

LIMANSKIY M. Ye.

TRUSHINA, L.N., kand.med.nauk; LIMANSKIY, M.Ye., kand.med.nauk

Development of advanced medical education in the U.S.S.R. Vrach.
deleno no.1:73-77 Ja '58. (MIRA 11:3)

1. Kafedra khirurgii (zav.-zasl.deyatel' nauki, prof. A.K.Gorchakov)
stomatologicheskogo fakul'teta Kiyskogo meditsinskogo instituta
i Ukrainskiy nauchno-issledovatel'skiy institut tuberkuleza.
(MEDICINE--STUDY AND TEACHING)

LIMANSKIY, M.Ye., kand.med.nauk; BILLY, M.V.; LEVCHYK, I.A. (Kiев)

Public health system in Snyatyn District. Vrach. delo no.1:1335-1337
D '58. (MIRA 12:3)

1. Ukrainskiy nauchno-issledovatel'skiy institut tuberkuleza imeni
akademika F.G. Yanovskogo i Snyatynskaya rayonnaya bol'nitsa Stanis-
lavskoy oblasti.
(SNYATYN DISTRICT--PUBLIC HEALTH)

LIMANSKIY, M.Ye., Dotsent (Kiyev)

X-ray examinations in preventive examinations for the purpose
of detecting tuberculosis in adults and children. Vrach. delo
no. 6:118-119 Je'63. (MIRA 16:9)

1. Ukrainskiy nauchno-issledovatel'skiy institut tuberkuleza
(KIEV--TUBERCULOSIS--PREVENTION)

KOVAL'CHUK, G.K. [Koval'chuk, H.K.], kand.tekhn.nauk; MOSKALENKO, N.F.,
starshiy nauchnyy sotrudnik; LIMANSKIY, V.V. [Lymans'kyi, V.V.],
starshiy nauchnyy sotrudnik; PARSHINA, Z.S. [Parshyna, Z.S.],
inzh.

Use of biomycine for the preservation of fresh fish. Khar.
(MIRA 15:8)
prom. no.1:58-63 Ja-Mr '62.

1. Azovsko-Chernomorskiy nauchno-issledovatel'skiy institut
morskogo rybnogo khozyaystva i okeanografii.
(Chlortetracycline) (Fishery products--Preservation)

KOVAL'CHUK, G.K. [Koval'chuk, H.K.]; MOSKALENKO, N.F.; LIMANSKIY, V.V.
[Lymans'kyi, V.V.]

Use of sorbic acid for the processing of cold-smoked hearings.
(MIRA 15:9)
Khar.prom. no.2:65-67 Ap-Je '62.

1. Azovsko-Chernomorskiy nauchno-issledovatel'skiy institut
morskogo rybnogo khozyaystva i okeanografii.
(Fishery products--Preservation) (Sorbic acid)

SOROKINA, Z.A. (Kiyev); LIMANSKIY, Yu.P. (Kiyev)

Third All-Union Conference on the Electrophysiology of the Nervous System. Fiziol. zhur. 46 no.11:1423-1425 N '60. (MIRA 13:11)
(ELECTROPHYSIOLOGY--CONGRESSES) (NERVOUS SYSTEM)

SOROKINA, Z.A. [Sorokina, Z.A.]; LIMANSKIY, Yu.P. [Limans'kyi, Iu.P.]

Third Conference on Problems of Electrophysiology. Fiziol. zhur.
[Ukr.] 7 no.1:151-153 Ja-F '61. (MIRA 14:1)
(ELECTROPHYSIOLOGY—CONGRESSES) (NERVOUS SYSTEM)

LIMANSKIY, Yu.P.

Intracellular derivation of potentials of the action of individual neurons in the reticular formation of the medulla oblongata. Fiziol. zhur. 47 no.6:671-677 Je '61. (MIRA 15:1)

1. From the A.A.Bogomolets Institute of Physiology Ukrainian S.S.R. Academy of Sciences, Kiev.
(MEDULLA OBLONGATA) (ELECTROENCEPHALOGRAPHY)

LIMANSKIY, Yu.P. [Lymans'kyi, IU.P.]

Peculiarities of the convergence of various afferent impulses on neurons of the reticular formation of medulla oblongata. Fiziol. zhur. [Ukr.] 8 no.1:93-99 Ja-F '62. (MIR 15:2)

1. Laboratoriya obshchey fiziologii Instituta fiziologii im.A.A. Bogomol'tsa AN USSR, Kiyev.
(MEDULLA OBLONGATA)

43806

27.1140
27.6200

S/216/62/000/006/002/002
A004/A127

AUTHORS: Gazeiko, O.G., Limanskiy, Yu.P., Razumeyev, A.N., Izosimov, G.V., Baranov, V.I., Chichkin, V.A., Gaydamakin, N.A.

TITLE: Method of registering the action potentials of neurons of vestibular nuclei upon adequate stimulation of vestibular receptors in the cat

PERIODICAL: Akademiya nauk SSSR. Izvestiya. Seriya biologicheskaya, no. 6, 1962, 925 - 928

TEXT: The studies carried out were aimed at registering the action potentials of individual neurons of vestibular nuclei, particularly of the Deuters nucleus, during a motionless position of the animal and the reaction of these neurons on a stimulation of the vestibular apparatus during a vertical passive displacement of the animal. The tests were conducted on 17 cats on which action potentials of more than 500 neurons in the area of vestibular nuclei were registered. The authors describe the test conditions and the special test stand on which the animals were placed. The data obtained are being analyzed at present. Of the action potentials of 500 neurons registered, 6 groups of nerve cells were

Card 1/2

Method of registering the action potentials of

S/216/62/000/006/002/002
A004/A127

separated, which were grouped according to the following symptoms: 1) Increase in the background rhythm in stimulating the receptors - 439 cells; 2) slowing down of the background rhythm - 20; 3) increase in the background rhythm when moving the platform downwards - 14; 4) increase in the background rhythm when moving the platform upwards - 7; 5) neurons detecting the restoration of the background rhythm after motion sickness - 70; 6) neurons not detecting the restoration of the background rhythm in the period after motion sickness - 397. 51 neurons did not show any response to the stimulation of receptors. There are 2 figures.

Card 2/2

LIMANSKIY, Yu.P.

Synaptic changes in the rest potential of the separate neurons of the reticular formation of the medulla oblongata. Fiziol. zhur. 48 no.2: 126-133 F '62.
(MIRA 15:2)

1. From the Ukrainian S.S.R. Academy of Sciences A.A.Bogomoletz
Institute of Physiology, Kiev.
(MEDULLA OBLONGATA INNERVATION)

LIMANSKIY, Yu.P.

Slow and fast prepotentials of the neurons of the reticular formation
of the medulla oblongata. Fiziol. zhur. 51 no.1:99-104 Ja '65.

(MIRA 18:7)

1. Laboratoriya obshchey fiziologii Instituta fiziologii imeni
Bogomol'tsa AN UkrSSR, Kiyev.

L 23778-66
ACC NR: AP6015181 SOURCE CODE: UR/0239/65/051/001/0099/0104

AUTHOR: Limanskiy, Yu. P. -- Limanski, Yu. P.

ORG: Laboratory of General Physiology, Institute of Physiology im. A. A. Bogomolets,
AN UkrSSR, Kiev (Laboratoriya obshchey fiziologii Instituta fiziologii AN UkrSSR)

TITLE: Slow and fast prepotentials of neurons of the reticular formation of the medulla oblongata 22 27

SOURCE: Fiziologicheskiy zhurnal SSSR, v. 51, no. 1, 1965, 99-104

TOPIC TAGS: neuron, brain, cat, neurophysiology, electrophysiology

ABSTRACT: The biopotentials of individual reticular neurons of the medulla oblongata of cats were investigated by means of micro-electrodes on irritation of the shoulder and sciatic nerves of the animals. It was established that in some neurons, which exhibited regular rhythmic activity, an evenly rising slow depolarization (slow prepotential) preceded the action potential developing on irritation of the afferent nerve. In some of these neurons the slow prepotential was followed by a fast prepotential before the action potential set in. It is assumed that the fast prepotential developed as a result of stimulation of sections of the reticular neurons removed from the cell soma, possible large neuron dendrites which exerted an electrotonic effect on the somatic part of the cells. Orig. art. has: 3 figures. [JPRS]

22 27
B

SUB CODE: 06 / SUBM DATE: 31Oct63 / ORIG REF: 005 / OTH REF: 006

Card 1/1 RB 2 27

UDC: 612.822.3.087

L. M. ON TOY

The flow of homogeneous liquid between separator plates.
V. Sunkov, Yu. Zelotin, and G. Litvinov, (Termodinamika
Meat and Dairy Prod., No. 6(1957), Mekhanika Tverd. S. 100-
6, 15-8(1957)) -- A plastic separator bowl was made to facilitate
study of the pathway of the flow of homogeneous liquid
between plates of a separator. Stroboscopic motion pictures
of the bowl showed that approx. 40% of the area between
the plates was covered by the liquid. The liquid
dispersion pattern was found to be wedge shaped at 4000
r.p.m. with plates 0.43 mm. apart; higher speeds (6000) and
wider spacing of the plates (0.7 mm.) resulted in the widening
of the wedge until the flow became roughly rectangular.
Vladimir N. Krutovsky

HAT

LIMANTOV, I.A.; CHERKASOV, Yu.A.

