHCHENKO, T.K., mayor; SKAPENKOVA, T.N.; SOROKINA, L.D.; ZOTOV, M.M., polkovnik, red.; MYASNIKOVA, T.F., tekhn.red.

[Material for political studies; a manual for group leaders] Materialy k politicheskim zaniatiiam v pomoshch' rukovoditeliam grupp. Moskva, Voen.izd-vo M-va obor. SSSR, 1958. 199 p. (MIRA 11:5)

1. Russia (1923- U.S.S.R.) Armiya. Upravleniye propagandy i agitatsii. 2. Voyennyy otdel Gosudarstvennoy biblioteki imeni V.I.Lenina (for Skapenkova, Sorokina)
(Russia--Army--Education, Nonmilitary)

APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001652510020-9"

"APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001652510020-9

SOROKINA, L. G. (DECEASED)

"The Alkaloids of Leontice Ewersmannii Bge and Leontice Alberti Bge."
Yunusov, S. and Sorokina, L. G. (deceased) (Lab Chem Alkaloids, Inst Chem, Acad Sci Uzbeki SSR) (p. 1955)

SO: Journal of General Chemistry (Zhurnal Obshchei Khimii) 1949, Vol. XIX, No. 10

APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001652510020-9"

"APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001652510020-9

KAZAKOV, S.V.; SINITSYNA, K.V.; SKAPENKOVA, T.N.; SOROKINA, L.I.; POLYAKOVA, N., red.; DANILINA, A., tekhn. red.

[People going forward] Idushchie vperedi. Moskva, Gos.izd-vo polit. lit-ry, 1961. 438 p. (MIRA 14:6)
(Labor and laboring classes.)

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29739

S/190/61/003/011/010/016
B110/B101

158121 2209, 1407

AUTHORS: Andrianov, K. A., Fromberg, M. B., Zabyrina, K. I., Sorokina, L. I.

TITLE: Graft copolymers from polyorganosiloxanes and epoxy resin

PERIODICAL: Vysokomolekulyarnyye soyedineniya, v. 3, no. 11, 1961, 1692 - 1697

TEXT: Polar groups bound to Si are introduced to increase the mechanical strength and the adhesion of polyorganosiloxanes (POS). Since the stability of the Si-radical bond is often reduced by such introduction, graft or block copolymerization with polymers containing polar groups is recommended. The functional groups contained in the copolymer also permit reactions with bifunctional groups for POS hardening at room temperature. Epoxy resins (I) catalyze polycondensations of POS:

$$-\overset{|}{Si}-OH + HO-\overset{|}{Si}- \longrightarrow -\overset{|}{Si}-O-\overset{|}{Si}- + H_2O$$

to solid, unmeltable substances, particularly if POS contain OCH_3 or OC_2H_5 groups. It is assumed that the alkoxy groups of POS react with the hydroxyl groups of I according to

Card 1/5

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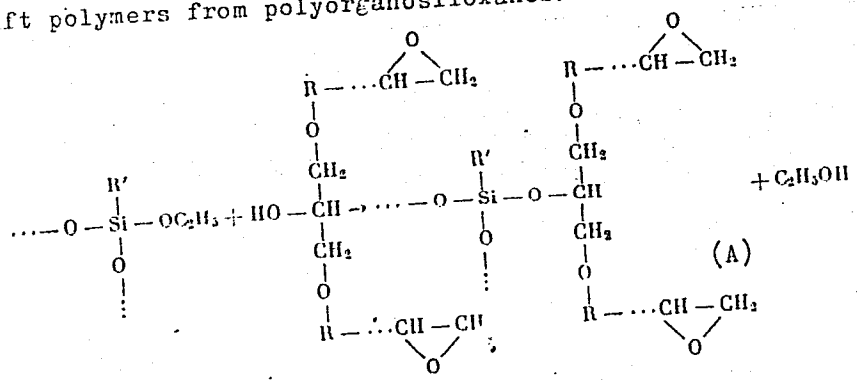
B110/B101

Graft polymers from polyorganosiloxanes...



(A)

Phenyl triethoxy silane with I forms a homogeneous polymer with separation of C_2H_5OH,

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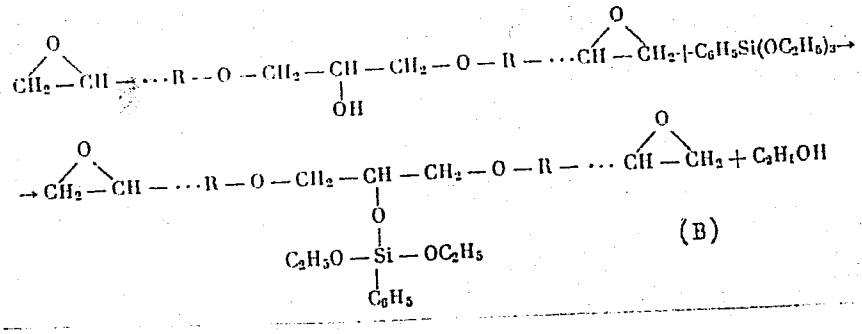
29739
S/190/61/003/011/010/016
Graft polymers from polyorganosiloxanes... B110/B101



(B)

For producing graft copolymers the authors used polydimethyl phenyl siloxanes (II) or polydimethyl phenyl methyl siloxanes (molecular weights: 1000 - 1500, OH content 1.0 - 2.0%) with 3 - 6% methoxyl or ethoxyl groups. They obtained these polymers by hydrolysis of a mixture of $(CH_3)_2SiCl_2$ and $C_6H_5SiCl_3$ or $(CH_3)_2SiCl_2$, CH_3SiCl_3, and $C_6H_5SiCl_3$ in water-alcohol medium. Since the dimension of the alkoxy group considerably affects the thermal decomposition, polymers with OCH_3 groups react at

Card 3/5

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B110/B101

Graft polymers from polyorganosiloxanes...

200 - 230°C, those with OC_2H_5 groups at 280°C. No copolymer is formed at an alkoxy group content < 3%. The copolymerization is accompanied by separation of C_2H_5OH and decrease of epoxy groups, especially at increasing temperature. Investigations of the infrared spectra of polydimethyl phenyl methoxy siloxanes (III) and graft copolymers based on them confirm the reaction mechanism described. Turbidimetric analyses showed the homogeneity of III and its graft copolymers. The presence of epoxy groups in the copolymers permits hardening by means of diamines (polyethylene polyamine (IV), hexamethylene diamine (V), m-phenylene diamine, m-toluylene diamine) to nonthermoplastic varnish films which are highly thermoelastic at 200°C. The chemical nature of the hardener considerably affects the film properties. The high thermoelasticity of films hardened with IV and V is probably due to their evaporation at 200°C. Hardening is also performed at 130 - 150°C by means of polyphenyl aluminosiloxanes (VI). III heated at 200°C for 4 hr and at 250°C for 10 hr has T_v = 0°C, an indistinctly marked range of highly elastic deformation, and it flows at 20°C. In graft copolymers based on III and hardened for 72 hr at 20°C by means of IV, the value of highly elastic deformation grows, and flowing

Card 4/5

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29739

Graft polymers from polyorganosiloxanes... S/190/61/003/011/010/016
B110/B101

starts at 150°C. Structuration at 20°C is slow. After 120 hr, the temperature range of highly elastic deformation was much wider, and the flow temperature T_f was 330°C. Graft copolymer hardened with IV for 2 hr at 200°C has a steric structure, an insignificant highly elastic deformation, and a flow temperature of 450°C. Structurated polymer with a flow temperature of 425°C is formed by hardening with VI at 140°C within 2 hr. Varnish films from solutions of copolymers hardened at 130 - 150°C by means of VI form nonthermoelastic coats with higher mechanical strength and adhesion as coats from POS. There are 2 figures, 2 tables, and 2 Soviet references.

ASSOCIATION: Vsesoyuznyy elektrotekhnicheskiy institut im. V. I. Lenina (All-Union Electrotechnical Institute imeni V. I. Lenin)

SUBMITTED: December 25, 1960

Card 5/5

APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001652510020-9"

"APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001652510020-9

33267
S/062/62/000/001/006/C13
B117/B101

15.8170
11.2219

AUTHORS: Andrianov, K. A., Fromberg, M. B., Sorokina, L. I., and Kirilenko, E. I.

