

PUSHKIN, P.S., kand. tekhn. nauk, dotsent; TIKHOMIROVA, B.V., inzh.;
SHAPKINA, O.S., inzh.

Technical and economic basis for the production of soft artificial materials with a mechanically bonded fibrous base (IK artificial leather). Izv. vys. ucheb. zav.; tekhn. leg. prom. no.4:13-16 '63.
(MIRA 16:10)

1. Vsesoyuznyy nauchno-issledovatel'skiy institut plenochnykh materialov i iskusstvennoy kozhi. Rekomendovana kafedroy ekonomiki promyshlennosti i organizatsii proizvodstva Kiyevskogo Tekhnologicheskogo instituta legkoy promyshlennosti.

VASIL'KOVA, I.V.; ZAYTSEVA, N.D.; SHAPKIN, P.S.

Interaction of tungsten hexa- and pentachloride with sodium
and potassium chlorides. Zhur. neorg. khim. 8 no.10:2360-
2364 0 '63. (MIRA 16:10)

(Tungsten chlorides) (Alkali metal chlorides)

SHAPKIN, S. Ya., Engineer --

"Friction and Wear in Automobile Brake Shoes." Cand Tech Sci, Moscow
Automotive Mechanics Inst, 22 Oct 54. (VM, 13 Oct 54)

Survey of Scientific and Technical Dissertations Defended at USSR Higher
Educational Institutions (10)

SO: Sum. No. 481, 5 May 55

SHAPKIN, V., starshiy master

Heater for fire hose. Pozh.delo 6 no.12:27 D '60. (MIRA 13:12)

1. Novosibirskaya pozharno-ispytatel'naya stantsiya.
(Fire departments--Equipment and supplies)

SHAPKIN, V., yefreytor, master sporta SSSR

Under the cupola of a parachute. Voenn. 38 no.5:8 My '62.
(MIRA 15:5)

(Parachute troops)

L 46175-66 E.T(1)/T JK

ACC NR: AP6029379

(A,N)

SOURCE CODE: UR/0346/66/000/006/0018/0019

AUTHOR: Zagorodnov, M. V.; Mustafayev, G. A.; Shapkin, V. A.; Yelagina, Ye. B. ²⁴_B

ORG: [Zagorodnov; Mustafayev] State Scientific Control Institute of Veterinary Preparations (Gosudarstvennyy nauchno-kontrol'nyy institut veterinarnykh preparatov); [Shapkin] Main Administration, Biological Industry, MSKh SSSR (Glavnoye upravleniye biologicheskoy promyshlennosti MSKh SSSR); [Yelagina] Kursk Biological Plant (Kurskaya biofabrika)

TITLE: Effect of prolongators on the activity of hyperimmune ⁶ foot-and-mouth disease serum

SOURCE: Veterinariya, no. 6, 1966, 18-19

TOPIC TAGS: hoof and mouth disease, serum, experiment animal, virus, immunization, diagnostic drug

ABSTRACT: Hyperimmunization of guinea pigs with a suspension of foot-and-mouth disease virus containing aluminum hydroxide (AH) and a saponin greatly increases the activity of diagnostic serum, regardless of the virus type. In the authors' experiments, the optimum dose of AH was 1%, that of the saponin 0.5%. Hyperimmunization of guinea pigs with a virus suspension containing 1% AH yielded type O serum with a titer of 1:60; types A and C, 1:80. Hyperimmunization of the animals with 0.5% saponin yielded type O serum with a titer of 1:110 to 1:150; type A, 1:140 to 1:170; type C, 1:170. A pronounced inflammatory reaction was noted at

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UDC: 619.616.988.43-077.34
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L 40175-66

ACC NR: AP6029379

the injection site following injection of virus with 1% AH or 0.5% sponin. With increase in AH or saponin content, necrosis developed in the inflammatory focus and some of the guinea pigs died. Orig. art. has: 2 tables. [JPRS: 36,932]

SUB CODE: 06 / SUBM DATE: none

ACC NR: AR7004300

SOURCE CODE: UR/0271/66/000/011/A007/A007

AUTHOR: Rusin, P. I.; Shapkin, V. M.; Pustovoyt, V. N.