Double photoconductive layers with a long dark relaxation
period of the surface charge. Zhur. nauch. i prikl. fot. i
kin. 8 no.6:449-454 N-D '63. (MIRA 17:1)

1. Gosudarstvennyy opticheskiy institut imeni S.I. Vavilova.

BOROVIK, Ye.S.; LIMAR', A.G.

Generation of pulse magnetic fields of long duration. Zhur.tekh.
fiz. 31 no.8:939-943 Ag '61. (MIRA 14:8)

1. Fiziko-tehnicheskiy institut AN USSR, Khar'kov.
(Magnetic field)

S/781/62/000/000/030/036

AUTHORS: Borovik, Ye. S., Limar', A. G.

TITLE: Production of pulsed magnetic fields of long duration

SOURCE: Fizika plazmy i problemy upravlyayemogo termoyadernogo sinteza;
 doklady I konferentsii po fizike plazmy i probleme upravlyayemykh
 termoyadernykh reaktsiy. Fiz.-tekhn. inst. AN Ukr.SSR. Kiev,
 Izd-vo AN Ukr. SSR, 1962. 144-148

TEXT: Experiments were made to determine the increase in the current-carrying capacity of coils wound with commercial wire (copper) cooled with liquid hydrogen. When a pulse is discharged in such a coil, the buildup of the magnetic field is not limited by the resistance and more energy goes into the field, which can be made both more intense and longer. The tests have shown that the heating conditions of the coil placed in liquid hydrogen are nearly adiabatic, which helps the production of longer pulsed magnetic fields, but that not all the energy stored in the discharge capacitors is utilized, only about one-third going into the magnetic energy and one-half remaining in the capacitors.

Card 1/2

ACCESSION NR: AT4036077

S/2781/63/000/003/0344/0348

AUTHORS: Limar', A. G.; Litvinenko, Yu. A.

TITLE: Similarity theory in pulsed multturn coils

SOURCE: Konferentsiya po fizike plazmy* i problemam upravlyayemogo termoyadernogo sinteza. 3d, Kharkov, 1962. Fizika plazmy* i problemy* upravlyayemogo termoyadernogo sinteza (Plasma physics and problems of controlled thermonuclear synthesis): doklady* konferentsii, no. 3, Kiev, AN UkrSSR, 1963, 344-348

TOPIC TAGS: magnetic field, magnetization, magnet coil, solenoid, model theory, model test

ABSTRACT: In view of the practical importance of obtaining strong magnetic-field pulses of long duration, using coils cooled to low temperatures, it is shown that the field obtained by discharging through a given coil a given capacitor bank can be calculated before-

Card 1/3

FEYTSARENKO, A.M.[Feitsarenko, A.M.], otv. red.; PREDKO, I.G.[Predko, I.H.], red.; GRIN'KO, T.F.[Hrin'ko, T.F.], kand. sel'khoz. nauk, red.; DEMCHENKO, P.K., red.; DOBROVOL'SKIY, I.M.[Dobrovols'kyi, I.M.], red.; LIMAR, F.M.[Lymar, F.M.], red.; SEMENOV, F.G.[Semenov, F.H.], red.; FEYTSARENKO, G.I.[Feitsarenko, H.I.], kand. sel'khoz. nauk, red.; VAS'KOVSKIY, Yu.I.[Vas'kovs'kyi, Iu.I.], red.; VIDONYAK, A.P. [Vidoniak, A.P.], tekhn. red.

[Sixty years of the Cherkassy (formerly Verkhnyaki) State Agricultural Experiment Station; collection of scientific papers] 60 rokiv Cherkas'koi (kol. Verkhniats'koi) derzhavnoi sil's'kohospodars'koi doslidnoi stantsii; zbirnyk naukovykh prats'. Kyiv, Vyd-vo Ukrains'koi akad. sil's'kohospodars'kykh nauk, 1961. 145 p. (MIRA 15:2)

1. Cherkassy. Derzhavna sil's'kohospodars'ka doslidna stantsiya.
2. Direktor Cherkasskoy gosudarstvennoy sel'skokhozyaystvennoy opytnoy stantsii (for Feytsarenko, A.M.). 3. Zavedyushchiy otdelom selektsii sakharinoi svekly Cherkasskoy gosudarstvennoy sel'skokhozyaystvennoy opytnoy stantsii (for Grin'ko).

(Continued on next card)

FEYTSARENKO, A.M.---(continued) Card 2.

4. Zaveduyushchiy otdelom obrabotki pochvy Cherkasskoy go-
sudarstvennoy sel'skokhozyayatvennoy optytnoy stantsii (for
Demchenko). 5. Zaveduyushchiy otdelom skotovodstva Cherkasskoy
gosudarstvennoy sel'skokhozyaystvennoy optytnoy stantsii (for
Liman). 6. Zaveduyushchiy otdelom selektsii zernovykh kul'tur
Cherkasskoy gosudarstvennoy sel'skokhozyaystvennoy optytnoy
stantsii (for Feytsarenko, G.I.).
(Cherkassy—Agricultural experiment stations)

LIMAR', N.G.

All-Russian conference on the problem of sanitation statistics. Gig.
sanit., Moskva no.3:54-55 Mar 1951. (CLML 20:7)

1. Of the Institute of Public Health Organization and History of
Medicine imeni N.A. Semashko of the Academy of Medical Sciences
USSR.

LIMAR O.F. [Lymar, O.F.]

Synthesis of thiazolidinone derivatives with possible antiepileptic
action. Farmatsev. zhur. 15 no.6:4-6 '60. (MIRA 14:11)

1. Kafedra farmatsevticheskoy khimii L'vovskogo meditsinskogo
instituta, zaveduyushchiy kafedroy - prof. M.M.Turkevich [Turkevych,
M.M.]. (THIAZOLIDINONE) (ANTICONVULSANTS)

Name : LIMAR', P. L.
Dissertation : Investigating the hammer throw technique
and how it can be improved
Degree : Cand Ped Sci
Defended At : State Central Order of Lenin Inst Physical
Culture imeni I. V. Stalin
Publication Date, Place : 1956, Moscow
Source : Knizhnaya Letopis' No 5, 1957

LIMAR', R.S.

Effect of elevated soil temperatures on the growth and development of oats at different stages of ontogenesis. Dokl. AN SSSR 108 no.6:1194-1196 Je '56.
(MIRA 9:10)

1. Gosudarstvennyy estestvenno-nauchnyy institut imeni P.F. Lesgafta Akademii pedagogicheskikh nauk RSFSR. Predstaceno akademikom L.A. Orbeli.
(Oats) (Botany--Physiology)

LIMAR', R.S.

~~Effect of soil temperature on the growth, development, and yield
of oats under different conditions of mineral nutrition [with
summary in English]. Fiziol. rast. 5 no.3:221-227 My-Je '58.
(MIRA 11:6)~~

1. Gosudarstvennyy yestestvenno-nauchnyy institut imeni P.J.
Lesgafta, Leningrad.

(Oats)
(Soil temperature)
(Fertilizers and manures)

LIMAR', R.S.

Dynamics of chlorophyll accumulation in oat leaves (*Avena sativa* L.) in relation to soil temperature and nitrogen nutrition. Bot. zhur. 45 no.5:739-742 My '60. (MIRA 13:7)

1. Vsesoyuznyy institut rasteniyevodstva, Leningrad.
(Plants, Effect of nitrogen on) (Chlorophyll)
(Soil temperature)

LIMAR', R.S.

Specific effect of ultrasound of various frequency
on the seeds of some plants. Bot.zhur. 45 no.8:1166-1169
(MIRA 13:8)
Ag '60.

1. Laboratorii Vsesoyuznogo instituta rasteniyevodstva,
g.Pushkin.
(Plants, Effect of ultrasonic waves on)
(Germination)

RAZUMOV, V. I.; LIMAR', R. S.; TAN' K-UY [T'an Ke-wei]

Effect of gibberellic acid on the development of winter grain
crccps. Bot. zhur. 45 no.12;1732-1738 D '60. (MIRA 13:12)

1. Vsesoyuznyy institut rasteniyevodstva, Leningrad.
(Gibberellic acid) (Grain) (Vernalization)

LIMAR', R.S.

Effect of ultrasonic waves on the germination of lentils.
Bot. zhur. 46 no.8:1165-1168 Ag '61. (MIRA 15:1)

1. Vsesoyuznyy institut naucheniyevodstva, Leningrad.
(Lentils)
(Ultrasonic waves—Physiological effect)

CRUSHVITSKIY, I.V.; LIMAR', R.S.

Accelerated germination of ginseng seeds due to the effect of
ultrasonic waves. Bot. zhur. 46 no.9:1282-1285 S '61.
(MIRA 14:9)
1. Botanicheskiy institut im. V.L.Komarova AN SSSR i Vsesoyuznyy
institut rasteniyevodstva, Leningrad.
(Ginseng) (Germination)
(Plants, Effect of ultrasonic waves on)

LIMAR¹, R.S.; NIKULINA, G.N.