TITLE: Polyorganoaluminoxanes and polyorganoaluminosiloxanes

PERIODICAL: Akademiya nauk SSSR. Izvestiya. Otdeleniye khimicheskikh nauk, no. 1, 1962, 78 - 86

TEXT: The composition, the structure, and properties of intermediates of polyorganoalumoxane synthesis, their conversion into polymers, and the possibility of producing compound polymers were investigated. Monomeric organoaluminum compounds were synthesized with azyloxy and chelate groups (Table 1). The solubility of the compounds obtained is largely affected by the nature of organic groups with aluminum. Aluminum isopropoxy dicaprylate and aluminum diisopropoxy caprylate are soluble, 8-hydroxyquinoline derivatives are poorly soluble in organic solvents. Dialkoxy derivatives, and above all aluminum dihalides are easily hydrolyzed by atmospheric moisture. Hydrolysis of benzoate aluminum dichloride always yields insoluble composite products, since the acyloxy group

Card 1/3

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Polyorganoaluminoxanes ...

is separated. Aluminum dihydroxy caprylate and aluminum dihydroxy-8-oxyquinolate were obtained (with almost theoretical yields) by hydrolysis of aluminum diisopropoxy caprylate and aluminum diisopropoxy-8-oxyquinolate which takes place at the alkoxy groups only, and does not destroy the chelate bond nor split off the acyloxy group. These hydroxy derivatives are poorly soluble in the usual organic solvents. Their infrared spectra showed absorptionbands (3600 and 3430cm^{-1}) corresponding to associated HO---X and -OH---X hydroxyl groups. Experiments have shown that the synthesis of polyorganoaluminoxanes proceeds via hydroxyl derivatives which are condensed with alkoxy groups into polymers either directly or due to a reaction with hydroxyl groups bound with aluminum. The interaction of hydroxyl derivatives of organoaluminum compounds with alkoxy derivatives is a general one. This reaction takes place among organoaluminum monomers and among organosilicon and organoaluminum compounds. Isopropyl alcohol is separated, and a polymer is formed by polycondensation of aluminum diisopropoxy-8-oxyquinolate with hydroxyl derivatives of organosilicon compounds. Polycondensation of aluminum diisopropoxy caprylate with α, ω-dihydroxy-methyl-phenyl siloxanes

Card 2/3

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B117/B101

Polyorganoaluminoxanes ...

yields linear polyorganoaluminosiloxanes. Such a polymer is elastic and well soluble in organic solvents. These properties are also preserved with continuous heating (200°C). Heterofunctional polycondensation of alkoxy derivatives of organoaluminum compounds also takes place with organosilicon compounds in which hydroxyl groups are replaced by other functional groups. In this process, caprylic acid is separated presumably due to the presence of HCl traces. Therefore, insoluble, steric polymers of compound structure are formed, but no linear molecules. There are 3 figures, 2 tables, and 7 references: 3 Soviet-bloc and 4 non-Soviet-bloc. The two references to the English-language publications read as follows: USA patent 2744074 (1956); English patent 783679 (1957).

ASSOCIATION: Vsesoyuznyy elektrotekhnicheskiy institut im. V. I. Lenina (All-Union Electrotechnical Institute imeni V. I. Lenin)

SUBMITTED: July 19, 1961

Legend to Table 1: (1) Compound; (2) melting point, °C.

Card 3/3

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"APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001652510020-9

SOROKINA, Lyudmila Ivanovna; BOGOMOLOV, P.D., mayor, redaktor; KHOVANSKIY, I.P., tekhnicheskiy redaktor

[Atomic energy and its use; a bibliography] Atomnaia energiia i ee ispol'zovanie; rekomendatel'nyy ukazatel' literatury. Izd. 2-oe, perer. i dop. Moskva, 1956. 38 p. (MLRA 9:8)

1. Moscow. Publichnaya biblioteka
(Bibliography--Atomic power)

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"APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001652510020-9

POKALEV, G.M.; PAROKHONYANK, Z.M.; KLEMENOV, V.I.; KOMAROVA, M.A.; [redacted]OKINA, L.I.

Dynamics of the mechanical activity of the heart under the influence of acupuncture in the area of the Chinese points. Sbor. trud. GMI no.9:108-114 '62. (MIRA 17:2)

1. Kafedra gospital'noy terapii lechebnogo fakul'teta Gor'kovskogo meditsinskogo instituta (zav. kafedroy prof. V.G. Vogralik).

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"APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001652510020-9

BUSEV, A.I.; TIPTSOVA, V.G.; SOROKINA, L.M.

Composition and stability constants of trivalent thallium tartrate complexes. Zhur.neorg.khim. 7 no.9:2122-2126 S '62. (MIRA 15:9)

1. Moskovskiy gosudarstvennyy universitet imeni Lomonosova.
(Thallium compounds) (Tartrates)

APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001652510020-9"

"APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001652510020-9

TIKHONOV, V.N.; MASLYUKOV, I.M.; SOROKINA, L.N.

Immunogenetic methods for determining the origin as related to the study of the selectivity of fertilization and the formation of chimeras. Izv. SO AN SSSR no.8 Ser. biol.-med. nauk no.2: 117-125 '64 (MIRA 18:1)

1. Institut tsitologii i genetiki Sibirskogo otdeleniya AN SSSR, Novosibirsk.

APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001652510020-9"

"APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001652510020-9

GERASIMOV, S.A., kand.tekhn.nauk; SOROKINA, L.P., inzh.; PIRONKOV, V.M., inzh.

Planting vegetable crops in wide strips. Mekh.i elek.sots. sel'khoz. 19 no.5:53-54 '61. (MIRA 14:10)

1. Vsesoyuznyy nauchno-issledovatel'skiy institut mekhanizatsii sel'skogo khozyaystva.
(Vegetable gardening)

APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001652510020-9"

"APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001652510020-9

SOROKINA, L. P.

5

chem

Tetra-1-pyrryl borate salts. V. A. Sazonova and L. P. Sorokina (M. V. Lomonosov State Univ., Moscow). ~~Doklady akad.~~ *Nauk S.S.S.R.* 105, 993-6(1955).—To EtMgBr (from 1.86 g. Mg) was added dropwise 4 g. pyrrole in Et_2O and after 0.5 hr. on a steam bath the soln. was treated with 7.7 g. KBF_4; upon completion of the reaction the mixt. was poured into aq. NH_4Cl yielding at the interface a ppt. of 0.9 g. product, which was rapidly sepd. yielding 14% *tetra-1-pyrrylboropotassium*, $C_{16}H_{16}BN_4K$, colorless solid, decomp. 200° (from Me_2CO-Et_2O). The substance does not have active H reactive with MeMgI, proving the 1-bonding of B. This in aq. KOH treated with KI-I_2 gave a black ppt. which after decolorizing in EtOH gave tetraiodopyrrole, decomp. 140-50°. To $(C_4H_4N)_4BK$ (0.1 g.) in 9 ml. pyridine was added 0.06 g. $EtO_2CCH_2COCH_3$ in the form of the Cu complex; careful heating changed the color from green to brown when H_2O was added pptg. 40% *tetra-1-pyrrylborocopper*, isolated as the *pyridinate*, $C_{24}H_{24}BN_5Cu$, yellow, decomp. 80°, which is quite unstable, losing pyridine in several hrs. $(C_4H_4N)_4BK$ with aq. $AgNO_3$ gave $(C_4H_4N)_4BAg$, colorless, unstable solid, decomp. 125°. $(C_4H_4N)_4BK$ with aq. pyridinium chloride gave 80% *tetra-1-pyrrylboropyridinium salt*, $C_{21}H_{22}N_5B$, unstable solid. The use of *N*-ethylpyridinium bromide in the above reaction gave 83% *tetra-1-pyrrylboro-N-ethylpyridinium salt*, $C_{23}H_{26}N_5B$, decomp. 184-5° (from C_6H_6-$MeNO_2$).

G. M. Kosolapoff

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"APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001652510020-9

5(3) SOV/62-58-12-7/22

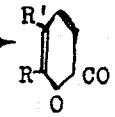
AUTHORS: Zakharkin, L. I., Sorokina, L. P.

