The carbide solid solutions were prepared by reduction of the suitable oxide mixtures by carbon. It was found that the optimum conditions for preparing a solid solution containing 20 mole% ScC and having maximum microhardness are obtained by heating a stoichiometric mixture of oxides with carbon at 1900°C for 1 hr. In the case of reduction in vacuo, the optimum conditions of formation of WC+TiC+ScC solid solutions are: heating of a suitable oxide and carbon mixtures for 1 hr at 2000°C or in the case of carbidization in a Tammann furnace, a two-time heating of a WC+TiO₂+Sc₂O₃+C mixture for 1 hr at 2100°C or heating of a W+Sc₂O₃+TiO₂+C mixture for 1 hr at 2500°C. In general, the mere presence of scandium carbide increases the hardness of the other transition element carbides. Orig. art. has: 1 figure and 4 tables.

SUB CODE: 07,11/ SUBM DATE: 03Jul65/ ORIG REF: 002/ OTH REF: 000
AUTHOR: Makarenko, G. N.; Pustovoyt, L. T.; Yupko, V. L.; Rud', B. M.

ORG: Institute of Materials Science Problems, Academy of Sciences, UkrSSR, Kiev

TITLE: Nature of chemical bonding in rare earth dicarbides


TOPIC TAGS: yttrium compound, lanthanum compound, cerium compound, praseodymium compound, neodymium compound, gadolinium compound, chemical bonding

ABSTRACT: In order to study the chemical bonding in rare earth carbides, the composition of gaseous hydrolysis products of yttrium, lanthanum, cerium, praseodymium, neodymium, and gadolinium dicarbides is investigated chromatographically. The evolution of acetylene as the main hydrolysis product indicates that in the dicarbides the carbon–carbon bonds are much stronger than the carbon–metal bonds, which are broken during hydrolysis. The amount of acetylene increases from La to Ge and then to Pr and Nd; this is explained in terms of the electronic structure of the rare earths. Physical properties (melting points, Hall effect, electrical resistivity, thermoemf, and thermal expansion coefficient) of the Card.

UDC: 546.86’261+841.57
dicarbides were measured and plotted against the elements and temperature. A structural model is proposed for LaC$_2$, PrC$_2$, NdC$_2$, and CeC$_2$: in a tetragonal face-centered cell containing four metal atoms and four C$_2$ groups, ten of the twelve valence electrons of the four metal atoms participate in the C–C bond, and the remaining two (0.5 electron per metal atom) are free and participate in the conduction. It is concluded that the covalent bond is the strongest one in rare earth dicarbides, and that it is combined with an ionic-metallic bond. Orig. art. has: 2 figures and 2 tables.

SUB CODE: IC, GC / SUBM DATE: 05Jul65 / ORIG REF: 007 / OTH REF: 006
AUTHOR: Paderno, Yu. B.; Fomanko, V. S.; Podchernyayeva, I. A.; Makarenko, G. N.

ORG: Institute for the Study of Problems of Material Sciences, AN SSSR
Kiev (Institut problem materialovedaniya AN SSSR)

TITLE: Thermionic emission from CeC₂


TOPIC TAGS: thermionic emission, rare earth metal, cerium carbide, carbide, cathode, cerium bicarbide

ABSTRACT: The thermal emission properties of CeC₂, whose electronic structure resembles that of ThC₂ (which is known to be a good emitter) have been investigated in the temperature range of 1200—1770 K, in view of the possible use of the material for the production of efficient cathodes. The methods and instrumental setup used for the experiments were described in an earlier work (Samasov, G. V., V. S. Fomanko, V. N. Paderno, and B. M. Rud). Teplofizika vysochkh temperatur, 2, 730, 1964). Suspended in absolute alcohol, the carbide was deposited onto a tantalum substrate upon which it formed a 0.2—0.3-mm-thick layer. To prevent oxidation, the deposition did not last more than three
minutes, the measurements of the work function taken during the activation process showed a minimum of 2.49 ev at 1380K, which value remained unchanged until 1520K, when an insignificant increase could be observed. At any given fixed temperature, the stationary value of the work function was attained rapidly when the cathode temperature was high. The good emission properties of CeC2 are indicated by its fast activation, with the work function changing from 3.20 to 2.49 ev in the temperature range of 1220—1380K. The maximum current density actually measured was 3 amp/cm² at a cathode temperature of 1700K, but a rough extrapolation leads to a value of 17 amp/cm² at 2300K. The authors hope that studies of other rare-earth metal carbides may help to explain the influence of the electronic structure on the emission properties of materials. Orig. art. has: 2 figures.

SUB CODE: EN/1 SUBM DATE: 05Feb63/ ORIG REF: 004/ OTH REF: 004

ATD PRESS: 4/13/
Physical properties of certain rare earth dicarbides

ABSTRACT: The temperature dependence of the electrical resistance in the 20 – 1300°C temperature range, the coefficient of absolute thermoelement, the Hall coefficient at room temperature, and the melting point were measured on the same samples of Y, La, Ce, Pr, and Nd dicarbides. From these measurements, the charge carrier concentrations and mobilities were calculated. An anomalous temperature dependence of the electrical resistance was observed around 1000°C. The high effective carrier concentration in CeC2 as compared to the other dicarbides studied is explained on the basis of the electronic...
structure of the rare earth atoms and the magnetic susceptibility of the dicarbides. The low effective carrier concentration in the case of YC$_2$ is due to a change in bond character in the C$_2$ complex, this being supported by data on the hydrolysis of YC$_2$. Orig. art. has: 1 figure and 2 tables.