Changes of the carotinoid content in the leaves of wheat and barley
in connection with their development. Bot. zhur. 50 no.1:113-119
Ja '65. (MIRA 18:3)

1. Vsesoyuznyy institut rasteniyevodstva, Leningrad.

GRUSHVITSKIY, I.V.; LIMAR', R.S.

Effect of gibberellin on the ripening and germination of seeds
with underdeveloped embryos. Bot. zhur. 50 no.2:215-217 F '65.
(MIRA 18:12)

1. Botanicheskiy institut imeni V.L.Komarova AN SSSR i
Vsesoyuznyy institut rasteniyevodstva, Leningrad. Submitted
June 26, 1964.

L-16814-63
ACCESSION NR: AP3003256

S/0286/63/000/003/0018/0018
444

AUTHOR: Limar', T. F.; Andreyeva, V. I.

TITLE: Method of obtaining mononitrate-dioxyniobium. Class C Olf. 12m, 9.
No. 152874

SOURCE: Byul. izobreteniy i tovarnykh znakov, no. 3, 1963, 18

TOPIC TAGS: mononitrate-dioxyniobium, production, hydrogen peroxide

ABSTRACT: Method of obtaining mononitrate-dioxyniobium from niobium-hydroxite and hydrogen peroxide; its distinguishing feature is that the freshly precipitated hydroxite of niobium is dissolved in a mixture of hydrogen peroxide and nitric acid, taken in a ratio 3:1 by volume, and the obtained peroxinitrate of niobium is dried and decomposed at 150 -- 170 C.

[Abstracter's note: complete translation]. Orig. art. has no figures, tables, or formulas.

Card 1/2

L-16814-63	ACCESSION NR: AP3003256						
ASSOCIATION: none	SUBMITTED: 09Apr62	DATE ACQ: 23Jul63	ENCL: 00				
SUB CODE: CH		NO REF SOV: 000	OTHER: 000				
Card 2/2							

LIMAR', T.F.; SHATSKAYA, K.P.

Interaction of vanadyl chloride with ammonium carbonate.
Zhur. neorg. khim. 8 no.11:2483-2489 N '63.

(MIRA 17:1)

1. Donetskij filial Vsesoyuznogo nauchno-issledovatel'skogo
instituta khimicheskikh reaktivov i osobu chistykh khimi-
cheskikh veshchestv.

L 16035-65 EWT(m)/EPF(n)-2/EWP(j)/EWP(t)/EWP(b) Pu-4 LJP(c) JD/JG/RM

ACCESSION NR: AP4046450

S/0078/64/009/010/2381/2386

AUTHOR: Limar', T. F.; Slatinskaya, I. G.; Sikora, O. P.

TITLE: Oxalic acid compounds of niobium

SOURCE: Zhurnal neorganicheskoy khimii, v. 9, no. 10, 1964, 2381-2386

TOPIC TAGS: niobium oxalic acid compound, synthesis, oxaloniobic acid, ammonium oxaloniobate, potassium oxaloniobate, sodium oxaloniobate

ABSTRACT: The process of polythermal crystallization of solid phases from solutions of niobium hydroxide and oxalic acid or ammonium, potassium or sodium oxalate was shown applicable for the synthesis of oxaloniobic acid and its alkali salts. The niobium hydroxide was made by reaction of K_2NbF_7 with NH_4OH ; after filtering and washing the niobium hydroxide was dissolved in saturated oxalate solutions at pH 1. Optimum conditions were crystallization with agitation at temperatures from about 70 to 20-22C for 5-7 hours from solutions having an $Nb:C_2O_4^{2+}$ ratio of 1:3 and containing, after concentration, 1.6-1.8

Card 1/2

L 16085-65

ACCESSION NR: AP4046450

mol/l niobium in the case of $H_2C_2O_4$ or $K_2C_2O_4$ and 2 mol/l in the case of $(NH_4)_2C_2O_4$ and $Na_2C_2O_4$. The products formed were $H_3NbO(C_2O_4)_3 \cdot 7 \cdot 5H_2O$ and in the case of sodium, potassium and ammonium, $Me_3NbO(C_2O_4)_3 \cdot 2H_2O$. 5-10% oxalic acid losses were encountered, especially at the higher temperature due to decomposition: $H_2C_2O_4 \longrightarrow CO_2 + CO + H_2O$. Pentavalent niobium was recovered as Nb_2O_5 from the mother liquor by precipitation with NH_4OH . The oxaloniobic acid and its salts are water-soluble white crystalline products; the salts are insoluble in acetone, alcohol, ether and carbon tetrachloride, and the acid is hydrolysed by alcohol and acetone. The thermograms showed dehydration of the salts at 100°C, decomposition of the Na and K salts at 230-260°C and of the ammonium salt at 180°C. The acid dehydrated at 76 and 121°C, the acid decomposed at 175-185°C and Nb_2O_5 formed at 228-250.5°C. Orig. art. has: 4 tables and 2 figures.

ASSOCIATION: None

SUBMITTED: 13Jun83

ENCL: 00

SUB CODE: GC

NO REF SOV: 004

OTHER: 003

Card 2/2

L 54994-65 EWT(m)/EPF(n)-2/T/EWP(t)/EWP(b)/EWA(c) Pu-4 IJP(c) JD/kn/JG
ACCESSION NR: AP5011935 UR/0363/65/001/003/0383/0387
546.831'431

AUTHOR: Limar', T. F.; Savos'kina, A. I.; Shepelevko, L. A.

TITLE: Preparation of barium zirconate by coprecipitation

SOURCE: AN SSSR. Izvestiya. Neorganicheskiye materialy, v. 1, no. 3, 1965, 383-387

TOPIC TAGS: barium zirconate, barium, zirconate, coprecipitation, coprecipitate thermal decomposition, coprecipitate decomposition

ABSTRACT: The object of the study was to prepare barium zirconate by thermal decomposition of Ba-Zr coprecipitates. The following systems were used in studying the conditions of coprecipitation of Ba and Zr:
 $BaCl_2-ZrOCl_2-Na_2CO_3-H_2O$; $BaCl_2-ZrOCl_2-(NH_4)_2CO_3-H_2O$; $BaCl_2-ZrOCl_2-(NH_4)_2CO_3-NH_4OH-H_2O$. In all experiments an equimolar quantity of Ba and Zr was used (up to 0.25 gram-ion/l) and the quantity of precipitating reagents was such as to ensure that the ratio $n = (NH_4)_2CO_3(Na_2CO_3)/Zr^{4+}(Ba^{2+})$ varied from 1.0 to 6.0. A quantitative coprecipitation of Ba and Zr is effected with Na_2CO_3 at a ratio of $BaCl_2:ZrOCl_2:Na_2CO_3 = 1:1:(2.5-3.0)$ in the 9.5-9.8 pH range; and with a mixture of ammo-

25
24
B

Card 1/2

L 54994-65

ACCESSION NR: AP5011935

nium carbonate and ammonia at a ratio of $\text{BaCl}_2:\text{ZrOCl}_2:(\text{NH}_4)_2\text{CO}_3:\text{NH}_4\text{OH} = 1:1:1.5:1$ (4-6) in the 9.3-9.4 pH range. Coprecipitation of barium and zirconium with a mixture of $(\text{NH}_4)_2\text{CO}_3 + \text{NH}_4\text{OH}$ yields BaCO_3 and $\text{Zr}(\text{OH})_4$, and coprecipitation with Na_2CO_3 yields BaCO_3 , $\text{Zr}(\text{OH})_4$, and some $\text{Na}[\text{Zr}(\text{OH})_3\text{CO}_3]$. The precipitates were dried and heated to 1100°C at a rate of 150° to $200^\circ\text{C}/\text{hr}$. A 9-10 hour calcining at 1100°C yielded barium zirconate powder of particle size less than 1μ . Orig. art. has: 4 tables and 1 figure.

ASSOCIATION: Donetskiy filial VNII khimicheskikh reaktivov i osobochistykhs veshchestv (Donets Branch of the VNII of Chemical Reagents and High Purity Compounds)

SUBMITTED: 24Aug64

ENCL: 00

SUB CODE: IC, GC

NO REF SOV: 008

OTHER: 002

Card 2/2

L 52073-65 EWT(m)/EFF(n)-2/EEG-4/EWP(t)/IMF(b) Pu-4 IJP(c) JD/WW/JG

ACCESSION NR: AP5014086

UR/0363/65/001/004/0591/0536

AUTHOR: Limar', T. F.; Andreyeva, V. I.; Uvarova, K. A.