TITLE: Condensation of β,β-Dichloro Acrolein With Carbonyl Compounds and the Conversion of Condensation Products Into α-Pyrone Derivatives (Kondensatsiya β,β-dikhlorakroleina s karbonil'nymi soyedineniyami i prevrashcheniye produktov kondensatsii v proizvodnyye α-pirona)

PERIODICAL: Izvestiya Akademii nauk SSSR. Otdeleniye khimicheskikh nauk, 1958, Nr 12, pp 1445-1451 (USSR)

ABSTRACT: In the present paper the authors investigated the condensation of β,β-dichloro acrolein with some carbonyl compounds, which leads to the production of dichloro diene ketones. Besides, they investigated the possibility of a closing of the cycle of the latter into α-pyrone derivatives:

$$RCOCH_2R' + CHOCH{=}CCl_2 \rightarrow RCOC(R')=CH-CH=CCl_2 \rightarrow$$



Card 1/3 With aliphatic aromatic ketones the reaction with β,β-dichloro

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acrolein in the presence of hydrogen chloride takes place easily. Thus, acetophenone with β,β-dichloro acrolein yields 1,1-dichloro-5-phenyl-1,3-pentadiene-5-on:

$$C_6H_5COCH_3 + CHOCH{=}CCl_2 \xrightarrow{HCl} C_6H_5COCH{=}CH{-}CH{=}CCl_2$$

p-chloro-acetophenone, p-oxy-acetophenone, propiophenone and n-butyrophenone react in a similar way. With respect to the mechanism of the closure of the cycle of the dichloro pentadiene system into an α-pyrone system the following considerations may be made: It may be assumed that in acid medium originally a hydrolysis takes place of the dichlorovinyl group into a carboxyl group with a subsequent closure of the cycle of the formed keto acids. In this case an addition of the proton to the $CCl_2{=}CH$-group takes place. The assumption, however, that the proton affiliates to the end of the conjugated system, i.e. to the carbonyl oxygen, seems more probable. The process of cyclization can then be represented as follows:

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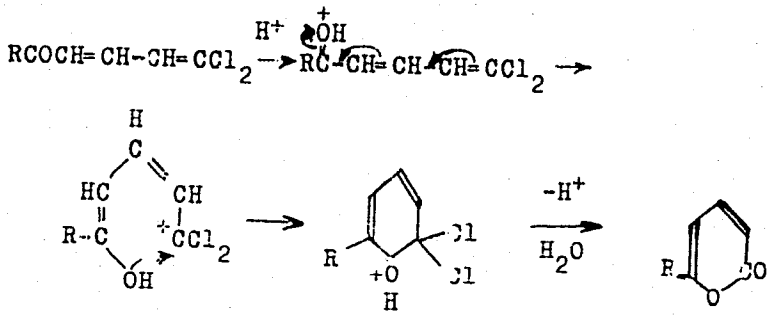
"APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001652510020-9

SOV/62-58-12-7/22

Condensation of β,β-Dichloro Acrolein With Carbonyl Compounds and the Conversion of Condensation Products Into α-Pyrone Derivatives



There are 4 references, 1 of which is Soviet.

ASSOCIATION: Institut elementoorganicheskikh soyedineniy Akademii nauk SSSR Institute of Elementorganic Compounds, Academy of Sciences, USSR)

SUBMITTED: April 5, 1957

Card 3/3

APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001652510020-9"

"APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001652510020-9

5(3) SOV/62-59-5-32/40

AUTHORS: Zakharkin, L. I., Sorokina, L. P.

TITLE: Rearrangement of 1,1-Dichloro-5-oxy (Chloro)-5-arylpentadienes-1,3 Into δ-Arylpentadiene Acids (Peregruppirovka 1,1-dikhlor-5-oksi (khlor)-5-arilpentadiyenov-1,3 v δ-arilpentadiyenovyye kisloty)

PERIODICAL: Izvestiya Akademii nauk SSSR. Otdeleniye khimicheskikh nauk, 1959, Nr 5, pp 936-938 (USSR)

ABSTRACT: In the present paper the reduction of some 1,1-dichloro-5-oxo-5-phenyl pentadienes-1,3 into the corresponding oxide derivatives was carried out, and the allyl-anionotropic isomerization into δ-aryl pentadiene acid was investigated according to the scheme

$$ArCOCR{=}CH{-}CH{=}CCl_2 \xrightarrow{H_2} ArCH(OH){-}CR{=}CH{-}CH{=}CCl_2 \xrightarrow{H^+}$$

$ArCH{=}CR{-}CH{=}CH{-}COOH$. Such a re-grouping in pentadienes has hitherto not been investigated. The reduction of the following diene ketones was carried out with aluminum isopropylate in isopropyl alcohol: $ArCOCR{=}CH{-}CH{=}CCl_2$ with 1) $Ar = C_6H_5$, $R = H$;

Card 1/2

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"APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001652510020-9

SOV/62-59-5-32/40

Rearrangement of 1,1-Dichloro-5-oxy (Chloro)-5-arylpentadienes-1,3 Into o-Arylpentadiene Acids

2) Ar = C_6H_5, R = CH_3; 3) Ar-p-ClC_6H_4, R = H. Of these three oxide derivatives obtained only 1,1-dichloro-5-oxy-4-methyl-5-phenylpentadiene-1,3 showed sufficient resistance to heat, so that it could be distilled without being changed. The other two alcohols had to be converted into the corresponding chlorides for the purpose of vacuum distillation. In the experimental the individual reactions are described and the physical characteristics of the substances obtained are given. There are 5 references, 2 of which are Soviet.

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

SUBMITTED: October 24, 1958

Card 2/2

APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001652510020-9"

"APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001652510020-9

ZAKHARKIN, L.I.; SOROKINA, L.P.; KHORLINA, I.M.

Action of triisobutylaluminum on cyclohexanone. Zhur.ob.khim. 31 no.10:3311-3316 O '61. (MIRA 14:10)
(Aluminum) (Cyclohexanone)

APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001652510020-9"

"APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001652510020-9

ZAKHARKIN, L.I.; SOROKINA, L.P.

Condensation of β,β-dichloroacrolein with cyclic ketones and the cyclization of condensation products obtained to γ-pyrone derivatives. Izv. AN SSSR Otd.khim.nauk no.2:287-290 F '62. (MIRA 15:2)

1. Institut elementoorganicheskikh soyedineniy AN SSSR.
(Acrolein)
(Ketones)
(Pyranone)

APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001652510020-9"

"APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001652510020-9

ZAKHARKIN, L.I.; SOROKINA, L.P.

Condensation of 5,5-dichloro-2,4-pentadienal and 7,7-dichloro-2,4,6-heptatrienal with some ketones. Izv. AN SSSR. Otd.khim.nauk no.5:821-823 My '62. (MIRA 15:6)

1. Institut elementoorganicheskikh soyedineniy AN SSSR.
(Pentadienal) (Heptatrienal) (Ketones)

APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001652510020-9"

"APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001652510020-9

ZAKHARKIN, L.I.; SOROKINA, L.P.

Preparation of 2-pyrone-5- and 2-pyrone-6-carboxylic acids via β,β-dichloroacrolein. Izv.AN SSSR. Otd.khim.nauk no.11:2096-2097 N '62. (MIRA 15:12)

1. Institut elementoorganicheskikh soyedineniy AN SSSR.
(Pyranonecarboxylic acid) (Acrolein)

APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001652510020-9"

"APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001652510020-9

35138

S/070/62/007/002/004/022
E132/E160

24.7/00

AUTHORS: Tsukerman, B.I., Meyl'man, M.L., and Sorokina, L.P.

TITLE: Radiospectroscopic orientation of crystals

PERIODICAL: Kristallografiya, v.7, no.2, 1962, 224-228

TEXT: The method described can be used for the orientation of crystals with paramagnetic impurities with an accuracy of about 1'. A simple two circle goniometer is used to turn the crystal specimen in the resonator chamber. The loci of particular resonances are followed and the courses are plotted out on a specially constructed sphere. From the shape of the loci the symmetry of the crystal can be identified. Some qualitative analysis of the nature of the paramagnetic impurities can be made.
There are 5 figures.

SUBMITTED: April 18, 1961

Card 1/1

APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001652510020-9"

"APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001652510020-9

SOROKINA, L.P.; ZAKHARKIN, L.I.

Preparation of 6-substituted 2-pyrones via β,β-dichloroacrolein and its chloroacetals. Izv.AN SSSR. Ser.khim. no.1:73-77 Ja '64. (MIRA 17:4)

1. Institut elementoorganicheskikh soyedineniy AN SSSR.

APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001652510020-9"

"APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001652510020-9

L 40975-65 EWT(m)/EPF(c)/EPR/EWP(j)/T/EWP(t)/EWP(b) Pc-4/Pr-4/Ps-4 IJP(c)/RPL JD/WW/RM

ACCESSION NR: AP5006420 S/0062/65/000/001/0180/0182

35

AUTHOR: Zakharkin, L. I.; Sorokina, L. P.; Ivanov, L. L.

TITLE: Obtaining complex aluminum acetylenides from complex aluminum amides and α-acetylenes

SOURCE: AN SSSR. Izvestiya. Seriya khimicheskaya, no. 1, 1965, 180-182

TOPIC TAGS: aluminum, aluminum compound, acetylene, complex molecule

ABSTRACT: Complex aluminum acetylenides can be obtained from the interaction of complex aluminum amides with α-acetylenes. The following were obtained: sodium tetra(dimethylamido)aluminum, sodium tetra(piperidido)-aluminum, sodium tri(diethylamido)aluminum hydride, lithium tetra(hexine-1-yl)aluminum, sodium tetra(phenylethinyl)aluminum. Orig. art. has: 5 equations.