TITLE: TVCh-photorelay designed with semiconductor elements

SOURCE: Ref. zh. Avtomat. telemekh. i vychisl. tekhn., Abs. 11A56

REF SOURCE: Sb. Avtomatiz. kontrolya tekhnol. protsessov sel'khoz mashinostr. Rostov-na-Donu, 1965, 18-21

TOPIC TAGS: automatic control, photorelay, photocontroller, heat treating furnace, photodiode, transistorized amplifier

ABSTRACT: Application of a Ge photodiode having a small inertia (10^{-6} sec) as a sensor in hf-heating systems is considered. A principal circuit for controlling hf oscillator is shown. A photodiode connected to a bridge circuit feeds into a 2-stage transistorized amplifier to whose output the winding of a polarized relay is connected. The instrument is supplied from ac line via a S-0,09 stabilizer. The instrument is tuned with a temperature lamp. The instrument ensures automatic control of thermal treatment of parts and permits improving their quality. One figure. Bibliography of 6 titles. T. R. [Translation of abstract]

SUB CODE: 09, 13

Card 1/1

UDC: 621.318.58

03720

IX. 1150

S/137/60/000/011/026/043
A006/A001

Translation from: Referativnyy zhurnal, Metallurgiya, 1960, No. 11, p. 199,
26862

AUTHORS: Krasnichenko, L.V., Pikhel'son, V.F., Shapkin, V.M.

TITLE: Run-in Ability of a Copper-Steel Pseudo-Alloy

PERIODICAL: Tr. Rostovsk.-n/d. in-ta s.-kh. mashinostr., 1959, No. 12, pp. 32-
38

TEXT: The authors describe the effect of stepped and stepless loading on the run-in process of a Cu-steel pseudo-alloy. They investigated three groups of the ПЦТ, М 20 (PSt, M20) pseudo alloy with an initial roughness of about 0.4 mm, which were loaded by steps of 4.5 kg/cm², 11.2 kg/cm² and with a continuously increasing load of 0.562 kg/cm² per minute. The loading time lasted in all the three cases 80 minutes with bringing the specific load to 45 kg/cm². The dependence of the friction moment, the temperature of the operating surface and the coefficient of friction, on the load applied and the run-in time, was investigated. Moreover, changes in the oil-film state along the friction path were studied. It

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88720

Run-in Ability of a Copper-Steel Pseudo-Alloy

S/137/60/000/011/026/043
A006/A001

was established that the Cu-steel pseudo-alloy showed satisfactory short-time run-in ability, which is explained by the rapid recovery of the oil film at the expense of the oil accumulated in the pores. The run-in process should preferably be conducted with stepless loading, since the time required to obtain constant friction moment and temperature is in this case twice as short as in stepped loading. The Cu-steel pseudo-alloy can be recommended as an antifriction bearing material. X

I.A.

Translator's note: This is the full translation of the original Russian abstract.

Card 2/2

RUSIN, P.I.; GOFMAN, L.A.; SMOLYANINOV, A.I.; SHAPKIN, V.M.

Device for the control of the hardness of malleable cast iron
parts. Lit. proizv. no.8:38-39 Ag '62. (MIRA 15:11)
(Cast iron--Testing) (Hardness--Testing)

RUSIN, P.I.; SHAPKIN, V.M.

Residual stresses in malleable, ferritic cast iron hardened by
high-frequency currents. Metalloved. i term. obr. met. no.7:52-
55 J1 '64. (MIRA 17:11)

1. Rostovskiy-na-Donu institut sel'skokhozyaystvennogo mashinostroyeniya.

SHAEIN, V.M.

Effect of residual stresses on the wear resistance of gray
cast iron. Lit. proizv. no.2:35-36 7 '65. (MIRA 18,6)

SHAPKIN, V.P., inzh.