TITLE: On the synthesis of PbZrO₃

SOURCE: AN SSSR. Izvestiya. Neorganicheskiye materialy, v. 1, no. 4, 1965,
591-595

TOPIC TAGS: thermal decomposition, chemical reaction, lead zirconate, zirconium compound

ABSTRACT: The article is the first of a series devoted to the study of coprecipitation by ammonia of compounds of lead and zirconium, lead and titanium, lead and tin, and their more complex mixtures, and also to a study of the conditions of thermal decomposition of coprecipitated compounds for preparation of PbZrO₃, PbTiO₃, PbSnO₃, and their solid solutions. In this first paper, physicochemical methods of analysis (determination of solubility, pH, and apparent volume of the precipitates) were used to examine the interactions in the ZrOCl₂ - NH₄OH - H₂O, Pb(NO₃)₂ - HCl - NH₄OH - H₂O, and Pb(NO₃)₂ - ZrOCl₂ - NH₄OH - H₂O systems. It was found that the interaction of zirconyl chloride solutions with ammonia results in the formation of

Card 1/2

L 52073-65

ACCESSION NR: AP5014086

two insoluble compounds: basic chloride $ZrO(OH)_{1.75}Cl_{0.25}$ and zirconium hydroxide $ZrO(OH)_2$. Interaction in the $Pb(NO_3)_2 - HCl - NH_4OH - H_2O$ and $Pb(NO_3)_2 - ZrOCl_2 - NH_4OH - H_2O$ system is associated with the formation of lead chloride and basic lead chlorides $xPbO \cdot PbCl_2$, whose composition depends on the pH of the solutions. The optimum pH range for the coprecipitation of compounds of lead and zirconium is 9.0-9.5. The precipitate contains zirconium hydroxide $ZrO(OH)_2$ and basic lead chloride $PbO \cdot PbCl_2$; hydrolysis of the latter is accomplished by washing the precipitate with ammonium nitrate. Orig. art. has: 3 figures and 3 tables.

ASSOCIATION: Donetskiy filial VNII Khimreaktivov i osobochistykh veshchestv
(Donets Branch, VNII of Chemical Reagents and High-Purity Substances)

SUBMITTED: 01Dec64

ENCL: 00

SUB CODE: IC, Gc

NO REF Sov: 009

CTHER: 005

oak
Card 2/2

LIMAR', I.F.; SHATNIKAYA, K.P.

Carbonate compounds of zirconium. Zhur. neorg. khim., 10
no.13:115-120 Ja '65. (M.R.A. 18:11)

I. Donetskij filial Instituta reaktivov. Submitted Aug. 10,
1963.

LIMAR', T. F.; AZAROVA, Ye. M.

Conditions of ammonium zirconyl oxalate formation in aqueous
solutions. Zhur. neorg. khim. 10 no. 2:398-402 F '65.
(MIRA 18,11)

1. Donetskij filial Vsesoyuznogo nauchno-issledovatel'skogo
instituta khimicheskikh reaktivov i osobo chistykh veshchestv.
Submitted Aug. 10, 1963.

LIMAR', T.E.; UVAROVA, K.A.; BULACHEVA, A.F.; SGYVUBM, A.S.; BFDNOVA, I.N.; MAKOVSKAYA, E.B.; SOLOMEINA, G.I.; DOLMATOV, Yu.D.; BOBYRENKO, Yu. Ya.; KOGAN, F.I.; KOVALENKO, P.M.; IVANOVA, Z.I.; FOKIN, A.V.; KOMARCV, V.A.; SOROCHKIN, I.N.; DAVYDOVA, S.M.; RAVDEL', A.A.; GORELIK, G.N.; DAUKSHAS, V.K. [Dauksas, V.]; PIKUNAYTE, L.A. [Pikunaite, L.]; SHARIPOV, A.Kh.; SHABALIN, I.I.; STEPNOVA, G.M.; SHMIDT, Ye.V.; DUEOV, S.S.; STRUKOV, O.G.

Scientific research papers of the members of the All-Union Mendeleev Chemical Society (brief information). Zhur. VHKO
10 no.3:350-360 '65. (MIRA 18:8)

1. Donetskiy filial Vsesoyuznogo nauchno-issledovatel'skogo instituta khimicheskikh reaktivov i osobo chistiykh khimicheskikh veshchestv (for Limar', Uvarova, Bulacheva). 2. Ural'skiy nauchno-issledovatel'skiy khimicheskiy institut (for Shubin, Bednova, Makovskaya, Solomeina). 3. Chelyabinskiy filial Gosudarstvennogo nauchno-issledovatel'skogo i proyektного instituta mineral'nykh pigmentov (Dolmatov, Bobyrenko). 4. Rostovskiy-na-Donu universitet (for Kogan, Kovalenko, Ivanova). 5. Leningradskiy tekhnologicheskiy institut imeni Lensoveta i Institut mineral'nykh pigmentov (for Ravdel', Gorelik). 6. Vil'nyusskiy gosudarstvennyy universitet imeni Kpsukasa (for Daukshas, Pikunayte). Nauchno-issledovatel'skiy institut neftekhimicheskikh proizvodstv (for Sharpipov, Shabalin). 8. Tomskiy politekhnicheskiy institut imeni Kirova (for Stepnova, Shmidt).

L 23868-66 EWT(m)/EPF(n)-2/EWP(j)/EWP(t) IJP(c) JD/JG/GS/RM
ACC NR: AT6009944 SOURCE CODE: UR/0000/65/000/000/0246/0248

AUTHOR: Limar', T. F.; Andreyeva, V. I.

. 30

B71

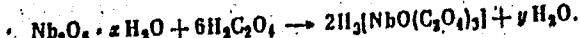
ORG: none

TITLE: Preparation of high-purity niobium pentoxide

SOURCE: AN SSSR. Otdeleniye obshchey i tekhnicheskoy khimii. Issledovaniya v oblasti khimii i tekhnologii mineral'nykh soley i okislov (Studies in the field of chemistry and technology of mineral salts and oxides). Moscow, Izd-vo Nauka, 1965, 246-248

TOPIC TAGS: niobium compound, metal purification

ABSTRACT: The niobium pentoxide was prepared from commercial potassium fluoniobate, $K_2NbF_7 \cdot H_2O$, which contain (in %) 0.1-0.3 SiO_2 , 0.3-0.7 TiO_2 , 0.01-0.05 Fe_2O_3 , and 0.5-1.0 Ta_2O_5 . Potassium was removed by dissolving the fluoniobate and passing it through a KU-1 or KU-2 ion exchange resin. Subsequent operations involved the precipitation of niobium hydroxide and formation of the oxalate complex, as follows:



Prior to crystallization, hydrogen peroxide was added to tie up the titanium in the soluble peroxyoxalate complex. Crystals of oxaloniobic acid $H_3[NbO(C_2O_4)_3] \cdot xH_2O$ formed, and yielded niobium pentoxide (50-60% yield) after heating to 700°-800°C. The

Card 1/2

L 23868-66

ACC NR: AT6009944

O

rest of the niobium pentoxide was obtained from the mother liquor. The method yielded niobium pentoxide of both special and reagent purity. The method has been used both in the laboratory and in industry and no special equipment was required. Orig. art. has: 2 formulas.

SUB CODE: 07/ SUBM DATE: 14Jan64/ ORIG REF: 002/ OTH REF: 002

Card 2/2 dde

L 06117-67 EWP(e)/EWT(m)/EWP(t)/ETI IJP(c) JD/JG/WH
ACC NR: AP6030770 SOURCE CODE: UR/0363/66/002/009/1608/1611

AUTHOR: Golub, A. M.; Maydukova, T. N.; Limar', T. F.

29
B

ORG: Institute of Reagents and Extra High Purity Chemicals, Donetsk (Institut reakti-vov i osobochistykh khimicheskikh veshchestv)

TITLE: Production of lanthanum aluminate by the coprecipitation method

SOURCE: AN SSSR. Izvestiya. Neorganicheskiye materialy, v. 2, no. 9, 1966, 1608-1611

TOPIC TAGS: lanthanum compound, aluminum compound, precipitation

ABSTRACT: At present, the production of lanthanum aluminate of the requisite uniformity for the production of high quality ceramics and piezoelectric materials is attended by numerous difficulties. The purpose of this investigation was to develop a more efficient method for the production of LaAlO_3 , to select the optimum conditions for the coprecipitation of lanthanum and aluminum, and to investigate the solid phase processes which occur during the thermal decomposition of coprecipitated compounds. The $\text{La}(\text{NO}_3)_3\text{-Al}(\text{NO}_3)_3\text{-(NH}_4\text{)}_2\text{CO}_3\text{-H}_2\text{O}$ system was investigated. The methods include potentiometry, conductometry, differential thermal analysis, thermogravimetric analysis, x-ray structural analysis and microscopic analysis. Potentiometric titration of $\text{La}(\text{NO}_3)_3$ and $\text{Al}(\text{NO}_3)_3$ mixture with ammonium carbonate showed that the formation of lanthanum and aluminum precipitates proceeds in one stage. It is shown that the complete coprecipi-

UDC: 546.623'654 : 542.65

Card 1/2

.L 06117-67

ACC NR: AP6030770

iation of components occurs at pH 7-8 where

$$n = \frac{[(\text{NH}_4)_2\text{CO}_3]}{[\text{La}^{3+}] + [\text{Al}^{3+}]} = 1.5-2$$

Thermal decomposition of coprecipitated lanthanum and aluminum compounds begins at 900°C and ends at 1300°C. Analysis shows that the composition of LaClO_3 , produced by the developed method, is close to the theoretical composition. Microscopic analysis shows that the grain size of the product obtained is 1-2. Orig. art. has: 4 figures, 3 tables.

SUB CODE: 07/ SUBM DATE: 070ct65/ ORIG REF: 004

Card 2/2 *pls*

LIMARENKO, A.