SUB CODE: 11 / SUBM DATE: 28May65 / ORIG REF: 012 / OTH REF: 008

ORG: Institute of Materials Science Problems, AN UkrSSR (Institut materialo-
veçeniya AN UkrSSR); L'vov State University imeni I. Franko (L'vovskii gosudar-
stvenny universitet)

TITLE: Preparation of rare earth sesquicarbides

SOURCE: Zhurnal prikladnoy khimii, v. 39, no. 11, 1966, 2395-2400

TOPIC TAGS: lanthanum compound, cerium compound, praseodymium compound, neodymium compound, carbide

ABSTRACT: A study of the possibility and conditions of preparation of lanthanum, cerium, praseodymium and neodymium sesquicarbides via reduction of the metal oxides with carbon in a vacuum and in argon and reaction of the dicarbides with the corresponding oxides showed that the preparation of sesquicarbides is impossible under these conditions because their formation is superseded by the formation of the stabler dicarbides. It is shown that the four sesquicarbides can be formed by reacting dicarbides with the corresponding metals in argon, and also by arc melting of metal fragments with spectroscopically pure graphite. The existence of isostructural oxy-
carbides of lanthanum and praseodymium of the approximate composition LaCO and PrCO is postulated. Orig. art. has: 9 tables.

UDC: 546.65.261
AUTHOR: Paderno, Yu. B.; Yupko, V. L.; Rud', B. M.; Kvee, G. P.; Hukarenko, G. N.,

ORG: Institute of Material Science Problems, AN UkrSSR (Institute
problem materialovedeniye AN UkrSSR)

TITLE: Electrophysical properties of Gd, Tb, Dy, Er, Tu dicarbides

SOURCE: AN SSSR. Izvestiya, Neorganicheskiye materialy, v. 3, no. 2, 
1967, 195-397

TOPIC TAGS: gadolinium, terbium, dysprosium, erbium, thulium, dicarbide, carbide, resistivity, Hall effect, carrier density

ABSTRACT: The results are presented of an experimental determination of the electrophysical properties of Gd, Tb, Dy, Er, and Tu dicarbides. Initial powder carbides were obtained by the reduction of metal oxides with carbon in vacuum at 1800°C for 25-60 min. The carbide powders were compacted and sintered in argon at 1700-1800°C for 15 min under a pressure of 100 kg/cm²; the porosity of sintered compacts was 5-13%. Finished specimens were annealed at 1650°C for 8 h. It was found that carbide resistivity changed from 30 μhm.cm for GdC₂ to 51 μhm.cm for...
TuC$_2$; the coefficient of en from $-5.95$ w/°C for ErC$_2$ to $-7.75$ w/°C for TbC$_2$; Hall effect from $-2.55$ cm$^3$/coul for TbC$_2$ to $41.35$ cm$^3$/coul for TuC$_2$; effective carrier concentration from $0.018$ el/atom H for TuC$_2$ to $1.04$ el/atom H for TbC$_2$; and mobility from $6.75$ cm$^2$/v. sec for ErC$_2$ to $19.6$ cm$^2$/v. sec for TuC$_2$. Melting points ranged from $2100^\circ$C for TuC$_2$ to $2280^\circ$C for ErC$_2$. Orig. art. has: 1 figure and 2 tables. 

SUB CODE: 11/ SUEM DATE: 13Jan66/ ORIG REF: 009/ OTH REF: 008
ACCESSION #: AT4035158

S/0000/63/000/000/0008/0021

AUTHOR: Samsonov, G. V.; Kosolapova, T. Ya.; Lyutaya, M. D.; Makarenko, G. N.

TITLE: Preparation and physicochemical properties of the carbides and nitrides of the rare-earth elements

SOURCE: AN SSSR. Institut geokhimii i analiticheskoy khimii. Redkozemel'nye elementy* (Rare-earth elements). Moscow, Izd-vo AN SSSR, 1963, 8-21

TOPIC TAGS: rare earth, rare earth element, scandium, lanthanum, yttrium, cerium, carbide, nitride

ABSTRACT: After reviewing the literature on the structure and physical properties (density, melting point, electrical resistivity) of the carbides and nitrides of Sc, Y, La and Ce, the authors describe the preparation of ScC, YC, LaC, ScN, CeN and LaN, the oxidation of the carbides, and some results of an X-ray study of their microstructure. The carbides and nitrides were prepared by heating the oxides with carbon. The nitrides could be heated at 800 and 1800°C. The nitrides could be prepared at lower temperatures by heating the oxide with ammonia. Data were also given on the effects of variations in temperature, heating rate and concentration of the reagents, as well as on the relationship between the composition and physical properties of the carbides. Thus, YC was found to have the highest...
melting point, electrical resistivity, chemical stability and microhardness, all of which increased with the C/metal ratio. X-ray analysis of the nitrides showed a cubic lattice of the NaCl type with a period of about 4.5-5.5 A. "The X-ray analyses were carried out by O. T. Khorpyakov." Orig. art. has: 12 figures and 6 tables.