Device for testing the electron tubes of the PVZK high-frequency
transmitter-receiver set. Energetik 9 no.8:18-19 Ag '61.
(MIRA 14:8)

(Electron tubes—Testing) (Radio, Shortwave)

SHAPKIN, V. S.

LIPS-CANCER

Surgical treatment of labial cancer. Khirurgiia no. 6, 1952.

Monthly List of Russian Accessions, Library of Congress, October 1952. Unclassified.

SHAPKIN, V.S.

Errors and complications in total gastrectomy. Khirurgia, Moskva
no.7:32-34 July 1953. (GLML 25:4)

1. Of the Oncology Division (Head -- Docent D. V. Mysh), Novosibirsk
Oblast Clinical Hospital.

SHAPKIN, V.S.

Tumors of the mesentery of the small intestine. Sov.med. no.2:
32-34 F '54. (MLRA 7:1)

1. Iz onkologicheskogo dispansernogo otdeleniya Novosibirskoy
oblastnoy bol'nitsy (glavnyy vrach V.N.Kutikov).
(Mesentery--Tumors)

SHAPKIN, V.S.

SHAPKIN, V.S.

Ligation of the pulmonary vessels in pneumonectomy. Zhurnal
no.5:75-76 My '54. (MLRA 7:7)

1. Iz onkologicheskogo otdeleniya (zav. V.S.Shapkin) 4-y kliniche-
skoy bol'nitsy Novosibirskaya (glavnyy vrach I.M.Gol'dshteyn) i
khirurgicheskogo otdeleniya (zav. B.S.Gudimov) Novosibirskoy do-
rozhnoy bol'nitsy (glavnyy vrach A.N.Vishnevskaya)

(LUNGS, sugery,

*pneumonectomy, ligation of pulm. vessels)

SHAPKIN, V.S.

Complications of nonradical surgery for peptic ulcer of
the stomach and duodenum. Khirurgiia no.7:25-30 J1 '55.

(MLRA 8:12)

1. Iz onkologicheskogo dispansernogo otdeleniia (zav.
V.S.Shapkin) 4-y gorodskoy klinicheskoy bol'nitsy Novo-
sibirskaya (glavnyy vrach K.A.Dement'yev)

(PEPTIC ULCER, srug.

compl. of non-radical cases)

SHAPKIN, V.S.

Surgical treatment of pericarditis in its transitional form
between adhesion and effusion. Vest.khir. 75 no.6:116-119 J1
'55. (MLRA 8:10)

1. Iz onkologicheskogo otdeleniya (zav. V.S. Shapkin)4-y
gorodskoy klinicheskoy bol'nitsy gor. Novonibirska.
(PERICARDITIS, surg.
in transition between adhesion & effusion)

SHAPKIN, V.S.

Errors in the diagnosis of cancer of the esophagus [with summary
in English p.156] Vest.khir. 77 no.3:35-41 Mr '56. (MLRA 9:7)

1. Iz onkologicheskogo otdeleniya (zav. - V.S.Shapkin) 4-oy
gorodskoy klinicheskoy bol'nitsy g.Novosibirsk.
(ESOPHAGUS, neoplasms
diag., errors)

SHAPKIN, V.S. (Novosibirsk, Kamenskoye shosse, 7-a, kv. 12)

Surgical treatment of pulmonary suppuration complicated by empyema;
concerning N.M.Amosov's article. Vest.khir. 77 no.7:129-132 J1 '56.
(MLRA 9:10)

1. Iz khirurgicheskogo otdeleniya (zav. - V.S.Shapkin) bol'nitay
Kirovskogo rayona g.Krasnoyarska (g. vrach - G.N.Streblyanskiy)
(LUNGS--ABSCESS)

SHAPKIN, V.S. (Krasnoyarsk, ul. Chaykovskogo, 24, kv. 17)

Pneumonectomy for bronchiectasis with simultaneous ligation of patent ductus arteriosus. Vest.khir. 77 no.7:138-139 J1 '56.