New exhibition forms. Vnesh. torg. 43 no.7:38 '63. (MIRA 16:3)
(Exhibitions)

LIMARENKO, A.A., aspirant

Method for counting the micro-organisms of the rumen contents.
Veterinariia 42 no.5:105-106 My '65. (MIRA 18.6)

1. Kubanskiy sel'skokhozyaystvennyy institut.

LIMARE NKO A.P.

6

1

Alkylation of mercaptans with alkylarylsulfenes

Y. Itoh, K. Kondo, and A. T. Lutz, Z. 1965, 2, 103
Sulfur, XVII. Alkylation of mercaptans with alkylarylsulfenes

In the reaction of $\text{Et}_2\text{S}\text{O}$ with PhSH in the presence of Al(OBu)_3 , I mole reagent was added to $\text{Et}_2\text{S}\text{O}$ to produce alkyl sulfides. EtN:NNHPh (II), 3 g.; 3 g. PhSH , and 3 g. I gave 3 g. MeSPh ; b. 145-7°, and 0.5 g. Ph_2S ; II (16 g.), 4.5 g. EtSH , and 18 g. I gave 1 g. MeSEt , b. 65-8°, oxidized to MeSO_2Et , m. 36°; II (8 g.), 3.1 g. $\text{MeCH}(\text{SH})\text{CO}_2\text{H}$, and 14.4 g. I gave 2.4 g. $\text{MeCH}(\text{SMe})\text{CO}_2\text{Me}$, b. 272°; II (16 g.) and 2 g. 2-mercaptopbenzothiazole (no I present) gave 1.5 g. 2-mercaptopbenzothiazole, m. 32°. EtN:NNHPh (III) (5 g.), 3.6 g. PhSH , and 8.2 g. I gave 2.8 g. EtSPh , b. 200-4°, oxidized with H_2O_2 to EtSO_2Ph , m. 41-2°; III (10 g.) and 7 g. $\text{MeCH}(\text{SH})\text{CO}_2\text{H}$ (no I present) gave 7 g. $\text{MeCH}(\text{SH})\text{CO}_2\text{Et}$, b. 40-1°, 5 g. of which with 5.5 g. III and 9 g. I gave 3.2 g. $\text{MeCH}(\text{SET})\text{CO}_2\text{Et}$, b. 145-50°, d₄₂ 1.0418, n_D 1.4872. As is seen, the alkyl sulfide is not formed when I is absent. A mechanism for the catalyzed reaction is suggested. — M. A.

B.M.C. ✓

LIMARENKO, D. G.

Electric Welding

Using semi-automatic welders PSH-5. Avtom. svar. 4, No. 6, 21 1951

Monthly List of Russian Accessions, Library of Congress, June 1952. UNCLASSIFIED.

SERGIYENKO, N.Ye., inzh.; KATRECHKO, V.I., inzh.; YEVDOKIMOV, K.K., inzh.;
LIMARENKO, D.G., inzh.

Utilization of the slag crust from welding fluxes in automatic
welding. Svar. proizv. no.4:31-33 Ap '63. (MIRA 16:5)

1. Zavod transportnogo mashinostroyeniya im. Malysheva.
(Electric welding) (Flux (Metallurgy))

LIMARENKO, I. M.

"Histochemistry and Ultraviolet Microscopy of the Basic Divisions of the Nervous System. (Investigation of Nucleic Acids and Certain Amino Acids)." Cand Biol Sci, Moscow State U, Moscow, 1953. (RZhBiol, No 8, Dec 54)

Survey of Scientific and Technical Dissertations Defended at USSR Higher Educational Institutions (12)

SO: SUM No. 556, 24 Jun 55

LIMARENKO, I. M.

U.S.S.R.

7 Ultraviolet microscopy and its application to the study of the chemical composition of cells and tissues. I. M. Limarenko. *Uspekhi Sovremennoj Biol.* 38, 327-42 (1954).—A review of the history of the development of this field abroad and in the U.S.S.R., with details of application to cytochemistry. A description of the Soviet ultraviolet microscope, model MUP-2, is given, and recent data on the detm. of ribonucleic and deoxyribonucleic acids, tyrosine, and tryptophan in single-cell protoplasm. J. A. S.

LIMARENKO, I. V.

(3)

Determination of tyrosine and tryptophan in protein solutions and in tissue slices by means of altered absorption spectra in the ultraviolet. V. Ya. Brodskij and I. M. Limarenko (M. V. Lomonosov State Univ., Moscow). *Doklady Akad. Nauk S.S.R.*, 95, 313-16 (1954).—Treatment of pure aq. solns. of various amino acids with 0.2% HNO₃ (NaNO₂ soln. treated with AcOH) results in alteration of spectra of only the aromatic acids after 1.5 hrs. at 40°. The treatment results in a new max. at 310 m μ for tryptophan with displacement of the original max. to 270 m μ ; tyrosine shows a new max. at 300 m μ while the first one shifts to 265 m μ ; phenylalanine shows a small change with a weak max. at 350 m μ . If 1% HNO₃ is used both tyrosine max. are considerable after a 10-min. reaction while a rise of temp. to 60° gives max. absorption in 3 hrs. Tryptophan develops a strong max. at 310 m μ even with 0.2% HNO₃ within 10 min. and in 4 hrs. the 200-m μ max. vanishes, while the 310-m μ one shifts to 300 m μ ; with 1% HNO₃ the picture remains the same but the changes are more rapid (complete change in 2 hrs.). Expts. with histone solns. readily show the presence of tyrosine while casein soln. shows both tyrosine and tryptophan (abs. max. 400 and 290 m μ , resp.). The technique was applied to tissue-slice specimens with the use of selective filters for the photography. The use of 313-m μ filter shows the presence or absence of tryptophan since tyrosine absorption in this region is comparatively low, while the 438-m μ filter is used for tyrosine detn. or estn. Expts. with rabbit nerve-cell specimens showed that in the cytoplasm both these amino acids are present in considerable amounts, in the thyroid; the site of axon attachment is almost devoid of them while the coatings of the neuron fibers are rich in the two acids; nuclear chromatin is rich in both amino acids. G. M. Kosolapoff

Limanenko - I.M.

Per
Chemical composition of tigroid matter and nuclei of nerve cells. I. M. Limarenko (M. V. Lomonosov State Univ., Moscow). *Doklady Akad. Nauk S.S.R.* 107, 859-61 (1956).—The usual histochemical tests were augmented by ultraviolet microscopy in showing that the nerve cells of the spinal cord, midbrain, cerebrum and upper neck ganglion of the rabbit show coincidental locations of nucleic acids and basic and aromatic amino acids. This is true, for example, of arginine and histidine and ribonucleic acid

in tigroid matter of the nerve cells. Proteins rich in tyrosine and tryptophan are located in the cytoplasm and nuclei in somewhat different locations than ribonucleic acid (photos shown). Nucleoli are relatively poor in tyrosine and tryptophan. Aromatic amino acids in the cytoplasm are connected with the smallest grains and not with the whole of tigroid matter. The tigroid contains ribonucleic acid and at least two forms of proteins, one rich in diamino acids and the other rich in aromatic amino acids. — G. M. K.

USSR / Human and Animal Morphology (Normal and Pathological).
Histochemistry.

S

Abs Jour : Ref Zhur - Biologiya, No 1, 1959, No. 2885

Author : Limarenko, I. M.

Inst : Not given

Title : The Histochemistry of Tigroid

Orig Pub : Uspekhi sovrem. biologii, 1957, 43, No 3, 319-331

Abstract : The presence or absence of tigroid (T) in the cytoplasm of a nerve cell depends on its functional status. At the time of excitation T appears in it, and during the period of rest the cell is homogenous. UV-microscopy and histochemical studies demonstrated that T is composed of RNA and at least 2 other albumens: (1) basic protein rich in diamino acids (arginine and histidine) and (2) a neutral or acid protein containing aromatic amino acids. It is supposed that the latter is adsorbed in

Card 1/2

USSR / Human and Animal Morphology (Normal and Pathological).
Histochemistry.

S

Abs Jour : Ref Zhur - Biologiya, No 1, 1959, No. 2885

the form of grains on the basic nucleoprotein of T, formed by RNA and the basic protein. The total level of RNA in the nerve cell is higher than in other cells of the organism. The level of the content of nucleic acids and amino acids varies in nerve cells which are morphologically and functionally different and apparently depends on the character of the metabolic processes. Within the nerve cells these substances are asymmetrically distributed -- the axon does not contain RNA and the content of amino acids in it is negligible. Differences of the chemical composition and thus of the metabolic processes in the opposite poles of the nerve cells are at the base of the dynamical polarization of the neuron. Bibl. 58 titles.

-- Ye. A. Skvirskaya

Card 2/2

BURLAKOVA, Ye.V.; LIMARENKO, I.M.