ASSOCIATION: Institut geokhimii i analiticheskoy khimii AN SSSR (Institute of Geochemistry and Analytical Chemistry, AN SSSR)

SUBMITTED: 31Oct63 DATE ACQ: 30Apr64 ENCL: 00
SUB CODE: 1C NO REF SOV: 016 OTHER: 005
KUZ'MIN, Ye., kand.tekhn.nauk; MAKARENKO, L., nauchnyy sotrudnik;
PERVAKOV, A., nauchnyy sotrudnik; TATARINOV, V., nauchnyy
sotrudnik

New developments in the design of a joint for series 1-464
houses. Na stroi.Ros. 4 no.6 129-30 Je '63. (MIRA 16:6)

1. Odesskiy inzhenerno-stroitel'nyy institut (for all except
Kuz'min).

(Building—Details)
Evaluation of the efficacy of local anesthesia in gynecological operations by means of plethysmography and of pneumography.

Akh. I. gin. no. 2:8-12 Mr.-Ap '54.

(MIHA 7:6)

1. Iz akusherko-ginekologicheskoy kliniki (direktor - professor L. S. Pershininov) Minskogo meditsinskogo instituta.

(Generative organs, Female—Surgery) (Local anesthesia)

So: Knizhnaya letopis', No 8, 1956, pp 97-103
MAKARENKO, I.A.


1. Iz kafedry akusherstva i ginekologii (oveduyus'chiy kafedry - professor I.M. Starovoytov) Minskogo meditsinskogo instituta. (GENERATIVE ORGANS, FEMALE—CANCER) (FLUORESCENCE MICROSCOPY)
MAY ARENO, I. G.

"The Cytology and Histochemistry of the Uterus During Pregnancy." Cand Biol Sci, Moscow Order of Lenin State U imeni M. V. Lomonosov, 10 Dec 54. (VM, 1 Dec 54)

Survey of Scientific and Technical Dissertations Defended at USSR Higher Educational Institutions (12)
SG: Sum. No. 556, 24 Jun 55
POKROVS'KAIA, M.P.; MAKARENKO, I.G.; KRASKINA, N.A.; BRAUDE, N.I.;
PRYADKINA, M.D.; GUTOVSKAIA, N.M.

Significance of cytochemical investigations in the study of
immunological problems. Zhurnal mikrobiologii, Epidemiologii, i Imunologii. 30, no. 1:
5–11 Jan 1950. (MIRA 12:3)

Iz Gosudarstvennogo kontroll'nogo instituta meditsinskikh biologicheskikh preparatov imeni Tarasevicha.
(IMMUNITY,
cytochem. aspects (Rus))
MAKARENKO, I.I.

Certain clinical variations in the course of so-called non-specific infectious arthritis. Sov. med. 16 no.10:20-24 O '54. (MLRA 7:11)

1. Iz gospital'noy i propedeuticheskoy kliniki (zav. deystvitel'nyy chlen AMN SSSR prof. Ye.M.Tareyev) sanitarno-gigienicheskogo fakulteta I Moskovskogo ordena Lenina meditsinskogo instituta. (ARTHRITIS, RHEUMATOID, clin. aspects)
Treatment of so-called nonspecific infectious arthritis (rheumatoid arthritis) with butadione. Sov.med.19 no.7:44–48 J1 '55.


  (ANALGESICS, ther. use
  butadione in rheum.arthritis)

  (ARTHRITIS, RHEUMATOID, ther.
  butadione)
Involvement of the kidneys in so-called nonspecific infectious (rheumatoid) arthritis. Sov. med. 19 no. 12: 46-50 1965 (In Russian).

Nakarenko, I. I.

"Injuries to the internal and internal-external ligaments (rheumatoid arthritis)." First Department of Orthopedic Surgery. L. M. Sohen and P. V. Kalachev. Report on the results of anterior capsulotomies.
Hemagglutination reaction in patients with the so-called unspecific infectious arthritis. Sov. med. 20 no.1 : 57-60 Ja '56. (MLRA 9:5)

1. Iz obshchey i gospit'noy terapevticheskoi kliniki (zav.-deyat'vitel'nyy chlen Akademii meditsinskikh nauk SSSR, prof. E.M. Tareyev) sanitarno-gigienicheskogo fakulteta I Moskovskogo ordena Lenina meditsinskogo instituta.

(AGGLUTINATION reactions in unspecific infect. arthritis)

(ARTHRITIS unspecific infect., hemagglutination reactions in )


(MIRA 16:6)

1. Moscow. Pervyy meditsinskiy institut. 2. AMN SSSR (for Tareyev).

(OCCUPATIONAL DISEASES)
MAKARENKO, I.I., kand.med.nauk

Some nonspecific syndromes in silicosis. Sov.med. 26 no.21
35-41 P'65.

1. Iz kafedry obshchej terapii i professional'nykh zabolovanij
(zav. - deystvitel'nyy orden AAR SSSR prof. V.M. Tareyev)
sen-tero - gigiennyicheskogo fakulteta I Moskovskogo ordena Lenina
meditsinskogo instituta imeni I.M. Sechenova.
(LUNGE—DUST DISEASES) (COLLAGEN DISEASES)
(KIDNEYS—DISEASES)
MAKARENKO, I.I.