(MLRA 9:10)

1. Iz khirurgicheskogo otdeleniya (sav. - V.S.Shapkin) bol'nitsy Kirovskogo rayona g. Krasnoyarska (gl. vrach - N.M.Kaverin)

(LUNGS, surg.

pneumonectomy in bronchiectasis, simultaneous ligation of patent ductus arteriosus)

(BRONCHIECTASIS, surg.

pneumonectomy, simultaneous ligation of patent ductus arteriosus)

(DUCTUS ARTERIOSUS, PATENT, surg.

simultaneous pneumonectomy fo bronchiectasis)

SHAPKIN, V.S. (Krasnoyarsk, 37, ul. Chaykovskogo, d.24, kv.17)

Liver hemangioma with profuse intraperitoneal hemorrhage [with summary in English]. Vop.onk. 3 no.6:744-745 '57. (MIRA 11:2)

1. Iz khirurgicheskogo otdeleniya (zav. - V.S.Shapkin) bol'nitsy Kirovskogo rayona Krasnoyarska (glavnyy vrach - N.S.Karpovich)

(LIVER NEOPLASMS, compl.

angioma, causing intraperitonea hemorrh.)

(ANGIOMA, compl.

liver, causing intraperitoneal hemorrh.)

(ABDOMEN, hemorrh.

intraperitoneal in angioma of liver)

SHAPKIN, V.S.

Perforation of the stomach following gastroscopy. Khirurgia
Supplement:33 '57. (MIRA 11:4)

1. Iz khirurgicheskogo otdeleniya bol'nitsy Kirovskogo rayona
Krasnoyarska.
(GASTROSCOPY) (STOMACH--WOUNDS AND INJURIES)
(PEPTIC ULCER)

SHAPKIN, V.S.

Hemorrhage in lung surgery. Khirurgia 33 no.11:116-117 N '57.
(MIRA 11:2)

1. Iz khirurgicheskogo otdeleniya (zav. V.S.Shapkin) bol'nitsy
Kirovskogo rayona Krasnoyarska (glavnyy vrach N.M.Kaverin)
(PNEUMONECTOMY, compl.
hemorrh., management (Rus))

SHAPKIN, V.S.

Surgeon's tactics in sarcoma of soft tissues. *Khirurgiya* 33
no.3:123-124 Mr '57. (MLA 10:6)

1. Iz Novosibirskoy oblastnoy bol'nitsy i Novosibirskogo
gorodskogo onkologicheskogo dispansera.

(SARCOMA, surg.
soft tissues, technic (Rus))

SHAPKIN, V. S., Cand Med Sci -- (diss) "Materials for the study of local anesthetization of organs of the thoracic cavity in operations." Irkutsk, 1958. 16 pp; (Irkutsk State Medical Inst); 250 copies; price not given; (AL, 17-60, 174)

SHAPKIN, V.S., kand.med.nauk (Krasnoyarsk, 37, ul. Michurina, d.8, kv.17)

Technic of resection of the liver and operations in various injuries.
Vest.khir. 83 no.10:62-68 0:59: (MIRA 13:2)

1. Iz khirurgicheskogo otdeleniya (zaveduyushchiy - V.S. Shapkin)
bol'nitsy No.7 g. Krasnoyarska.
(LIVER surgery)

SHAPKIN, V.S., kand.med.nauk (Krasnoyarsk, 37, ul. Michurina, d.8, kv.17)

Surgical treatment of extensive cardiac aneurysms. Vest.khir.
86 no.3:51-56 Mr '61. (MIRA 14:3)

1. Iz khirurgicheskogo otdeleniya (zav. - V.S. Shapkin) 7-y
bol'nitsy g. Krasnoyarska. (ANEURYSMS) (HEART--DISEASES)

SHAPKIN, V. S. (Kirov (oblastnoy), ul. Gaydara, d. 6, kv. 73)