ASSOCIATION: Institut elementoorganicheskikh soyedineniy Akademii nauk SSSR (Institute of Elementoorganic Compounds, Academy of Sciences SSSR)

SUBMITTED: 1 JUNE 64

Card 1/2

APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001652510020-9"

"APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001652510020-9

ZAKHARKIN, L.I.; SOROKINA, L.P.

Some transformations of 6-phenyl-2-pyrone. Izv. AN SSSR. Ser. khim. no.5:870-876 '65. (MIRA 18:5)

1. Institut elementoorganicheskikh soyedineniy AN SSSR.

APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001652510020-9"

"APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001652510020-9

ZAKHARKIN, L.I.; KOPYLOV, V.V.; SOROKINA, L.P.

Action of diisobutyl aluminum chloride on some ketones. Izv. AN SSSR. Ser. khim. no.7:1194-1197 '65. (MIRA 18:7)

1. Institut elementoorganicheskikh soyedineniy AN SSSR.

APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001652510020-9"

"APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001652510020-9

L 6453-66 EWT(1)/EWT(m)/EPF(c)/EWP(t)/EWP(b) IJP(c) JD/WW/GG
ACCESSION NR: AP5019850 UR/0181/65/007/008/2367/2369

AUTHOR: Atsarkin, V. A.; Lushnikov, V. G.; Sorokina, L. P.

TITLE: Electron paramagnetic resonance of trivalent gadolinium and iron ions in synthetic calcite

SOURCE: Fizika tverdogo tela, v. 7, no. 8, 1965, 2367-2369

TOPIC TAGS: electron paramagnetic resonance, gadolinium, iron, calcium carbonate, EPR spectrum, selection rule

ABSTRACT: The EPR spectra were investigated using calcite crystals grown by the hydrothermal synthesis method, described by one of the authors elsewhere (Lushnikov, Tr. Vses. nauchn.-issl. inst. sinteza mineral'nogo syr'ya v. 8, 173, 1964). The EPR spectrum was investigated with a superheterodyne radio spectrometer operating at 3 cm and at room temperature. The constants of the spin Hamiltonian of the trivalent ions replacing calcium in the calcite crystal lattice are calculated. The EPR spectrum of gadolinium consists of two groups of 7 lines each, belonging to two magnetically-nonequivalent systems of ions. The iron spectrum consists of five absorption lines corresponding to a change $\Delta m = \pm 1$ in the magnetic quantum number. The spin Hamiltonians are written out for both substances and their constants are evaluated. The spin lattice relaxation of Gd^{3+} in the calcite lattice was deter-

Card 1/2

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"APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001652510020-9

L 5453-66
ACCESSION NR: AP5019850

mined for the -1/2 ↔ -3/2 transition by the pulsed saturation method at 3 cm. The relaxation time was 1.4 millisec and 5 μsec at 4.2 and 1.75K, respectively, In the case of iron, the relaxation time for the 1/2 ↔ 3/2 transition was 1.0 millisec at 4.2K. Orig. art. has: 1 figure and 2 formulas.

ASSOCIATION: Institut radiotekhniki i elektroniki AN SSSR, Moscow (Institute of Radio Engineering and Electronics AN SSSR)

SUBMITTED: 26Feb65 ENCL: 00 SUB CODE: SS

NR REF SOV: 003 OTHER: 004

nw
Card 2/2

APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001652510020-9"

"APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001652510020-9

ACC NR: AT6034450 (A) SOURCE CODE: UR/0000/66/000/000/0140/0143

AUTHOR: Gerchikova, N. S.; Kishkin, S. T.; Sorokina, L. P.

ORG: none

TITLE: Investigation of the effect of aging and deformation on the dislocation structure of austenitic steel

SOURCE: AN SSSR. Institut metallurgii. Svoystva i primeneniye zharoprochnykh splavov (Properties and application of heat resistant alloys). Moscow, Izd-vo Nauka, 1966, 140-143

TOPIC TAGS: austenitic steel, crystal lattice dislocation, metal aging, crystal lattice deformation

ABSTRACT: The composition of the steel investigated was the following: 37.33% nickel; 19.44% chromium; 3.16% tungsten; 0.09% carbon; 1.3% niobium; remainder iron. The initial thickness of the foil was 50 microns. A thinning treatment was carried out on a band of foil 25 x 150 mm in size. Heating was done at a temperature of 1080° for 30 min, and aging in the temperature interval 650-900°, in a vacuum with different holding times. From the aged bands were cut samples of special form which were subjected to elongations of 1, 4, and 6% at room temperature. It was established by the method of microdiffraction that, after quenching from 1080° in water, there can be

Card 1/2

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"APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001652510020-9

ACC NR: AT6034450

observed the following carbide phases in the steel under investigation: niobium carbide (NbC) and a double carbide of the type Fe_3W_3C. After aging at a temperature of 650° for 8 hours, along with small black particles, diffused grey formations can be observed in the matrix. With an increase in temperature of aging to 700° (with the same holding time), the grey formations assume a more marked round form. In general, it is concluded that with a change in the degree of deformation there is a change in the configuration of the dislocations. With a small degree of deformation (1%) there are formed plane agglomerates, but with an increase in the degree of deformation up to 4%, a large number of short dislocations appear and the density of the dislocations increases. At the same degree of deformation, after aging at 700° for 8 hours, there appear packing defects. Increase in the degree of deformation up to 6% leads to interweaving of the dislocations in regions which do not contain particles, and to the accumulation of clusters of dislocations around the particles. Orig. art. has: 1 figure.

SUB CODE: 11/ SUBM DATE: 10Jun66/ OTH REF: 005

Card 2/2

APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001652510020-9"

"APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001652510020-9

SOROKINA, L.S.; POTAPOVA, N.Ye., glavnyi vrach.

Rupture of uterine vessels in pregnancy and labor. Akush,i gin. no.2:73 Mr-Ap '53. (MLRA 6:5)

1. Akushersko-ginekologicheskoye otdeleniye 1-oy gorodskoy bol'nitsy, Kemerovo. (Uterus--Rupture) (Labor, Complicated)

APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001652510020-9"

"APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001652510020-9

SOROKINA, L.S.; POTAPOVA, N.Ya., glavnyy vrach.

Ileus and pregnancy. Akush. i gin. no.3:68-69 My-Je '53. (MLRA 6:7)

1. Akusherako-ginekologicheskoye otdeleniye 1-y gorodskoy bol'nitsy g. Kemerovo. (Pregnancy, Complications of) (Intestines--Obstructions)

APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001652510020-9"

"APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001652510020-9

SOROKINA, L.S.

Extrauterine pregnancy. Akush.i gen. no.1:59-60 Ja-F '54. (MLRA 7:6)

1. Iz akusherako-ginekologicheskogo otdeleniya 1-y gorodskoy bol'nitsy g. Kemerovo. (Pregnancy, Extrauterine)

APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001652510020-9"

"APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001652510020-9

GERSHKOVICH, S.M.; SOROKINA, L.S.; NEMZER, M.P.

Reorganization of the system of infirmary care for children with goastrointestinal diseases. Vop. okh. mat. i det. 5 no. 2:69-74 Mr-Ap '60. (MIRA 13:10)

1. Iz Murmanskoy detskoy infektsionnoy bol'nitsy (glavnyy vrach M.P. Nemzer).
(DIGESTIVE ORGANS—DISEASES)
(INFANTS—CARE AND HYGIENE)

APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001652510020-9"

"APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001652510020-9

PIROGOVA, O.M., kand.med.nauk; MESHCHANINOVA, Ye.A., kand.biolog.nauk.
Prinimala uchastiye SOROKINA, L.S., vrach.

Treatment of pyoderma with bicillin-3 in combination with immunotherapy. Vest.derm. i ven. no.9:45-49'62. (MIRA 16:7)

1. Iz Ukrainskogo nauchno-issledovatel'skogo kozhno-venerologicheskogo instituta (zav. kozhnym otdelom A.P.Bazyka).
2. Vrach mediko-sanitarnoy chasti zavoda "Serp i molot" (for Sorokina).
(SKIN—DISEASES) (BICILLIN)

APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001652510020-9"

"APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001652510020-9

1ST AND 2ND ORDERS

3RD AND 4TH ORDERS

PROCESSES AND PROPERTIES INDEX

9

OH

Filling metal surfaces before painting. M. I. Birinberg and M. F. Sorokina. *Byull. Malyarnoi Tekh.* 1939, No. 10, 8-18; *Khim. Referat. Zhur.* 1940, No. 7, 101.—The chem. process of filling metal surfaces before painting consists in the formation of a film of phosphates of metals on the surface. The phosphate films adhere strongly to the surface of the metal and are a strong binding link between the surface of the metal and the primer, increasing the adhesion of the primer. Methods and tech. processes for filling the metal surfaces are described.