Pathogenesis of amyloidosis in rheumatoid arthritis. Te-mp.
arkh. 35 no.9:86-92 S'63 (MIRA 17: 4)

1. Iz kafedry obshchey terapii i professional'nykh zabolovaniy
(zav. - deystvitel'nyy chlen AMN SSSR prof. Ye.M. Tar'yev) san-
itarno-gigienicheskogo fakul'teta I Moskovskogo ordena Lenina
meditsinskogo instituta imeni Sechenova.
"Case of combined silicosis and scleroderma. Iod.: 43-48"
KABALENKOV, I.I., kand. med. nauk; KABALIN, V.I., kand. med. nauk

Talc pneumococcal in workers of the dust departments of the "Kauchuk" plant. Publ.: "Izd. NTU", L'vov.

MAKARENKO, I.I.; LEVITSKIY, E.R.

Resochin in clinical internal medicine and its possible side effects. Sov. med. 27 no. 3: 72-78 Mr '64. (MIRA 17:11)

В.В. Удоков, инженер-механик, капитан технической службы.

Оборудование для охраны зданий и радио-технических систем. "Электроника". "Электро". "Электровод". "Студент и ученый".
DUDOV, V.V., inzh.-major; MAKARENKO, I.M., kapitan tehnikheskoy sluzhby

What should models be like? Vest. protivozd.. obor. no.2;20--22 F
'61. (MIRA 14;2).

(Radio circuits—Models)
DUDOV, V.V., inzhener-mayor; MAKARENV, I.V., kapitan tekhnicheskoy sluuzhby

Operating modes of radio circuit elements. Vest. protivovozd. obor. no.4;21-23 Apr '61. (MIRA 14:7)

(Radio circuits)
DUDOV, V.V., inzhener-mayor; MAKARENKO, I.M., kapitan tekhnicheskoy sluzhby

Operating models. Vesta protivovozd. obor. no.6:21-24 Je '61. (MIRA 14:8)

(Oscillators, Electric)
DUDOV, V.V., inzhener-mayor, KARKAIKO, I.M.: kapitan tekhnicheskoj sluzyby

Models of "Phanteatron" and "Multivibrator." Vest. protivvzduzhoz., no.12:2-24 in '61. (MIA 15.1) (Pulse circuits) (Oscillators, Electric)
Niksanor Adamovich Khrzhonshevs'kyi, 1836-1906 S-0 156. (MIA 10:1)

1. Khivs'kyi medicniy institut, kafedra istorii meditsini.
(KHRZHONSHCHIYS'KYI, NIKSANOR ADAMOVYCH, 1836-1906)
BENYUMOV, R.Ya., dtsent; MAKARENKO, I.M., assistant

Professor V.A.Subbotin; on the history of Russian hygiene. Gig. i
san. 21 no.5 38-42 My '56. (MLRA 9:8)

1. Iz kafedry istorii meditsiny Kiievskogo meditsinskogo instituta
(HYGIENE, history,

 contribution of V.A.Subbotin (Rus))

(SUBBOTIN, V.A., 1844-1898)
MAKARANKO, I.M.

Views on prophylaxis and problems of hygiene in the works of
Professor A.P. Val'ter of the Department of Medicine, Kiev University.
Vrach.delo no.10:1101 0 '57.

meditsinskogo institute.

(VAL'TER, ALEKSANDR PETROVICH, 1817-1889)
BENTUMOV, R.Ya., dotsent; MAKARENKO, I.M. (Kiev)

From the history of Ukrainian-Czech mutual relations in the sphere of medical science. Vrach.delo no.3:319-322 Wr '60.

(CZECHOSLOVAKIA--MEDICINE) (UKRAINE--MEDICINE)
BENYUMOV, R.Ya., dottsnt; MAKARENKO, I.M. (Kiev)

Excerpts from the history of infectious disease control in Kiev.
Vrach. delo no. 10:151-153 0 '61.
(KIEV--COMMUNICABLE DISEASES--PREVENTION)
BENYUMOV, R.Ya., dotaent; MAKARENKO, I.M. (Kiyev)

Eminent scientist and public figure, N.A. Khrzhonshchevskii. Sov. zdrav. 21 no.10:83-86 '62. (MIRA 15:10)
(KHRZHONSHCHEVSKII, NIKANOR ADAMOVICH, 1836-1906)
TITLE: Electrochemical plating

SOURCE: Vestnik protivovozdushnoy oborony, no. 5, 1966, 73-74

TOPIC TAGS: electroplating, electroplating equipment, electrolyte, "electrolytic deposition, phenol, tin, zinc, silver chloride"

ABSTRACT: The problems of electroplating are discussed and it is pointed out that ferrocyanide silver plating is widely used because of its appearance, resistance to corrosion, high reflectivity and conductivity. Methods and ingredients used to produce the electrolyte and the silver chloride are cited and the plating process is described in detail. Tin and zinc plating methods are also described, as is the preparation of the required electrolyte. Methods of handling phenol are described.
DUDOV, V.V., inzh.-major; MAKARENKO, I.N., kapitan tehkn. služby

Models of oscillators. Vest.protivovozd.obor. no.9:28-31 3 '61. (MIRA 14:8)
(Oscillators, Electric)
AUTHORS: Motulevich, V. I., Petrov, Yu. N. and Makarenko, I. N.