Effect of the amount of water in tissues of the crustacean *Balanus improvisus* on its radiosensitivity. Radiobiologija 1 no.3:378-384
'61. (MIRA 14:10)

1. Moskovskiy gosudarstvennyy universitet imeni M.V.Lomonosova,
biologo-pochvennyy fakul'tet.
(WATER IN THE BODY) (X RAYS--PHYSIOLOGICAL EFFECT)

KOL'S, Ol'ga Romanovna; LIMARENKO, Iya Mikhaylovna. Prinimal uchastiye
AGRE, A.L.; TARUSOV, B.N., prof., red.; CHERKASOVA, V.I., red.
izd-va; YEZHOOVA, L.L., tekhn. red.

[Practical work in general biophysics in eight issues] Fraktikum
po obshchei biofizike v vos'mi vypuskakh. Pod obshchei red.
B.N.Tarusova. Moskva, Gos. izd-vo "Vysshiaia shkola." No.6. [Work
with radioactive isotopes] Rabota s radioaktivnymi izotopami.
1962. 202 p. (MIRA 15:10)

(Radiobiology)

BURLAKOVA, Ye.V.; VOROB'YEV, L.N.; KOL'S, O.R.; LIMARENKO, I.M.

Change in the physicochemical state of the nerve during the
development of nonconductivity. Trudy MOIP. Otd. biol. 9:224-
229 '64. (MIRA 18:1)

1. Kafedra biofiziki Moskovskogo universiteta.

LIMARENKO, I.M.

Relation between the electrical activity of a nerve cell and the
change in its submicroscopic structure. Trudy MOIP. Otd. biol.
9:241-243 '64. (MIRA 18:1)

1. Kafedra biofiziki Moskovskogo universiteta.

USSR / General and Specialized Zoology. Insects. Harmful Insects
and Acarids. Pests of the Technical, Oil, Medicinal and
Essential-Oil Cultures.

Abs Jour : Ref Zhur - Biol., No 18, 1958, No. 8297⁴

Author : Limarenkov, L. K.

Inst : Not given

Title : The Utilization of Reduced Doses of Mercaptophos
Against the Cotton Suctorial Pests

Orig Pub : Sots. s. k. Uzbekistana, 1957, No 6, 20-22

Abstract : In experiments, conducted in the Ferganskaya and Kokand-
skaya Oblasts in the year of 1956, the application of
mercaptophos (M) in norms of 0.2, 0.4, 0.8 and (in the
capacity of ethalone) 1.2 kg/hectare per preparation at
the expenditure of a solution of 500-600 l/hectare, after
two days, reduced the numbers of the spider mite, corres-
pondingly, 92, 96, 95 and almost 100%. The increase in the

Card 1/3

USSR / General and Specialized Zoology. Insects. Harmful Insects
and Acarids. Pests of the Technical, Oil, Medicinal and
Essential-Oil Cultures. F

Abs Jour : Ref Zhur - Biol., No 18, 1958, No. 8297⁴

numbers of the mite set in correspondingly after 1-4 weeks.
Competent treatment of the cotton plant in collective
farms, at the expenditure of 0.2 and 0.4 kg/hectare,
insured also a high efficiency in the course of 8-10
days. M, in the norm of 0.2 kg/hectare, rapidly and
reliably reduced the numbers of the mite more than 90%,
and exceeded in performance (after 6-8 days) sulphur and
thiphos preparations. The application of reduced M
norms in the young cotton plant is expedient at the start
of the mites' migration to it from the weed plant. In
June and the first half of July, it is necessary to apply
high norms (1-1.5 kg/hectare) to safeguard the efficient
performances during 25-30 days. In the second half of
July and the beginning of August, it is sufficient to

Card 2/3

26

KOSTENKO, I.R., zasluzhenny agronom Uzbekskoy SSR.; LIMARENKO, L.K.,
zasluzhenny agronom Uzbekskoy SSR.

New method of using ethylmerceptoethylidethiophosphate for
controlling sucking cotton insects. Zashch. rast. ot vred. i bol.
3 no.3:35-36 My-Je '58. (MIRA 11:6)

1. Nachal 'nik Upravleniya zashchity rasteniy Ministerstva sel'skogo
khozyaystva UzSSR (for Kostenko). 2. Nachal 'nik Ferganskogo otryada
Upravleniya zashchity rasteniy Ministerstva sel'skogo khozyaystva
UzSSR (for Limarenko).

(Ethyl thiophosphate) (Cotton—Diseases and pests)

L 45737-65 EPA(a)-2/EWT(1)/EWT(m)/EWP(b)/EWP(t) Pt-7 IJP(c) GG/JD/
JG/GS

UR/0000/64/000/000/0115/0118

ACCESSION NR: AT5009633

AUTHOR: Lymarenko, L. M. (Lymarenko, L. M.); Pashkovs'kyj, M. V. (Pashkovskiy, M. V.); Rybalka, V. V.; Savits'kyj, I. V. (Savitskiy, I. V.)

TITLE: Laws governing stationary photoconductivity in mercury sulfide with im-³⁵_{B+}/purities

SOURCE: Lvov. Universitet. Pytannya fizyky dverdoho tila (Problems in solid state physics). Lvov, Vyd-vo L'viv. univ., 1964, 115-118

TOPIC TAGS: mercury sulfide, photoconductivity, stationary photoconductivity, impurity effect, temperature dependence

ABSTRACT: This is a continuation of earlier work by the authors (UFZh v. 6, 691, 1961; Sbornik referatu IV konference o monokristalech v Turnove 1961, VUM, Turnov, 1962, 93; FTT v. 4, 1970, 1962), dealing with the growth of HgS crystals and their properties. This technology was used to grow a series of HgS crystals with impurities of I, Cd, Sb, Se, Te, P, Tl, Cu, Ag, Sn, and Mn, in amounts of 0.001--0.1% introduced into the charge prior to the analysis. The procedure for measuring the stationary characteristics of the photoconductivity of the samples is described

Card 1/2

L 45737-65

ACCESSION NR: AT5009633

briefly. An investigation of the temperature dependence of the photocurrent shows that for most samples the photocurrent increases exponentially with increasing temperature at temperatures above 250K and is either independent of the temperature or depends very little on it at lower temperatures. The dark resistance of HgS has a weak dependence on the type of impurity, and the impurity maximum of the photosensitivity has a position that is independent of the type of impurity. The lux-ampere characteristics of the photocurrent is sublinear above 250K, with exponent 0.5--0.8 and linear below 250K. The weak dependence of the conductivity on the impurities is attributed to the compensating action of the cation vacancies. The impurity maximum of the spectral dependence of the photocurrent is attributed to excitation of electrons captured by these vacancies. The temperature and lux-ampere relationships are attributed to the influence of the filling of the adhesion centers on the rate of recombination of the free electrons. The results are interpreted in light of an earlier study of the dependence of the stationary photoconductivity on various factors (V. E. Lashkarev, FTF v. 5, 417, 1963). Orig. art. has: 2 figures, 7 formulas, and 1 table.

ASSOCIATION: None

SUBMITTED: 22Jun64

ENCL: 00

SUB CODE: OP, SS

MR REF Sov: 004

OTHER: 001

Card 2/2

L 24205-66 FBD/EWT(1)/EWT(m)/EEC(k)-2/T/EWP(t)/EWP(k)/EWA(h) IJP(c) WG
ACC NR: AP6013077 JD/JG SOURCE CODE: UR/0048/66/030/004/0671/0674

AUTHOR: Limarenko, L. N.; Nosenko, A. Ye.; Pashkovskiy, M. V.; Furtak, S. P. 512

ORG: none 54 A

TITLE: Effects of x irradiation and heat treatment in different atmospheres on the optical and luminescence properties of cadmium tungstate. [Report, Fourteenth Conference on Luminescence held in Riga 16-23 September 1965] 27

SOURCE: AN SSSR. Izvestiya. Seriya fizicheskaya, v. 30, no. 4, 1966, 671-674

TOPIC TAGS: laser optic material, cadmium compound, terbium, luminescence, crystal phosphor, thermoluminescence

ABSTRACT: In view of the fact that most solid laser materials emit in the red and infrared, it is of interest to develop materials that emit in the other parts of the visible region. Among the rare earths that can form visible radiation emitting centers are terbium, europium, and dysprosium. The problem in forming new laser materials consists in incorporating these desirable ions into the lattice. In the present work ZnWO₄ and CdWO₄ single crystals were grown from melts by the Czochralski technique; reagent grade and spectroscopically pure raw materials were employed. The activator was Tb with one-tenth as much lithium added to the batch to facilitate incorporation of the Tb into the tungstate lattice. In some cases CaO was employed to "loosen" the lattice. 25

Card 1/2 2

L 24205-66

ACC NR: AP6013077

The best results were obtained with the CdWO₄. The luminescence measurements were performed on plates cleaved from the single crystals parallel to the (010) planes. UV stimulated luminescence curves are presented for "pure" and Tb-doped (1% Tb + 3% CaO) peak at about 540 m μ , whereas the pure compound has a broad peak centered at about 500 m μ . The x-ray stimulated spectra were also investigated; these indicate that different excitation mechanisms are involved. This is substantiated by the glow curves (presented in a figure) recorded for doped crystals after UV and after x-ray excitation CdWO₄:Tb³⁺ crystals grown in air were slightly smoky. X irradiation of clear crystals at room temperature resulted in light coloring, but no significant change of the photoluminescence properties. Annealing in oxygen led to bleaching, also with no significant change in darkening of the crystals and reduction of the luminescence intensity by a factor of about three. The probable reasons for this are suggested. The changes in the glow curves as a result of doping with Tb and Ca are briefly described. Orig. art. has 2 figures.