Diagnosis and surgical treatment of malignant tumors of the
pericardium. Grud. khir. 4 no.3:87-89 My-Je '62.
(MIRA 15:7)

1. Iz khirurgicheskogo otdeleniya Krasnoyarskoy bol'nitsy No. 7.

(PERICARDIUM—CANCER)

SHAPKIN, V.S., kand.med.nauk

Hemangiomas of the liver and their treatment. Vest.khir. no.6:
76-82 '62. (MIRA 15:11)

1. Iz khirurgicheskogo otdeleniya (zav. - V.S. Shapkin) bol'nitsy
No.7 g. Krasnoyarska. (LIVER--TUMORS) (ANGIOMA)

SHAPKIN, V.S., kand.med.nauk (Krasnoyarsk 37, ul. Michurina, d.8. kv.17)

Repeated operations for peptic ulcer of the stomach and duodenum.
Vest.khir. no.9:21-29 '61. (MIRA 15:3)

1. Iz khirurgicheskogo otdeleniya (zav. - V.S. Shapkin) 7-y
bol'nitsy g. Krasnoyarska.
(PEPTIC ULCER) (DUODENUM--SURGERY) (STOMACH--SURGERY)

SHAPKIN, V.S., kand.med.nauk

Treatment of penetrating wounds of the thorax. Vest.khir. 89
no.7:32-37 J1 '62. (MIRA 15:8)

1. Iz khirurgicheskogo otdeleniya (zav. - V.S. Shapkin) bol'-
nitsy No.7 g. Krasnoyarska.
(CHEST--WOUNDS AND INJURIES)

SHAPKIN, V.S., starshiy nauchnyy sotrudnik (Kirov (obl.), ul. Gaydara, d.6,
kv.73)

Plastic surgery of the liver because of a dermoid cyst using diaphrag-
matic flap with a pedicle. Klin.khir. no.9:70 S '62. (MIRA 16:5)

1. Khirurgicheskaya klinika filiala Leningradskogo nauchno-issledo-
vatel'skogo instituta perelivaniya krovi v g. Kirove.
(LIVER—SURGERY) (CYSTS)

SHAPKIN, V.S., kand. med. nauk (Leningrad)

Tuberculosis of the liver and its surgical treatment.
Klin. med. 40 no.12:51-56 D '62. (MIRA 17:2)

1. Iz khirurgicheskoy kliniki (rukovoditel' - doktor med. nauk N.S. Yepifanov) filiala Leningradskogo nauchno-issledovatel'skogo instituta perelivaniya krovi v Kirove.

SHAPKIN, V.S., starshiy nauchnyy sotrudnik

Nonparasitic cysts of the liver and their treatment. Khirurgiia no. 3:68-73 '63. (MIRA 16:5)

1. Iz khirurgicheskoy kliniki filiala Leningradskogo ordena Trudovogo Krasnogo Znameni nauchno-issledovatel'skogo instituta perelivaniya krovi (direktor- zasluzhennyi vrach' RSFSR N.V. Shestakov), Kirov.
(LIVER—TUMORS) (CYSTS)

SHAPKIN, V.S., kand. med. nauk

Anatomic hepatectomy, sectorectomy and segmental resection
of the liver. Khirurgiia 39 no.8:72-79 Ag '63. (MIRA 17:6)

1. Iz khirurgicheskoy kliniki filiala (direktor - zasluzhennyy
vrach RSFSR N.V. Shestakov) Leningradskogo ordena Trudovogo
Krasnogo Znameni nauchno-issledovatel'skogo instituta
perelivaniya krovi V Kirove.

Министерство внутренних дел СССР, Ленинград, 3-й этаж, кв. № 13, кв. 13

Секция по борьбе с преступностью. Пост. № 101.
№ 075-77-163. (ИРЛ 17:2)

Ленинградское отделение (зав. - В. И. Дроздов)
Улицы № 7 Звонцовская.