TITLE: Experimental investigation of convective heat exchange in electric fields


TEXT: To produce an electric field with large tension gradients, the authors used a heated copper wire (40 μm in diameter) combined with a cylinder or a plane plate. Conclusions: With tensions of 150 - 180 kV/cm near the surface of the wire a corona discharge is observed, its intensity increasing rapidly with tension. The presence of the discharge leads to a sharp increase of heat exchange, in some cases by several times. An increase of frequency in the region of corona discharge also leads to an increase of heat exchange. If the velocity of air flow around the wire reaches 5 - 10 m/sec in the absence of discharge, or 40 - 50 m/sec in the

Card 1/2
Experimental investigation of... presence of discharge, the electric field ceases to affect the heat exchange. Reversal of polarity in an electrostatic field does not affect the heat exchange, which confirms a theory given previously by two of the authors. If no special measures are taken against vibrations of the wire, heat exchange may increase considerably owing to mechanical causes which have nothing to do with electric convection. There are 9 figures.
AUTHOR: Pigal'skaya, L. A.; Yurchak, R. P.; Makarenko, L. N.; Filippov, L. P.

ORG: Moscow State University im. M. V. Lomonosov (Moskovskiy gosudarstvennyy universitet)

TITLE: Thermal properties of molybdenum at high temperatures

SOURCE: Teplofizika vysokikh temperatur, v. 4, no. 1, 1966, 144-147

TOPIC TAGS: molybdenum, metal physical property, heat conductivity, high temperature effect

ABSTRACT: This paper is devoted to the results of the measurement of the thermal conductivity and specific heat of molybdenum at high temperatures (1000 — 2000K), and to the values of heat conductivity obtained from the results. This work is part of the program of investigations of the thermal properties of solid and liquid metals being conducted at the Chair of Molecular Physics, Physics Department, MGU (kaledra molokulyarnoy fiziki fizicheskogo fakul'teta MGU). The experimental set-up, the methods used, and the specimens are described. The values of the heat conductivity of molybdenum and density are presented in graphs together with the data of other authors. The values of the Lorentz number, determined from the heat conductivity values, monotonically decreasing with a rise in temperature from $3.17 \times 10^{-8}$ at 1000K to $2.88 \times 10^{-8}$ v/deg$^2$ at 2000K. The appreciable difference of the Lorentz number from the theoretical value $2.45 \times 10^{-8}$ v/deg$^2$ testifies to the presence in the molybdenum of a considerable lattice heat conductivity, amounting to about 15—20% of the electronic. The absolute value of the lattice heat conductivity decreases with a rise in temperature as $1/T^2$.

UDC 546.77:536.631 + 536.2.023
\( \omega_{\text{latt}} = 320/T \text{ w/cm} \cdot \text{deg} \), which agrees with the predictions of the theory. Orig. art. has: 3 figures.

SUB CODE: 11 / SUBM DATE: 27Jul64 / ORIG REF: 011 / OTH REF: 004
MAYDANOV, A.P.; PELIKH, I.K. [Pelykh, I.K.] [deceased]; MAKARENKO, I.P.

Effect of irradiation on the physicochemical properties of serum proteins. Ukr. biokhim. zhur. 33 no.1:88-93 '61. (MIRA 14:3)

1. Kharkov State Medical Institute.
(ULTRAVIOLET RAYS—PHYSIOLOGICAL EFFECT)
(BLOOD PROTEINS)
MAKARENKO, I.P. (Leningrad); SOKHANSKAYA, V.S. (Leningrad); SHAKHBAZyan, K.V. (Leningrad)

Master plan for computer programming. Zhur. vych. mat. i mat fiz. 3 no.6:1134-1137 '63. (MIRA 17:1)
Using diesel locomotives and rail cars on local and intercity lines. Zheldortrans, no.7, 17-20. 1957. (ML.2, 12:5)

1. Nachal’nik Latviyskoy zheleznoy dorogi (for Krasnovayev).

(Diesel locomotives)
KRASNOBAYEV, N.I.; MAKARENKO, L.T.

Need for a faster adoption of diesel trains and railway motorcars in local and suburban transportation. Zhel. dor. transp. 42 no.3:17-20 Apr '60. (MIRA 13:8)

1. Nachal'nik Latviyskoy zheleznoy dorogi Riga (for Krasnobayev).
2. Nachal'nik tekhnicheskogo otdela dorogi, Riga (for Makarenko).
   (Railroad motorcars) (Diesel locomotives)
KRASNOBAYEV, N.I. (Riga); MAKARENKO, I.T. (Riga); SHREDER, I.B. (Riga)

Electric contact and battery type train. Zhet.dor.transp. №
no.11:55-58 N '62.
(MIRA 15:11)

1. Nachal'nik Latviyskoy dorogi (for Krasnobayev). 2. Glavnyy
inschener Latviyskoy dorogi (for Makarenko). 3. Glavnyy inzhener
lokomotivnogo depo Zasulauk (for Shreder).

(Latvia—Electric railroads)
VOLYNSKIY, F.A.; POPOVSKIY, Ye.M.; MAKARENKO, I.V.; PAVLOVA, A.I.; SHEVCHUK, P.Ye.; KATKHE, V.L.

Profound study of afferent (spinal) innervation of the internal organs. Arkh. anat., gist. i embr. 47 no.12:64-76 D '64.

(MIRA 18:4)

MAKARENKO, K.K.

Significance of the proconvertin test in the initial stages of Botkin's disease in children. Pediatria no.5:23-26 '61.

(MIRA 14:5)


(HEPATITIS, INFECTIOUS) (VLOOD—COAGULATION)
Study of the activity of aminopherases in the blood serum in some infectious diseases in children. Pediatria no. 6: 52-56 '62.