2

[15]

SUB CODE: 20/ SUBM DATE: none/ ORIG REF: 001/ OTH REF: 005/
ATD PRESS: 4245

Card 2/2

BLG

ALEKSEYENKO, L.I. [Aleksieienko, L.I.]; ZHOMNIR, S.V.; LIMARENKO, L.N.
[Lymarenko, L.M.]; NOSENKO, A.Ye. [Nosenko, A.IE.]; PASHKOVSKIY,
M.V. [Pashkovs'kyi, M.V.]; CHEDZHEMOVA, I.L.

Growing zinc tungstate crystals and studying their optical
properties. Ukr. fiz. zhur. 10 no.11:1222-1226 N '65.

1. L'vovskiy gosudarstvennyy universitet imeni I. Franko.
Submitted Dec. 21, 1964. (MIRA 18:12)

POCHINOK, V.Ya.; LIMARENKO, L.P.

Alkylation of alcohols with aliphatic-aromatic triazenes. Ukr.
khim.shur. 21 no.4:496-498 '55. (MLRA 9:2)

1.Kiyevskiy gosudarstvennyy universitet imeni T.G.Shevchenko,
kafedra organicheskoy khimii.
(Alkylation) (Alcohols) (Triazene)

KISLYAKOVA, L.N.; TSERAIKIS, G.S.; ZHDANOV, V.M.; BCGDANOVA, M.G.; LIMARENKO,
M.I.

Study of the viral etiology of chronic pemphigus. Vop. virus. 9
no.3:320-324 My-Je '64. (MIRA 18:1)

1. Ukrainskiy nauchno-issledovatel'skiy kozhno-venerologicheskiy
institut, Khar'kov.

LIMARENKO, M.N., veter. vrach

Device for catching poultry. Veterinariia 42 no.8:105-106
Ag '65. (MIRA 18:11)

1. Sovkhoz "Pobeda" Pskovskoy oblasti.

LIMARENKO, Ye. (pos. Bystryy Istok, Altayskiy kray)

From the history of fire prevention. Pozh.delo 8 no.7:32
Jl '62. (MIRA 15:8)
(Firemen)

ALEKSANDROV, Yu.; PILIPUSHKO, I.; VOLCHENKO, V.; SENDEROV, I.; LIMARENKO, L.
YARKOV, G.; YEMTSEV, I.; KUKHAREV, N.; SHCHEKOTOVICH, P.; BOBOVICH, V.;
CHEREPAKOV, G.

They are raising the level of their qualifications. Zashch.rast.
ot vred.i bol. 7 no.5:61 My '62. (MIRA 15:11)
(Plants, Protection of--Study and teaching)

LIMAREV, A.A.

Primary suture with application of penicillin following mastoidotomy.
Vest. otorinolar., Moskva 15 no.3:88 May-June 1953. (CIML 25:1)

1. Honored Physician Ukrainian SSR. 2. Of the Division for Diseases of
the Ear, Throat, and Nose of Voroshilovgrad Oblast Hospital.

TAYTSLIN, I.S., kandidat meditsinskikh nauk; LIMAREV, A.A., zasluzhennyj vrach
RSFSR.

Diagnosis of otogenous brain abscesses. Vrach. delo no.1:93
Ja '57 (MIRA 10:4)

1. Voroshilovgradskaya oblastnaya bol'nitsa.
(BRAIN--ABCESS) (RAR--DISEASES)

AKIMOV, V.I.; ALKELEVENKO, I.P.; ALENT'YEVA, K.A.; AMOSOV, N.M.; ARUTYUNOV, A.I.;
BRATUS', V.D.; VASICHENKO, I.D.; GELLERMAN, D.S.; GRISHIN, M.A.;
DANKEYEVA, T.N.; DENISOVA, A.G.; DOLGOVA, M.P.; IVANOV, N.A.; ISHCHEŃKO,
I.N.; KATS, V.A.; KOLOMIYČENKO, M.I.; LAVRIK, S.S.; LIJAREV, A.A.;
NAZAROVA, N.G.; NOVACHENKO, N.P.; PETRUNYA, S.P.; PKHAKADZE, A.I.;
RUDENKO, F.A.; SERGIYEVSKIY, V.F.; TAYTSLIN, I.S.; TARTAKOVSKIY, B.S.;
CHIZHONOK, P.I.; SHALABALA, M.P.; SHUMADA, I.V.; SHUPIK, P.L.

Konstantin Konstantinovich Skvortsov; obituary. Nov.khir.arkh.
no.3:142-143 My-Je '59. (MIRA 12:10)
(SKVORTSOV, KONSTANTIN KONSTANTINOVICH, 1871-1959)

LIMAREV, I., personal'nyy pensioner

Rebirth of the Donets Basin.. Mast.ugl. 9 no.4:12 Ap '60.
(MIRA 13:11)

(Donets Basin--Coal mines and mining)

1. LIMAREV, N. Ya.
2. USSR (600)
4. Kirovograd Province - Agricultural Education
7. Experience in preparing master farmers in Kirovograd Province.
Dost. sel'khoz. No. 2, 1952.

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

LIMAREV, P.I.

Problems in the method of studying tuberculosis mortality.
Sov.zdrav.Kir. №.5:39-43 S-0 '62. (MIRA 15:10)

1. Iz Kirgizskogo nauchno-issledovatel'skogo instituta tuberkuleza
(dir. - prof. Yu.A.Volokh).
(TUBERCULOSIS--MORTALITY)

BAZILEVSKAYA, N.S.; LIMAREVA, L.A.; CHERKASOV, A.S.; SHIROKOV, V.I.

Fluorometric determination of the lifetime of the excited state
of excited dimers (excimers) in anthracene derivatives. Opt. i
spektr. 18 no.2:354-356 F '65. (MIRA 18 4)

"APPROVED FOR RELEASE: 07/12/2001

CIA-RDP86-00513R000929920014-5

SVESHNIKOV, B.Ya.; KUDRYASHOV, P.I.; LIMAREVA, L.A.

Sensitized fluorescence in solutions. Opt. i spektr. 9 no.2:203-
208 Ag '60. (MIRA 13:8)
(Fluorescence)

APPROVED FOR RELEASE: 07/12/2001

CIA-RDP86-00513R000929920014-5"

L 4425-66 EWT(1)/EWT(m)/EPF(c)/EWP(j)/T/EWA(h)/EWA(c) IJP(c) RM
ACCESSION NR: AP5017895 UR/0051/65/019/001/0078/0085
535.372:535.373.3:541.65

AUTHORS: Veselova, T. V.; Limareva, L. A.; Cherkasov, A. S.; Shirokov, V. I.

TITLE: Fluorometric study of the influence of the solvent on the fluorescence spectrum of 3-amine-N-methylphthalimide

SOURCE: Optika i spektroskopiya, v. 19, no. 1, 1965, 78-85

TOPIC TAGS: fluorescence spectrum, light excitation, luminescence, luminor, organic solvent

ABSTRACT: To obtain additional information on the character of the intermolecular interaction influencing the position of the fluorescence spectra, the authors carried out fluorometric measurements of the phase delay of the luminescence light, relative to the exciting light, in narrow spectral sections, covering the entire fluorescent spectrum of solutions of 3-amine-N-methylphthalimide in mixtures of n-heptane + pyridine and n-heptane + n-butanol at 20°C, and in pure.

Card 1/3

L 4425-66

ACCESSION NR: AP5017895

n-butanol at 20 -- -183°C. The fluorometric measurements were carried out with the GOI fluorometer of 1958 (A. M. Bonch-Bruyevich et al., PTE no. 2, 53, 1958) at an exciting-light modulation frequency of 11.2 Mc. The narrow sections of the fluorescent spectra were separated with a UM-2 monochromator. The fluorometric phase in heptane solutions with small addition of pyridine and n-butanol was found to vary over the spectrum. This is attributed to the formation of hydrogen bonds between the molecules of the luminor and the active solvent. A similar phenomenon observed in a butanol solutions is examined over a certain temperature range from the viewpoint of re-orientation of the solvent molecules to an equilibrium configuration corresponding to the excited luminor molecule. In the butanol, as the temperature increased from -183 to 20°C, the fluorescence spectrum shifted to the red, and a change in the ϕ phase developed, becoming particularly strong at -70 -- -90°C, decreasing with further increasing temperature, and practically disappearing at 20°C. In the case of the heptane solution, addition of pyridine shifted the fluorescence spectra to the red and strengthened the dependence of the phase on the frequency. This dependence weakened with increasing pyridine concen-

Card 2/3

L 4425-66
ACCESSION NR: AP5017895

3

44,55

tration. 'We thank V. V. Zelinskiy for supplying the 3-amine-N-methylphthalimide.' Orig. art. has: 5 figures and 8 formulas.

ASSOCIATION: None

SUBMITTED: 13Apr64

ENCL: 00

SUB CODE: OP, GC

NR REF Sov: 011

OTHER: 001

Card 3/3 CR

VESELOVA, T.V.; LIMAREVA, I.N.; CHERKASSOV, A.S.; SHIROKOV, V.I.