SHUKHIN, V.I., doktor med. nauk

lobes and segments of the liver and the intrabiliary architectonics
of the vessels and ducts. Vest. rent. i rad. 10 no.2:38-41. Yul-Ap '65.
(MIRA 18:6)

1. Fakul'tetskaya khirurgicheskaya klinika (zav. - doktor med. nauk
V.I. Shukhin) Leningradskogo meditsinskogo instituta.

SHAPKIN, V.V.

USSR/Nuclear Physics

C-2

Abs Jour : Referat Zhur - Fizika, No 5, 1957, 11016

Author : Babykin, M.V., Plakhov, A.G., Skachkov, Yu.F., Shapkin, V.V.

Inst : Not given

Title : Plane-Parallel Spark Counters for the Measurement of Small Times.

Orig Pub : Atom. energiya, 1956, No 4, 38-45

Abstract : Report on the results of a work on the improvement of the time characteristics of plane-parallel spark counters by reducing the gaps between the electrodes and using sectionalized electrodes. A telescope consisting of two counters, the construction of which is described, is used to measure the dispersion in the delay of the pulses from cosmic particles, passing through both sensitive volumes. Thanks to the use of semi-transparent electrodes on glass,

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USSR/Nuclear Physics

C-2

Abs Jour : Ref Zhur - Fizika, No 5, 1957, 11016

total pressure is 6 atmos, the slope of the counting characteristic does not exceed 4% in 100 volts. As a result of the greater pressure, the constructed counters have a considerable efficiency, in spite of the small distance between electrodes.

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94,2120

30177
S/051/62/012/003/010/016
E202/E435

AUTHORS: Butslov, M.M., Plakhov, A.G., Shapkin, V.V.

TITLE: High intensity electron-optical system for spectral investigation of plasma

PERIODICAL: Optika i spektroskopiya, v.12, no.3, 1962, 419-423

TEXT: Electron-optical system consisting of a simple multistage impulse converter employing electrostatic focusing and a quadripole magnetic lens was designed and tested using Hg spectrum. The reason for building the instrument was a projected study of low luminosity impulse plasmas which fail to be recorded in ordinary instruments. The general design represents a further development of a previously described design. The main advantage of this type of lens lies in the possibility of changing the scale of the electron image along two mutually perpendicular axes without impairing the quality of the picture. This was utilized by reducing the height of the spectral line giving good time resolution in continuous linear scanning, while widening the width of the line, i.e. increasing the dispersion of the system. The arrangement is shown diagrammatically (Fig.4).

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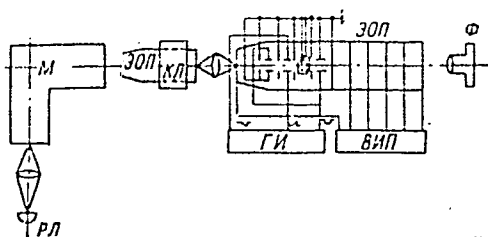
High intensity electron-optical ...

S/051/62/012/003/010/016
E202/E435

There are 5 figures.

SUBMITTED: March 18, 1961

Fig .



РЛ - Hg lamp; М - monochromator;
ЭОП - electron-optical converter;
ВНП - HT supply; Ф - camera.

КЛ - quadripole lens;
ГИ - impulse generator;

Card 2/2

ACCESSION NR: AP4020938

S/0051/64016/002/0329/0334

AUTHOR: Butslov, M.M.; Plakhov, A.G.; Shapkin, V.V.; Yashin, N.M.