1. Iz kafedry detskikh bolezney lechitel'mogo fakulteta (zav. - prof. V. P. Chernyuk) i kafedry infektsionnykh bolezney detskogo vozrasta (zav. - dottor N. G. Stepina) Odesskogo meditsinskogo instituta imeni N. I. Pirogova (dir. - zasluzhennyy deyatel' nauki UkrSSR prof. I. Ya. Deynika)

(TRANSMERASES) (COMMUNICABLE DISEASES)
MAKARENKO, K.K.

Proconvertin test with vitamin K in Botkin's disease in children. Vop. okhr. materin. dete. 8 no.1;87 #63 (MIRA 17:2)

1. Iz kafedry infeksionnykh bolezney detskogo vozrasta Odesskogo meditsinskogo instituta imeni N.I.Pirogova.
MAKARENKO, K.K.

Proconvertin test with vitamin K in Botkin's disease in children.
Gor. Zhur. no.12:87 D 63. (MIRA 17:3)

1. Iz kafedry infektsionnykh bolezney detskogo vozrasta Odesskogo meditsinskogo instituta imeni N.I. Pirogova.
AUTHORS: Fitingof, A. N.; Gubin, M. I.; Makarenko, K. P.

TITLE: A glandless centrifugal pump. Class 59, No. 176491

SOURCE: Byulleten' izobretateli i tovarnykh znakov, no. 22, 1965, 83-84

TOPIC TAGS: pump, centrifugal pump, corrosion, corrosion prevention

ABSTRACT: This Author Certificate presents a glandless centrifugal pump with a gas-filled casing. The pump is provided with an electric motor, a gas-distributing chamber, and an automatic apparatus for feeding inert gas (see Fig. 1). To protect the rotor and valves of the electric motor from aggressive liquids by a continuous feed of the inert gas into the distributing chamber, the automatic apparatus regulating the gas flow is made in the form of a valve activated by a float placed...
Fig. 1. 1 - Electric motor; 2 - gas distribution chamber; 3 - automatic apparatus; 4 - valve; 5 - float.

in the gas-distributing chamber. Orig. art. has: 1 figure.
MAKARENKO, K.S.

Improved magnetic separator. Stek. i ker. 17 no.12:36 D '60.

(MIRA 13:11)

(Magnetic separation of ores)
MAKARENKO, L.; ZHEVAKHOV, P.

GURSHIY, I.O. [Hurshii, I.O.], doktor izotrof. nauk; MAKARENKO, I.L.; ZHEVAKHOV, E.I.; DMITRIYENKO, M.F. [Dmytrienko, M.F.], zhurnalist

History of names. Nauka i zhittia 12 no.1:17 w. '63. (MIR 16:3)


(Donets Basin—Names, Geographical)
GURZHIY, I. O.; HURSHII, I. 0.; MAKARENKO, L. L.; ZHEVAKHOV, P. I.;
DMITRIYENKO, M. F. (Dmytryienko, M. F.), zhurnalist

History of names, Nauka i shyttia 12 no.2:33  P '63.  
(MIRA 16:4)

(Ukraine—Names, Geographical)
Defining more accurately the ratio of overloading from the weight of equipment. Shakht. stroi. 8 no.10:23 0 '64. (MILA 17:12)

1. Donetskiy PromstroyNIiproekt.
MAKARENKO, L.P., inzh.

Artificial regulation of strains in statically indeterminate reinforced-concrete articles. Bet. i zhel.-bet. no.5:236-240 My '61. (MIRA 14:6)

(Reinforced concrete)
KRYLOV, S.M., kand.tekhn.nauk; MAKARENKO, L.P., inah.

Artificial control of stresses in prestressed concrete elements.
Bet. i zh.-bet. 8 no.2:82-85 F '62. (MIRA 16:5)
(Prestressed concrete—Testing)

Experimental investigations of the creep and elasticity of concrete under constant and diminishing stress. Strukt. konstr., no. 21 (1978) 165.

I. Poltavskiy inzhenerno-stroitelniiy institut.
ACCESSION NR: AP4012567

AUTHORS: Kaminskiy, A. A.; Korniyenko, L. S.; Makarenko, L. V.; Prokhorov, A. M.; Fursikov, M. M.

TITLE: Investigation of stimulated emission of Nd$^{3+}$ in calcium fluoride at room temperature

SOURCE: Zhurnal eksper. i teoret. fiz., v. 46, no. 1, 1964, 386-389

TOPIC TAGS: stimulated emission, molecular generator, maser, calcium fluoride, neodymium impurity, neodymium doping, emission wavelength, emission time dependence, radiation structure, fine structure component.

ABSTRACT: The only fluoride doped with Nd$^{3+}$ previously found to exhibit stimulated emission at room temperature was SrF$_2$ (L. F. Johnson, J. Appl. Phys., v. 34, 897, 1963). The authors report testsATE
crystals grown from the melt in a fluoriding atmosphere by lowering the crucible. Emission was observed in crystals with neodymium oxide concentrations 0.3 and 1.5%, the approximate wavelength being 1.047 micron. The system was excited by absorption of light from a flash system at 14,000 cm⁻¹ above ground level. Emission corresponded to the \(^{4}F_{3/2} \rightarrow {^{4}I}_{11/2}\) transition. The illuminating system consisted of an elliptical system with the crystal in one focus and the flash lamp (80-mm glow column) in the other. The time dependence of the radiation was determined with a photomultiplier and oscilloscope. The structure of the radiation was determined with a spectrograph having a 600 line/mm grating. For the crystal with 0.3% neodymium oxide the emission line width was approximately 3 Å (4 fine structure components), increasing to 5 Å (12 components) for the 1.5% crystal. "The authors are grateful to V. V. Osiko and Yu. K. Voronko for supplying the fluorite crystals and for fruitful discussions." Orig. art. has: 2 figures.
KAMINSKIY, A.A.; KORNIYENKO, L.S.; MAKARENKO, L.V.; PROKHOROV, A.M.;
FURSIKOV, M.M.