W. R. Henn

COMMON ELEMENTS

OPEN

MATERIALS INDEX

ASM-SLA METALLURGICAL LITERATURE CLASSIFICATION

APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001652510020-9"

"APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001652510020-9

AVRAMENKO, L.I.; KOLESNIKOVA, R.V.; SOROKINA, M.F.

Rate constant and the mechanism of reaction between oxygen atoms and acetaldehyde. Izv.AN SSSR.Otd.khim.nauk no.6:1005-1010 Je '61. (MIRA 14:6)

1. Institut khimicheskoy fiziki AN SSSR.
(Acetaldehyde) (Oxygen) (Chemical reaction, Rate of)

APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001652510020-9"

"APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001652510020-9

AUTHORS: Khomutov, N. Ye., Sorokina, M. F. SOV/76-32-7-16/45

TITLE: The Kinetics of the Anodic Processes on Platinum in Borate-Carbonate Electrolytes (Kinetika anodnykh protsessov na platine v boratno-karbonatnykh elektrolitakh)

PERIODICAL: Zhurnal fizicheskoy khimii, 1958, Vol. 32, Nr 7, pp. 1556-1564 (USSR)

ABSTRACT: In connection with the fact that in publications no systematic data are found on the kinetics of the electrochemical production of perborates the authors carried out investigations concerning the problem in question. The investigations in the course of the electrode process were carried out according to the method of polarization curves as well as by determining the perborate content in the solution. Polarization measurements of two types were carried out; they were continuous measurements of the anodic potential in a protracted electrolysis at constant current and a gradual increase of the amperage, whereas the anodic potential was determined discontinuously. From the experimental results on the influence of the composition of the solution on the perborate yield may be seen that an increase of the borate content at constant

Card 1/3

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"APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001652510020-9

SOV/76-32-7-16/45

The Kinetics of the Anodic Processes on Platinum in Borate-Carbonate Electrolytes

soda concentration leads to an increase of the yield of active oxygen, and that on the other hand an exchange of the carbonate against the bicarbonate causes an abrupt drop of the content of active oxygen in the solution in the course of electrolysis. The diagrams showing the anodic potential versus time reveal that at great amperages the anodic potential stabilizes rapidly and then remains constant, while in the case of low amperages (of a few microamperes) a stabilization takes place only at 1,1 - 1,2 Volts . The data obtained from the polarization curves at various electrolyte compositions seem to agree with the assumption that perborate is formed in the primary electrode reaction which determines the summary kinetics of the process, as the complex character of the influence of the electrolyte composition on the anodic kinetics of the process can not be explained by the theories by Tanatar (Tanatar) (Ref 1), Foerster (Ferster)(Ref 6) and Arndt (Arndt)(Refs 4, 7). It is assumed that the perborate is formed in consequence of one of the ions BO_3^- or BO_2^- losing its charge, but none of the ions $B_4O_7^{-2}$. From the considerations leading to an explanation of the problem which of the two mentioned ions determines the kinetics of the perborate formation may be seen that the slowest stage of the anodic process in borate-carbonate solu-

Card 2/3

APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001652510020-9"

"APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001652510020-9

SOV/76-32-7-16/45

The Kinetics of the Anodic Processes on Platinum in Borate-Carbonate Electrolytes

tions is the stage of the ion neutralization of BO_2^-, which forms according to the reaction

$$B_4O_7^{2-} + 2CO_3^{2-} + H_2O \rightleftarrows 4BO_2^- + 2HCO_3^- .$$

The BO_2 ions formed by a discharge may enter into a secondary reaction which leads to the formation of perborates - the nature of this secondary reaction is, however, still open to question. There are 10 figures, 2 tables, and 7 references, 1 of which is Soviet.

ASSOCIATION: Khimiko-tekhnologicheskiy institut im. D. I. Mendeleyeva, Moskva (Moscow, Chemical and Technological Institute imeni D. I. Mendeleyev)

SUBMITTED: March 11, 1957

1. Anodes (Electrolytic cell)—Electrochemistry 2. Platinum electrodes—Performance 3. Electrolytes—Chemical reactions 4. Electrolysis—Theory

Card 3/3

APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001652510020-9"

"APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001652510020-9

S/126/60/010/001/027/027/XX
E032/E314

AUTHORS: Nemnonov, S.A., Sorokina, M.E. and Finkel'shteyn, L.D.

TITLE: Study of the K Absorption Edge in a Zinc-Aluminium Alloy with Small Zinc Concentration

PERIODICAL: Fizika metallov i metallovedeniye, 1960, Vol. 10, No. 1, pp. 148 - 150

TEXT: The present authors have investigated the K edge of zinc and aluminium in the alloy Al + 1.7% Zn (0.7 at.%) which constituted a solid solution based on the face-centred aluminium lattice. The K edge of Zn was obtained in the first-order reflection from quartz. The figure shows the K absorption edge of Al in the above alloy (Curve 1), the K absorption edge of Zn in this alloy (Curve 2) and the K absorption edge of pure Zn (Curve 3). It was found that the K absorption edges of Al and Zn in this alloy are displaced towards lower energies relative to the K absorption edge for pure Zn. The fine structures of the K edge of Zn and Al, including the position of the first maximum are very similar.

Card 1/4

APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001652510020-9"

"APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001652510020-9

S/126/60/010/001/027/027/XX
E032/E314

Study of the K Absorption Edge in a Zinc-Aluminium Alloy with Small Zinc Concentration

The K edge of Zn in the alloy is displaced by about 0.8 eV from the position of the K edge in pure Zn. The fine structure obtained is summarised in the following table

	Extrema, eV				
	A	α	B	β	C
K edge of Al in the alloy Al + 1.7% Zn	6.0	9.0	13.7	27.6	38.2
K edge of Zn in the alloy Al + 1.7% Zn	6.2	8.8	13.9	28.0	40.2
K edge of Zn (metal)	10.1	16.2	18.8	24.0	38.4

where A, B, C are the positions of the first three maxima, respectively, and α and β are the positions of the

Card 2/4

APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001652510020-9"

"APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001652510020-9

S/126/60/010/001/027/027/XX
E032/E314

Study of the K Absorption Edge in a Zinc-Aluminium Alloy with Small Zinc Concentration

first three maxima, respectively, and α and β are the positions of the first two minima, respectively. The slope of the rapidly varying part of the absorption curve is roughly the same in the case of pure Zn and the Zn in the alloy but is very different (higher) for the Al.
There are 1 figure, 1 table and 2 references: 1 Soviet and 1 non-Soviet.

ASSOCIATION: Institut fiziki metallov AN SSSR (Institute of Metal Physics of the AS USSR)

SUBMITTED: December 4, 1959

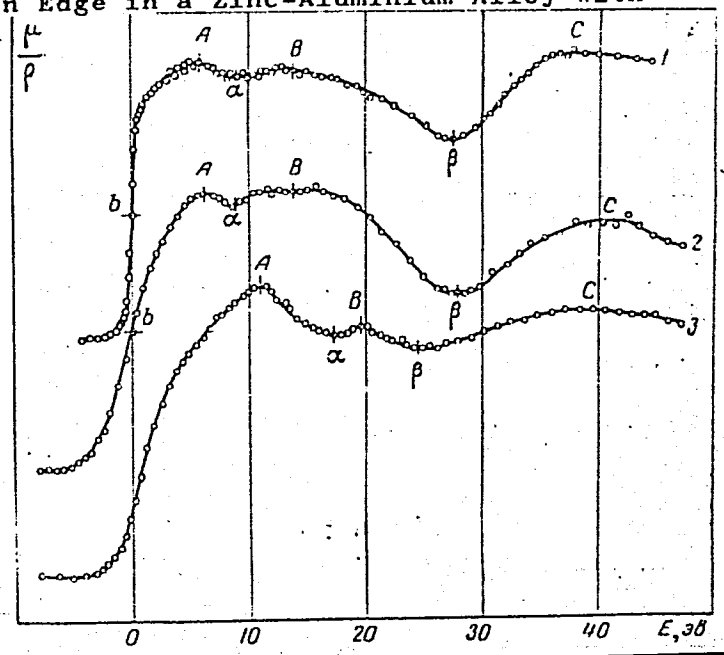
Card 3/4

APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001652510020-9"

"APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001652510020-9

S/126/60/010/001/027/027/XX
E032/E314

Study of the K Absorption Edge in a Zinc-Aluminium Alloy with Small Zinc Concentration



Card 4/4

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"APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001652510020-9

S/126/62/014/004/008/017
E111/E160

AUTHORS: Nemnonov, S.A., Sorokina, M.F., Men'shikov, A.Z., Kolobova, K.M., and Finkel'shteyn, L.D.