Fluorimetric detection and study of processes which are accompanied
by a change in the spectral composition of the luminescence due to
damping. Izv. AM SSSR. Ser. Fiz. 29 no. 8t1340-1343 '65.
(MIKA 18:3)

S/020/60/133/04/15/031
B019/B060

AUTHORS: Sveshnikov, B. Ya., Limareva, L. A.

TITLE: The Extinction of Sensitized Fluorescence in Solutions ✓

PERIODICAL: Doklady Akademii nauk SSSR, 1960, Vol. 133, No. 4,
pp. 807-810

TEXT: The two authors had previously studied together with P. I. Kudryashov (Ref. 1) the sensitized fluorescence in solutions. Results obtained from investigations of mixed solutions of trypaflavine (donor) and rhodamine B (acceptor) at high concentrations pointed to a possible extinction of the excited acceptor molecules by donor molecules. This hypothesis is checked in the present paper. The investigation includes the extinction of luminescence of mixed solutions by foreign substances, where a migration of the excitation energy takes place. The extinction of rhodamine fluorescence by trypaflavine was effected by the direct excitation of fluorescence with the mercury line $546 \text{ m}\mu$, with the mentioned compounds being dissolved in methyl alcohol or glycerin. Observations were made with a light filter, whose maximum was at $590 \text{ m}\mu$.

Card 1/2

The Extinction of Sensitized Fluorescence
in Solutions

S/020/60/133/04/15/031
B019/B060

On the strength of the results tabulated in Table 1 the authors conclude that there is definitely an extinction of the excited rhodamine molecules by trypaflavine molecules. A characteristic feature is that extinction depends on the duration of fluorescence of the trypaflavine-free solution and not on the viscosity of the solution. Table 2 shows results obtained from the investigations of the extinction of pure and mixed trypaflavine and rhodamine solutions in methyl alcohol in dependence of the potassium iodide concentration. The diagram of Fig. 1 shows the emission spectrum of a mixed solution of trypaflavine and rhodamine B (with and without addition of potassium iodide) in methyl alcohol. The authors conclude from the detailed discussion of results that there is a sensitization of fluorescence in the solution investigated. The authors finally thank Academician A. N. Terenin for his interest in the work. There are 1 figure, 2 tables, and 2 references: 1 Soviet and 1 German.

PRESENTED: March 1, 1960, by A. N. Terenin, Academician

SUBMITTED: February 12, 1960

Card 2/2

L 65231-65 EPP(c)/EWT(1)/EWT(m)/EWP(j)/EWA(c) IJP(c)/RPL JW/RM

ACCESSION NR: AP5020796

UR/0048/65/029/008/1340/1348⁴¹
^{44, 45} ³⁹

AUTHOR: Yeselova, T. V.; Limareva, L. A.; Cherkasov, A. S.; Shirokov, V. I.

TITLE: Fluorometric detection and investigation of processes accompanying change
of the spectral composition of luminescence during its decay /Report, 13th Con-
ference on Luminescence held in Khar'kov 25 June to 1 July 1964/

SOURCE: AN SSSR. Izvestiya. Seriya fizicheskaya, v. 29, no. 8, 1965, 1340-1348

TOPIC TAGS: phosphorescence, solution property, luminescence spectrum, time con-
stant

ABSTRACT: The fluorometric phase spectra of a number of fluorescent systems were
measured with an apparatus and technique that have been described elsewhere (A.M.
Bonch-Bruyevich, I.V.Karazin, V.A.Molchanov, and V.I.Shirokov, Pribory i tekhnika
eksperimenta, 4, 631, 1958) and that allow measurements to be made in a narrow
spectral range isolated with a monochromator. The results are presented graphical-
ly and are discussed in considerable detail. Measurements were made at three tem-
peratures between 24 and - 183°C of the fluorescence of 1,3- and 1,4-dimethyl-9,
10-di-o-toylanthracene in alcohol solutions. The results are interpreted in

Card 1/3

L 65231-65

ACCESSION NR: AP5020796

terms of a four-level excitation scheme. The fluorescence of 2-vinylanthracene in alcohol solution was investigated. The wavelength variation of the fluorometric phase was considerable at 20°C and barely perceptible at - 183°. The results are consistent with A.S.Cherkasov's interpretation (Dokl. AN SSSR, 146, 852, 1962) in terms of *sic* - *trans* transformations. In order to investigate the effect of solvent molecules, measurements were made of the fluorescence of 3-amino-N-methylphthalimide in mixtures of n-heptane and pyridine. The results obtained at low pyridine concentrations are consistent with the presence in the solution of only two kinds of luminescence centers. The effect of the pyridine appears to be to facilitate the formation of intermolecular bonds. At high pyridine concentrations the effect of the pyridine appears to be merely to alter the dielectric constant and refractive index. When the pyridine was replaced by n-butanol, it was no longer possible to interpret the results in terms of a two-component fluorescence spectrum. This is ascribed to the possibility of formation of hydrogen bonds between the hydrogen of the amino groups of the 3-amino-N-methylphthalimide and the oxygen of the n-butanol, and between the oxygen of each of the carbonyl groups of the 3-amino-N-methylphthalimide and the hydrogen of the hydroxyl group of the n-butanol. Orig. art. has: 3 formulas and 7 figures.

Card 2/3

L 55231-65

ACCESSION NR: AP5020796

ASSOCIATION: none

ENCL: 00

SUB CODE: CC, OP

NO REF Sov: 013

OTHER: 001

Card 7
3/3

LIMAREVA, P.P.

Use of vitamins P and C in stomatological practice.
Stomatologija 41 no. 5-6-9 S-0 '62. (MIRA 16:4)

1. Iz kafedry farmakologii (zav. - prof. Ya.B.Maksimovich) i
stomatologicheskogo otdeleniya (zav. Ye.D.Yermol'chik)
Luganskogo meditsinskogo instituta.
(STOMATOLOGY) (ASCORBIC ACID) (VITAMINS--P)

MITSKOVICH, Yu.G.; LIMAROV, V.T.

Transfer functions of continuous chemical processes in
reactors for complete mixing. Avtom. proizv. no. 4349-67 '64.

Using the method of self-compensation of perturbations in
the automation of production processes. Avtom. proizv. no. 4:
107-117 '64. (MISA 1823)

LIMASOV, A.I.; CHEPIKOV, A.T.

Volt-second characteristics of polar and nonpolar liquids.
Izv. Sib. otd. AN SSSR no. 8:22-26 '62. (MIRA 17:8)

1. Transportno-energeticheskiy institut Sibirskego otdeleniya
AN SSSR, Novosibirsk.

LIMASOV, A.I.; CHUPRIN, A.F.

Volt-second characteristics of plexiglass and teflon in thick
layers. Izv. Sib. otd. AN SSSR no.7:96-98 '62 (MIRA 17:8)

1. Transportno-energeticheskiy institut Alabirskogo otdeleniya
AN SSSR, Novosibirsk i Tomskiy politekhnicheskiy institut.

15.7312s

40964

S/200/62/000/007/002/002
D207/D308

AUTHORS:

Limasov, A.I. and Chepikov, T.A.

TITLE:

Volt-second characteristics of thick organic glass
and Ftoroplast-4

PERIODICAL:

Akademiya nauk SSSR. Izvestiya. Sibirskoye otdelen-
iye, no. 7, 1962, 96 - 98

TEXT: Point-to-plane breakdown voltages of organic glass
(polymethyl methacrylate or Perspex) and Ftoroplast-4 (polytetra-
fluoroethylene or Teflon) were measured as a function of duration of
high-voltage pulses. This was done to test the suitability of these
two materials as insulators in apparatus subjected to high-voltage
pulses. The novel feature of the measurements was the use of relatively
thick samples (60 x 60 x 30 mm). The pointed electrode was placed in
a conical recess in one of the 60 x 60 mm faces; this recess was filled
with a solution of NaCl. The plane electrode was grounded. The sample
thickness between the electrodes was 10 or 20 mm and positive pulses

Card 1/2

s/200/62/000/007/002/002
D207/D308

Volt-second characteristics ...

of up to 400kV were applied to the pointed electrode. Ftoroplast-4 had 40-55 % lower breakdown voltage ($U = 280$ kV for 2 μsec pulses) than organic glass ($U = 180$ kV for 2 μsec pulses) in the case of 10 mm samples. The value of U of both materials decreased with increase of the pulse duration from 2 μsec to 80 μsec ; the drop was stronger (30-35 %) for organic glass. When the thickness of organic glass was doubled (from 10 to 20 mm) the value of U rose only by 30-35%. The results reported can also be used for design of d.c. or 50 c/s apparatus because the values of U for 10 μsec or longer pulses are approximately equal to the static breakdown voltages. There are 2 figures.

ASSOCIATION:

Transportno-energeticheskiy institut Sibirskego
otdeleniya AN SSSR, Novosibirsk (Transport-Power
Institute, Siberian Division, Academy of Sciences
of the USSR, Novosibirsk); Tomskiy politekhniches-
kiy institut (Tomsk Polytechnic Institute)

SUBMITTED:

December 12, 1961

Card 2/2