Induced radiation from Nd\(^{3+}\) in CaF\(_2\) at room temperature.
Zhur. eksper. i teor. fiz. 46 no.19387-389 Ja'64. (MIRA 17:2)

I. Institut yadernoy fiziki Moskovskogo gosudarstvennego
universiteta.
AUTHOR: Bobrovnikov, Yu. A.; Zverev, G. M.; Makarenko, L. V.; Smirnov, A. I.

TITLE: Paramagnetic resonance of Nd$^{3+}$ ions in single-crystal oxides of yttrium and scandium

SOURCE: Fizika tverdogo tela, v. 8, no. 10, 1966, 3086-3088

TOPIC TAGS: yttrium, scandium, oxide, neodymium, paramagnetic resonance, crystal symmetry, forbidden transition, optic spectrum, microwave spectroscopy

ABSTRACT: This is a continuation of an earlier study of the optical spectra of Nd$^{3+}$ ions in Y$_2$O$_3$ and Sc$_2$O$_3$ (Opt. i spektro., in press) where the results were interpreted under the assumption that only one type of rhombic-symmetry center exists. In view of the fact that other results suggest the existence of two types of symmetry centers (C$_2$ and S$_2$), the authors have carried out a radiospectroscopic study of the same crystals. Paramagnetic resonance of Nd$^{3+}$ in Y$_2$O$_3$ and Sc$_2$O$_3$ was observed at 4.2K and 14.3 GHz. The samples were oriented in such a way that the constant field remained in the (110) plane during the crystal rotation, and the alternating field was perpendicular to the constant field. An analysis of the angular dependence of the paramagnetic resonance spectrum established the existence of centers in crystalline
fields of rhombic and trigonal symmetry, with predominant directions parallel to [110] and [111] respectively. The components of the g-factors in the Nd^{3+} spectra are calculated for both oxides and both symmetry centers. The concentrations of the two centers differ by only a factor of 2. Since the earlier investigation of the optical spectrum disclosed the existence of only rhombic-symmetry centers, this confirms the assumption that forbidden transitions have a high probability in the case of centers that have no inversion symmetry. Orig. art. has: 1 figure, 3 formulas, and 1 table.

SUB CODE: 20/ SUBM DATE: 28Mar66/ ORIG REF: 002/ OTH REF: 007
Paramagnetic resonance of Ce$^{3+}$ and Nd$^{3+}$ in SrMoO$_4$ single crystals

ABSTRACT: To check against results obtained with other scheelites, the authors studied the EPR spectra of Ce$^{3+}$ and Nd$^{3+}$ in single crystals of strontium molybdate grown by the Czochralski method and containing approximately 0.5% of Ce or Nd. The EPR spectra were measured at 4.2K and 14.3 GHz. In the case of cerium, a single intense line was observed, due to the Ce$^{3+}$ ion in a field of tetragonal symmetry. In the case of neodymium, the spectrum consisted of an intense line due to the even isotopes of Nd$^{3+}$, on which a hyperfine structure due to the odd isotopes Nd$^{143}$ and Nd$^{145}$ is superimposed. The $g$-factors half widths and the hyperfine structure constants were obtained for all lines and agreed with an empirical relation obtained by others. A wave function agreeing with the obtained data is also found for the lower state of Nd$^{3+}$ in a field of tetragonal symmetry. Orig. art. has: 2 figures and 7 formulas.
1. ULITOVS’KIY, R.; NAKARENKO, V.

2. USSR (600)

3. Diesel Motor


MAKARENKO, M., fel'dsher

Work of the Vas'kovichi fel'dsher-midwife center. Zdrez. Bel. 7
no.11:40-41 N '61.
(MIRA 15:11)
(VAS'KOVICH (WHITE RUSSIA)—PUBLIC HEALTH, RURAL)
MAKARENKO, V. A.


Comparative evaluation of some diagnostic examination methods in latent forms of dysentery in children. Pediatria no.4:42-47 April '57.


(ESCHERICHIA COLI) (DIGESTIVE ORGANS--DISEASES)
KHOKHOL, Ye.N., prof.; MAKARENKO, M.A., kand. med. nauk

Clinical characteristics of coliienteritis in children caused by different serotypes of the coli bacillus. Pediatrìia 37 no.5: 3-9 My '59. (MIRA 12:8)


(ENTERITIS, in inf. & child

E. coli, comparison of enteritis due to different serotypes (Rus))

(ESCHERICHIA COLI, infect.

enteritis in child., comparison of infect. due to different serotypes (Rus))
KHOKHOL, Ye.N.; MAKARENKO, M.A., kand.med.nauk; KASHKAVA, K.N., aspirant

Use of specific antibiotics and different sugars in the treatment and prevention of coli enteritis in children. Vop. och. mat. i det. 6 no.11:29-34 N '61.