TITLE: The character of the atomic interactions in the intermetallic compounds of the transition elements aluminium and silicon

PERIODICAL: Fizika metallov i metallovedeniye, v.14, no.4, 1962, 535-541

TEXT: A combination of the crystallochemical and X-ray spectroscopic characteristics of the compounds examined with their physicochemical properties, enables one to assert that the character of the interatomic bonding forces in these compounds (Fe_3Al, $NiAl_3$, FeSi, CrSi, $CrAl_7$, $MnAl_6$, $FeAl_3$, Co_2Al_9, $CuAl_2$, etc) is extremely complicated. The structural characteristics, the X-ray emission data and the magnetic properties show the presence, on a background of the predominantly metallic interaction, of certain localised bonds between different kinds of atoms, in which the 3d electrons of the transition metal actively participate.

Card 1/2

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"APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001652510020-9

The character of the atomic ... S/126/62/014/004/008/017
E111/E160

In all phases studied, the K absorption spectra of the transition metal show strong hybridisation of the 3d and 4s wave functions of the transition element with the 3p functions of aluminium or silicon. Allowing for certain conventions in the separation of the interatomic forces into their components, it can be reckoned that the predominantly metallic interaction is supplemented in the cases examined by the interaction of the covalent and resonating covalent type of bonding with a certain polarity, understood as a drawing out of the connecting electron cloud to the side of the more electronegative component (the transition metal). In the system transition metal / Al, this polar component of the bonding forces is strongly expressed but in the system transition metal / Si, it is almost absent. There is 1 table.

ASSOCIATION: Institut fiziki metallov AN SSSR
(Institute of Physics of Metals, AS USSR)

SUBMITTED: April 4, 1962.

Card 2/2

APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001652510020-9"

"APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001652510020-9

S/126/62/014/005/003/015
E111/E435

AUTHORS: Nemnonov, S.A., Sorokina, M.F., Kolobova, K.M., Men'shikov, A.Z.

TITLE: Investigation of the structure of absorption K-spectra of transition metals in intermetallic compounds with aluminium and silicon

PERIODICAL: Fizika metallov i metallovedeniye, v.14, no.5, 1962, 666-672

TEXT: The K-edge of absorption has been studied of Cr-Al, Mn-Al, Fe-Al, Ni-Al, Cr-Si, Mn-Si, Fe-Si and Ni-Si alloys for ranges of concentration which included almost all the intermetallic compounds in these systems. For all the compounds investigated the "initial" (i.e. long wave-length) absorption remained fairly large and of the same order as in the pure metal. With increasing concentration of the transition component the break between the initial and the next intermediate region was smoothed. The energy position of the point corresponding to the Fermi boundary, mostly remained unchanged in most cases. The maximum which is characteristic of the pure transition metal was smoothed at a certain concentration of the second component, a new maximum

Card 1/2

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appearing 6 to 14 eV further towards the short wave-lengths side and becoming more pointed. The changes described became apparent while still within the solid-solution boundaries. Conclusion: in compounds with a high content of the non-transition component there is strong hybridization of the 3d-, 4s-wave functions of the transition metal with the 3p-wave functions of aluminium and silicon. There are 5 figures and 1 table.

ASSOCIATION: Institut fiziki metallov AN SSSR
(Institute of Physics of Metals AS USSR)

SUBMITTED: April 4, 1962

APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001652510020-9"

"APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001652510020-9

SOROKINA, M.F.

Chemistry

AC

on Peroxidates by AB. Isentsiper (Moscow. 14-18 Nov. 61)

Second Conference on the Chemistry ... S/076/62/036/006/010/011
B117/B180

A number of reports dealt with the formation of of percarbonates and perborates during electrolysis: N. Ye. Khomutov, M. F. Sorokina, L. S. Filatova (Moscow) on "Study of the anodic formation of peroxidates in borate and carbonate solutions and their mixtures;" A. V. Yanush (Khar'kov) on "Production of sodium borate by electrolytic and chemical methods;" O. B. Khachaturyan, A. P. Kravchinskiy (Moscow) on "Study of anodic processes and formation conditions of peroxidates in phosphate solutions;" A. Yu. Prokopchik, A. P. Kazragis (Vil'nyus): "Comparison of some properties of dehydrated and 'low' perborates;" T. P. Firsova, A. N. Molodkina (Moscow): "Study of reactions between carbonic acid and alkaline solutions of hydrogen peroxide and the synthesis of percarbonates;" A. Yu. Prokopchik, A. I. Vatsekyalis (Vil'nyus): "Electrochemical properties of peroxy-carbonates." V. S. Gurman, V. I. Papisova, Ye. I. Yakovenko, G. B. Sergeyev (Moscow University) reported on the application of the paramagnetic resonance method of detecting free radicals. Further reports were given on the results of work done in the Gor'kiy State University (under the supervision of G. A. Razuvayev and V. A. Shushunov) by G. A. Razuvayev, V. R. Likhterov, V. S. Etlis: "Synthesis and reactions of some azyl sulfonyl peroxides with organic solvents;" G. A. Razuvayev, N. S. Vyazankin: "Reactions of

Card 5/8

ZHURNAL Fizicheskoy Khimii, Vol. 36. No. 6, 1962. AP1392-94

APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001652510020-9"

"APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001652510020-9

SOROKINA, M. F.

AID Nr. 987-11 11 June

IMPROVING HOT DUCTILITY OF 23-18 STAINLESS STEELS (USSR)

Moshkevich, Ye. I., R. D. Mininzon, V. F. Smolyakov, and M. F. Sorokina.
Kuznechno-shtampovochnoye proizvodstvo, no. 4, Apr 1963, 18-19.
S/182/63/000/004/001/004

In an attempt to improve the hot ductility of 0X23H18 steel [0.10% C max, 1.0% Si max, 2% Mn max, 22-25% Cr, and 17-20% Ni] and of X23H18 steel [both AISI-310] several variants of deoxidizing and refining have been tested. The best results were obtained with addition of 0.5 kg/ton aluminum and 0.005% boron alloy introduced 5 to 10 min before tapping. One-ton ingots of steel so treated could be heated to 1220-1230°C (furnace temperature) and forged into billets 180 to 190 mm square without reheating. Ingots of conventional and other experimental heats which had been heated to temperatures over 1160°C (furnace temperature) cracked when forged. [ND]

Card 1/1

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"APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001652510020-9

ACCESSION NR: AP4043489 S/0133/64/000/008/0738/0740

AUTHOR: Moshkevich, Ye. I. (Engineer); Mininzon, R. D. (Engineer); Smolyakov, V. F. (Engineer); Sorokina, M. F. (Engineer)

TITLE: Improving ductility of OKh23N18 and Kh23N18 steels

SOURCE: Stal', no. 8, 1964, 738-740

TOPIC TAGS: oxidation resistant steel, OKh23N18 steel, Kh23N18 steel, OKh23N18 steel ductility, boron, boron modified steel, boron modified Kh23N18 steel

ABSTRACT: The hot ductility of oxidation-resistant OKh23N18 and Kh23N18 steels can be improved by the addition of boron (0.005%) in the arc furnace shortly before tapping, followed by the addition of aluminum. The positive effect of boron is based on its ability to promote the precipitation of carbides in the form of coagulated particles on grain boundaries, instead of a continuous network. The improved ductility made it possible to forge ingots without reheating, which increased the efficiency of forging facilities by 40% and raised the yield by 1.75—4%. The forged billets had a clean surface without cracks. Orig. art. has: 1 figure.

Card 1/2

APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001652510020-9"

"APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001652510020-9

KHOMUTOV, N.Ye.; SOROKINA, M.F.

Quantitative determination of potassium peroxocarbonate by the iodometric method in an alkaline medium. Zhur.anal.khim. 19 no.9:1165-1167 '64. (MIRA 17:10)

1. Moskovskiy khimiko-tekhnologicheskiy institut imeni Mendeleyeva.

APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001652510020-9"

"APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001652510020-9

KARETNIKOV, G.S.; SOROKINA, M.F.

Spectral and X-ray diffraction analysis of the product obtained by electrolysis of potash. Zhur. fiz. khim. 39 no.2:364-368 F '65. (MIRA 18:4)

1. Khimiko-tekhnologicheskiy institut Mendeleyeva.

APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001652510020-9"

"APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001652510020-9

KHOMUTOV, N.Ye.; SOROKINA, M.F.; SHELUD'KO, O.V.