1. Iz kafedry gosipalt'noy pediatrii (zav. - prof. Ye.N.Khokhol) Kievskogo meditsinskogo instituta (dir. - dotsent V.D.Bratus').
2. Chlen-korrespondent AN SSSR (for Khokhol).

(INTESTINAL DISEASES) (ANTIBIOTICS)

(SUGARIS-THERAPEUTIC USE)
The purpose of these tests, following the ultrasonic dehydration tests described in the article "Dehydration of crude oil by ultrasonic method" by Ye. I. Skripnik and A. Z. Simileyskii in "Neft' i Gaz", no. 2, 1962, was to desalt highly sulfurous crudes to a salt content of only 50 mg/l and less. Three types of crudes from the Kuybyshev oil producing region were used, having respectively a viscosity of 58.2, 86.5 and 47.2 cst at 20°C, a salt content of 2800, 4000 and 1044 mg/l and a sulfuric acid tar content of 50.0, > 80.0 and 46.0 % with about 3 % sulfur. The following optimum conditions for both desalting and dehydration were established: temperature 96 - 100°C, for heavy crudes low pressures...
Dehydration and desalting of... (maximum 2 atm), washing with a 1% solution of trisodium phosphate, mixing with a propeller stirrer for 1 - 2 minutes. The same conditions apply for wet crudes and those with a high salt content, > 2000 mg/l, but in this case the two-stage processing has to be used. If crudes are processed in one stage, higher temperatures (160 - 200°C) are necessary; the reagent is an aqueous caustic soda solution. The final ultrasonic processing which results in a complete dehydration must be carried out at a low frequency, 15 - 17 kc, and at a rather low intensity amounting to 0.10 - 0.12 w/cm², so as to produce sound waves of greater length; settling time is 1 hr at 80°C. The tests showed that heavy, sulfurous and highly sulfurous crudes, forming very stable emulsions, can be desalted and dehydrated by this method. There are 7 tables.

ASSOCIATION: Kuybyshevskiy politekhnicheskiy institut im. V. V. Kuybysheva
(Kuybyshev Polytechnic Institute imeni V. V. Kuybysheva)

SUBMITTED: May 24, 1962
SKRIPNIK, Ye.I.; SIMILEYSKIY, A.Z.; MAKARENKO, K.A.; GRIGOR'YEVA, K.M.;
DOLGANOY, V.L.

Dehydration and desalting of sweet and sour petroleum. Izv.
yvs. ucheb. zav.; neft' i gaz 5 no.10:67-70 '62. (MIRA 17:8)

1. MAKARENKO, K. D.

2. USSR (600)

4. Agriculture

7. Summer care of livestock in advanced kolkhozes. Moskva, Sel'khoziz, 1951.

Useful booklet on super herd of cattle
(Assure care of cattle in progressive collective farms.) (Written by I. V. Gerasimov)
Kazhdeyazit sov. gos., 1956.

Monthly list of Russian newspapers, magazines, etc. in the world.
The Committee on Stalin Prizes (of the Council of Ministers USSR) in the fields of science and inventions announces that the following scientific works, popular scientific books, and textbooks have been submitted for competition for Stalin Prizes for the years 1952 and 1953. (Sovetskaya Kultura, Moscow, No. 22-40, 20 Feb - 3 Apr 1954)

<table>
<thead>
<tr>
<th>Name</th>
<th>Title of Work</th>
<th>Nominated by</th>
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<tr>
<td>MAKARENKO, M.D.</td>
<td>&quot;Summer Maintenance of Cattle in Advanced Kol khozes&quot;</td>
<td>Kiev State University imen T.O. Shevchenko</td>
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<td>&quot;Michurinian Teaching - the Basis of Improvement of Agricultural Animals&quot;</td>
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<td>Successes of Michurinists in Animal Husbandry</td>
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80: W-50604, 7 July 1954
Apparatus for warming solutions in radiographic laboratories.
Vest. rent. i rad. no.4: 84-85 Jl-Ag '55. (MLRA 8:12)
(ENTGRAPHS,
heaters for photo laboratory solutions)


I. "Moscow. Institut gornogo dela.
(Coal mining machinery)
PLAKSIN, I.N.; KARMAZIN, V.I.; OLOFINSKIY, N.F.; LORKIN, V.V.;
KARAMZIN, V.V.; MAKARENKO, M.G., red.

[New trends in the concentration of disseminated iron ores]
Novye napravlenia glubokogo obogashchenia tonkovkraplen-
(MIRA 17:4)
New methods of preparing and cooking coal. Some setory
zavodov ak sadovnikov ugle; sotvratel. Maksim; Maksim, etc., 299 p.
PLAKSIN, I.N., otv. red.; MAKARENKO, M.G., red.

[Flotation properties of rare-metal-containing minerals]
(MIRA 18:4)

1. Moscow. Institut gornogo dela imeni A.A. Skochinskogo.
2. Chlen-korrespondent AN SSSR (for Plaksin).
TAYTS, Ye.M., dokt. tekhr. nauk, ov. red.; MAKARENKO, M. M., red.


1. Moscow. Institut goryuchikh iskopayemykh.
FLEROV, B.L., kand. geol.-miner. nauk, otv. red.; MAKARENKO, I.G., red.

[Geology of tin-ore and complex metal deposits in Yakutia] Geologiya olovorudnykh i polimetallicheskih mestorozhd-

I. Akademiya nauk SSSR. Yakutskiy Filial, Yakutsk. Institut geologii.