Anodic processes in the electrolysis of mixed solutions of borax and soda. Trudy MKHTI no.44:63-66 '64. (MIRA 18:1)

APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001652510020-9"

"APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001652510020-9

SOROKINA, M.F.; KHOMUTOV, N.Ye.

Electrochemical production of potassium percarbonate and the study of its properties. Trudy MKHTI no.44:67-73 '64.

(MIRA 18:1)

APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001652510020-9"

"APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001652510020-9

KHOMYAKOV, M.Ye.; SOROKINA, M.F.

Kinetics and mechanism of anodic processes in potassium carbonate solutions. Zhur. fiz. khim. 38 no.6:1564-1568 Je '64. (MIRA 18:3)

1. Khimiko-tekhnologicheskiy institut imeni Mendeleyeva, Moskva.

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SOV/135-59-11-2/26

18(5,7)

AUTHORS: L'yubavskiy, K.V., Doctor of Technical Sciences, Professor, and Sorokina, M.I., Engineer

TITLE: Automatic Submerged-Arc Welding of Thin Sheets of Different Steels

PERIODICAL: Svarochnoye proizvodstvo, 1959, Nr 11, pp 3-6 (USSR)

ABSTRACT: The authors express their thanks to the following persons who assisted in organizing research on the problem treated in this article: Candidate of Technical Sciences F.Ye. Tret'yakov and Engineers S.N. Valeyev, A.B. Karan and B.N. Bad'yanov. The process of automatic submerged-arc welding is widely used. However, until recently, it has not been applied when joining different steels. This was due to the fact that it was hardly possible to obtain such a weld which would meet all the requirements of welded joints, namely, strength, plastic properties, absence of cracks, etc. The authors have researched on experimental methods of welding of two different kinds of steel: EI654 (austenitic-ferrite class), and 30KhGSA (perlite class) hardened steel $\delta = 120$ kg/mm^2. The thickness of welded sheets was 1.5 mm. Three groups of problems were considered when researching: 1) Selection of the rational geometry

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"APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001652510020-9

SOV/135-59-11-2/26

Automatic Submerged-Arc Welding of Thin Sheets of Different Steels

of the weld (zone of penetration); 2) Establishing of optimum welding conditions; 3) Assessment of results obtained. In Fig 1, the authors give the shape of the weld used when two different sorts of steel are welded. In Table 1, the basic materials used in welding are given. Four kinds of fluxes were tested: AN-348A, FTsL-2, AN-26 and FTsK-M2. Their respective chemical compositions and mechanical properties are given in Tables 2 and 3. The highest value of the weld metal percussion tenacity was obtained when using flux FTsK-M2. As electrode wire, brand EI654 was used; it was established that it ensures an austenitic-ferrite structure of the weld. The results of the research are given in Tables 3 and 4. Fig 5 shows the microstructure of steels 30KhGSA and EI654 outside the heat-affected zone and at the boundary of melting. There are 3 graphs, 6 tables, 1 diagram, 1 photograph and 5 references, 4 of which are Soviet and 1 English.

Card 2/2

ASSOCIATION: Moskovskiy vecherniy mashinostroitel'nyy institut (Moscow Machine-Building Evening Institute)

APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001652510020-9"

"APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001652510020-9

SMIRNOV, Leonid Petrovich; IOKHVIDOV, E. S., nauchnyy red.; SOROKINA, M.I., red.; PERSON, M.N., tekhn. red.

[Manual on electric line and cable operations] Monter-kabel'shchik. Moskva, Vses. uchebno-pedagog. izd-vo Prof-tekhizdat, 1961. 390 p. (MIRA 15:2)
(Electric lines) (Electric cables)

APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001652510020-9"

"APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001652510020-9

NIKULIN, Nikolay Vasil'yevich; MARCHENKO, N.L., nauchnyy red.; SOROKINA, M.I., red.; DORODNOVA, L.A., tekhn. red.

[Handbook for beginner electricians on electrical materials and products] Spravochnik molodogo elektrika po elektrotekhnicheskim materialam i izdeliiam. Moskva, Proftekhizdat, 1962. 277 p. (MIRA 16:5)

(Electric engineering--Materials)
(Electricians--Handbooks, manuals, etc.)

APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001652510020-9"

"APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001652510020-9

MAMONTOVSKIY, Ivan Aleksandrovich; SHMAYEVKA, Semen Matveyevich; KLOKOV, B.K., nauchn. red.; SOROKINA, M.I., red.; NESMYSLOVA, L.M., tekhn. red.

[Mechanization of winding, insulating, and stamping operations in the manufacture of asynchronous motors] Mekhanizatsiia obmotochno-izoliatsionnykh i shtampovochnykh rabot pri proizvodstve asinkhronnykh elektrodvigatelei. Moskva, Proftekhizdat, 1963. 109 p. (MIRA 17:1)

APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001652510020-9"

"APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001652510020-9

MELEŠHKINA, Lidiya Petrovna; ROGOZIN, Yu.D., nauchn. red.; SOROKINA, M.I., red.; BARANOVA, N.N., tekhn. red.

[Prinicpal stages of electronic and ionic automatic control devices] Osnovnye uzly elektronno-ionnykh ustroistv avtomatiki. Moskva, Proftekhizdat, 1963. 143 p. (MIRA 16:7)
(Automatic control) (Electronic circuits)

APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001652510020-9"

"APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001652510020-9

BASS, Eleonora Isaakovna; BERKOVICH, Mikhail Arnol'dovich; SAVOST'YANOV, Aleksey Ivanovich; SEMENOV, Vladimir Aleksandrovich; MEL'NIKOV, M.F., nauchn. red.; SOROKINA, M.I., red.; PERSON, M.N., tekhn. red.

[Maintenance electrician of relay protection and automatic control systems] Elektromonter po ekspluatatsii releinoi zashchity i avtomatiki. [By] E.I.Bass i dr. Moskva, Proftekhizdat, 1963. 342 p. (MIRA 17:3)

APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001652510020-9"

"APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001652510020-9

DROZDOV, Nikolay Gavrilovich; NIKULIN, Nikolay Vasil'yevich; SOROKINA, M.I., red.; DORODNOVA, L.A., tekhn. red.

[Study of electric engineering materials] Elektromaterialovedenie. 2., perer. i dop. izd. Moskva, Proftekhizdat, 1963. 349 p. (MIRA 16:11)
(Electric engineering--Materials)

APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001652510020-9"

"APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001652510020-9

SEMENOV, Leontiy Grigor'yevich; DAM'YE, V.N., nauchn. red.; SOROKINA, M.I., red.

[Manual for storage battery electricians] Elektromonter-akkumuliatorshchik. Moskva, Vysshaia shkola, 1964. 231 p. (MIRA 17:6)

APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001652510020-9"

"APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001652510020-9

D'YAKOV, V.I.; SOROKINA, M.I., red.

[Standard electrical equipment calculations] Tipovye raschety po elektrooborudovaniiu. Izd.3., perer. i dop. Moskva, Vysshaia shkola, 1965. 130 p. (MIRA 18:4)

APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001652510020-9"

"APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001652510020-9

GOL'DIN, Iser Isaakovich; SOROKINA, M.I., red.; MEYNGARD, S.A., nauchn. red.

[Instruction in mechanical engineering] Prepodavanie tekhnicheskoi mekhaniki. Moskva, Vysshaia shkola, 1965. 165 p. (MIRA 18:7)

APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001652510020-9"

"APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001652510020-9

VARTANOV, Grayr Leonovich; VERNER, Vadim Vladimirovich; SEREBRYAKOV, Viktor Mikhaylovich; SOROKINA, M.I., red.

[Electromechanical technician and repairman] Elektromonter-remontnik. Moskva, Vysshaia shkola, 1965. 206 p. (MIRA 18:8)

APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001652510020-9"

"APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001652510020-9

DASOYAN, Martin Avetisovich, kand. tekhn. nauk; NOVODEREZHKIN, Vladimir Vasil'yevich, inzh.; TOMASHEVSKIY, Fedor Feliksovich, inzh.; SOROKINA, M.I., red.

[Manufacture of storage batteries] Proizvodstvo elektricheskikh akkumuliatorov. Moskva, Vysshaia shkola, 1965. 411 p. (MIRA 18:6)

APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001652510020-9"

"APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001652510020-9

SEMENOV, Viktor Gavrilovich; SAGATOVSKIY, N.V., otv.red.; SOROKINA, M.I., red.; ZARKH, I.M., tekhn.red.

[Effect of the Atlantic Ocean on the regimen of temperature and precipitation in the European part of the U.S.S.R.] Vliianie Atlanticheskogo okeana na rezhim temperatury i osadkov na Evropeiskoi territorii SSSR. Moskva, Gidrometeor.izd-vo, 1960. 147 p. (MIRA 13:8)

(Atlantic Ocean--Temperature) (Meteorology)

APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001652510020-9"

"APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001652510020-9

BORODKIN, V.F.; Prinimali uchastiye: YMRIKHOV, V.I., student; SOROKINA, M.I. SMIRNOVA, A.L., studentka

Phthalocyanine analogs. Zhur.ob.khim. 30 no.5:1547-1553 My '60. (MIRA 13:5)

1. Ivanovskiy khimiko-tekhnologicheskiy institut.
(Phthalocyanine)

APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001652510020-9"

"APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001652510020-9

RODIONOV, Nikolay Aleksandrovich; NIKIFOROV, Ya.D., red.; SOROKINA, M.I., red.; ZARKH, I.M. tekhn. red.

[Hydrology of the region around the mouth of the Don River] Gidrologiia ust'evoi oblasti Dona. Pod red. IA D. Nikiforova. Moskva, Gidrometeor. izd-vo, 1958. 94 p. (MIRA 11:9)
(Don River—Hydrology)

APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001652510020-9"

"APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001652510020-9

SKRIPTUNOV, N.A.; BAYDIN, S.S., red.; SOROKINA, M.I., red.; ZEMTSOVA, T.Ye.; tekhn. red.

[Hydrology of waters off the Volga Delta] Gidrologiia predust'evogo vzmor'ia Volgi. Pod red. S.S.Baidina. Moskva, Gidrometeor. izd-vo, 1958. 142 p. (MIRA 11:9)
(Caspian Sea—Hydrology)

APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001652510020-9"

"APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001652510020-9

PIOTROVICH, Vil'gel'm Vladislavovich; CHIZHOV, O.P., red.; SOROKINA, M.I., red.; ZAMKH, I.M., tekhn. red.

[Formation and thawing of ice on lakes and reservoirs and calculation of times of icing over and clearing]. Obrazovanie i staivanie l'da na ozerakh-vodokhranilishchakh i raschet srokov ledostava i ochishcheniia. Pod red. O.P. Chizhova. Moskva, Gidrometeor. izd-vo, 1958. 191 p. (MIRA 11:8)

(Ice on rivers, lakes, etc.)

APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001652510020-9"

"APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001652510020-9

Sorokina, M.F.

AUTHORS: Stavrov, O.D., Sorokina, M.I. 132-58-4-2/17

TITLE: Quantitative Calculation of Accessory Minerals of Granitoids in Large Sized Slides (Kolichestvennoye opredeleniye aktsessornykh mineralov granitoidov v bol'shikh shlifakh)

PERIODICAL: Razvedka i Okhrana Nedr, 1958, Nr 4, pp 8-15 (USSR)

ABSTRACT: Since petrographic and geochemical research requires an exact and full knowledge of the quantitative mineralogic composition of eruptive rocks, including also the quantityt of accessory minerals, a method to make these calculations in a cheaper and simpler way has been proposed. Until now, these calculations were made with the aid of large sized slides of minerals and with aid of a schlich analysis. The elimination of the schlich analysis and the use of large slides only has been proposed and the method of calculation is described.
There are 3 photos, 3 tables, 1 drawing and 4 Soviet references.

ASSOCIATION: GEOKNI AN SSSR (GEOKNI AS USSR)

AVAILABLE: Library of Congress
Card 1/1 1. Minerals 2. Granite-Analysis 3. Geochemistry
4. Petroleum-Sources

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"APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001652510020-9

KOMAROV, Valentin Dmitriyevich; SUBBOTIN, A.I., otv.red.; SOROKINA, M.I., red.; ZARKH, I.M., tekhn.red.

[Spring runoff of lowland rivers in the European part of the U.S.S.R., conditions influencing its formation and methods used in predicting it] Vesennii stok ravninnykh rek Evropeistkoi chasti SSSR, usloviia ego formirovaniia i metody prognozov. Moskva, Gidrometeor.izd-vo (otd-nie), 1959. 294 p. (MIRA 12:8)

(Runoff)

APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001652510020-9"

"APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001652510020-9

PAGAVA, S.T.; ZAKHAROVA, N.M.; SEVALKINA, N.A.; SAGATOVSKIY, N.V., otv. red.; SOROKINA, M.I., red.; ZARKH, I.M., tekhn.red.

[Atmospheric macroprocesses causing considerable monthly air temperature anomalies in the European part of the U.S.S.R.] Atmosfernye makroprotsessy, obuslovlivaiushchie znachitel'nye mesiachnye anomalii temperatury vozdukha na Evropeiskoi territorii SSSR. Moskva, Gidrometeor.izd-vo (otd-nie), 1960. 111 p. (MIRA 13:8)

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SHUPYATSKIY, Arkadiy Borisovich; KOSTAREV, V.V., red.; SOROKINA, M.I., red.; ZEMTSOVA, T.Ye., tekhn.red.

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IVANOV, A.P.; KIRILLOV, I.F.; RYBNIKOV, I.F.; SIROTOV, K.M.; SOROKINA, M.I., red.; ZARKH, I.M., tekhn.red.

[Hydrometeorological observations made on the "Slava-15" whaler of the Antarctic Whaling Fleet in 1955-58 and deep-sea hydrological observations carried out in 1950-51 and 1953-58] Gidrometeorologicheskie nabliudeniia na kitoboinom sudne "Slava-15" Antarkticheskoi kitoboinoi flotili v 1955-58 gg. i glubokovodnye gidrologicheskie nabliudeniia v 1950-51 i 1953-58 gg. Moskva, Gidrometeor. izd-vo (otd-nie). 1960. 319 p. (Moscow. Gosudarstvennyi okeanograficheskii institut. Trudy, no.58). (MIRA 13:11)

(Antarctic regions--Meteorology, Maritime--Observations)
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VOLPYAN, Georgiy Abramovich; IVANCHUKOV, A.F., nauchn. red.; ZHIVOV, M.S., nauchn. red.; SOROKINA, M.I., red.

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1ST AND 2ND ORDERS

3RD AND 4TH ORDERS

PROCESSES AND PROPERTIES INDEX

SOROKINA, M.I.

A-4

[redacted]

J. D. B.

All-Union Inst. Exp. Medicine –
Inst. Cytology, Histology & Embryology

ASM-SLA METALLURGICAL LITERATURE CLASSIFICATION

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Variability of the chromosome complex in tissue cells of warm-blooded animals. Izv.Akad.nauk SSSR Ser.biol.,Moskva No.6:97-123 Nov-Dec 50. (CLML 20:4)

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SHARKOVA, A.S.

Cytological modification of mycelium Actinomyces globosporus in lysis under the effect of actinophage. Mikrobiologiia, Moskva 21 no. 6:665-670 Nov-Dec 1952. (CLML 23:3)

1. Institute of Animal Morphology of the Academy of Sciences USSR and Institute of Microbiology of the Academy of Sciences USSR, Moscow.

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SOROKINA, M.I.

USSR/ Medicine - Morphology

Card 1/1 Pub. 22 - 13/43

Authors : Sorokina, M. I.

Title : Morphological changes in nerve cells of the medulla oblongata of white mice resulting from their total x-raying

Periodical : Dok. AN SSSR 106/1, 51-53, Jan 1, 1956

Abstract : Experiments were conducted to determine the effect of x-rays on the nerve cells of the medulla oblongata of white mice. The medulla was exposed to x-rays of various strength (from 700r up to 5000r) and for various periods of time. Morphological changes in the medulla were studied microscopically. Eleven references: 1 Eng., 3 USA, and 7 Russ. and USSR (1896-1952). Photographs.

Institution : Acad. of Sc., USSR, The Institute of Animal Morphology imeni A. N. Severtsev

Presented by: Academician L. A. Orbeli, July 25, 1955

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Morphological changes in the nerve cells of the cerebellum in general and local X-ray irradiation of white mice. TSitologiia 1 no.4:374-378 Jl-Ag '59. (MIRA 12:10)

1. Laboratoriya radiobiologii Instituta morfologii zhivotnykh AN SSSR, Moskva.
(X RAYS--PHYSIOLOGICAL EFFECT) (CEREBELLUM--INNERVATION)

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Morphological changes in the nerve cells of the medulla oblongata following general and local X-ray treatment of animals. Trudy Inst.morf.zhiv. no.24:126-134 '59. (MIRA 13:3)

(X RAYS--PHYSIOLOGICAL EFFECT)
(MEDULLIA OBLONGATA--INNERVATION)

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