TITLE: Electron-optical recording of the radiation from weakly luminous pulse-discharge plasma

SOURCE: Optika i spektroskopiya, v.16, no.2, 1964, 329-334

TOPIC TAGS: plasma, plasma diagnostics, plasma spectroscopy, time-resolved study, plasma intensity distribution, line contour, faint plasma, weak plasma, helium plasma, helium(I), image intensifier, image converter, image translator, light amplifier

ABSTRACT: Conventional procedures for spectroscopic observation and diagnosis of weakly luminous short-lived (pulse-discharge) plasmas have a number of obvious shortcomings; even when employing fast photographic plates or sensitive photomultipliers it is generally necessary to record the radiation from several hundred discharges, in the course of which the conditions may change. Accordingly, recently several investigators have turned to the use of electron-optical image intensifiers (image converter tubes) with light amplification (V.F.Bolotin, Ye.K.Zavoysky, M.N.Oganov, G.Ye.Smolkin and A.R.Striganov, Izv.AN SSSR, Ser.fiz.27, 986, 1963; I.F.Bala-

Card 1/3

ACC.NR: AP4020938

shov, M.P.Vanyukov, V.R.Muratov and Ye.V.Nilov, Opt. i. spektr. 9, 790, 1960; Ibid. 10, 540, 1961). In the present paper there is described a procedure for recording the radiation from weakly luminous pulse-discharge plasmas, involving the use of an electron-optical image converter with a controlled PIM-3 input stage (M.M.Butslov, Sp. nauchn. fotografii, 6, 76, 1959) and five light amplification stages. The electron image in the amplifying stages is focused by means of magnetic coils, similar to coils used in electron microscopes. The image scan in the input stage is realized by saw-toothed oscillators capable of providing 0.5, 1.5, 3, 6 or 12 millisecond durations. The input stage sweep is driven and operates for the period of the scan. The sweep length on the screen of the converter is 30 mm. The image converter was tested in conjunction with a plasma device with helical fields. For spectroscopic measurements the tube was coupled to an ISP-51 spectrograph. Several time-resolved spectrograms of helium plasma are reproduced; in one figure a time-resolved section of the helium spectrum is compared with the spectrum photographed directly with an exposure of 200 pulse discharges. The image converter was also coupled to a Fabry-Perot interferometer for the purpose of obtaining time-resolved studies of individual line contours. This setup is diagramed. With the aid of the electron-optical image intensifier one can also obtain information on the spatial distribution in terms of selected monochromatic radiation in weakly luminous plasmas; this is rea-

Card 2/3

ACC.NR: AP4020938

lized by the introduction of another pair of deflecting plates. Orig.art.has: 5 figures.

ASSOCIATION: none

SUBMITTED: 24May63

DATE ACQ: 02Apr64

ENCL: 00

SUB CODE: PH,SD

NR REF SOV: 007

OTHER: 000

3/3
Card

L 57565-65 EWT(1)/EWT(m)/EPF(c)/EEC(t)/T/EWP(t)/EWP(b)/EWA(c) Pi-4 IJP(c)
JD/WW/GG

ACCESSION NR: AP5016137

UR/0048/65/029/006/0990/0993

AUTHOR: Bursian, E.V.; Danilyuk, Yu.L.; Shapkin, V.V.

46
B

TITLE: Electron paramagnetic resonance of barium titanate single crystals containing color centers /Report, 4th All-Union Conference on Ferroelectricity held in Rostov-on-the-Don 12-18 Sept 1964/

SOURCE: AN SSSR.Izvestiya. Ser.fizicheskaya,v.29, no.6, 1965, 990-993

TOPIC TAGS: ferroelectric material, barium titanate, electron paramagnetic resonance, color center

ABSTRACT: Electron paramagnetic resonance (EPR) spectra of barium titanate crystals, powders and ceramics were recorded over a wide range of temperatures that included the rhombohedral, tetragonal and cubic phases in order to determine the effect, if any, of color centers on EPR in this material. Color centers were induced in the crystals by heating them in oxygen or alcohol vapor, or by passing an electric current through them. The observed EPR spectra are described

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L 57565-65

ACCESSION NR: AP5016137

and discussed in some detail. The intensity of the line decreased and its shape became altered in the immediate vicinity of the Curie point. An attempt to detect an effect of ferroelectric polarization reversal on the EPR spectrum was not entirely successful because the alternating polarization reversing field led to excessive heating of the sample. The application of a dc electric field did not affect the EPR spectrum. No effect of color centers (at concentrations up to 10^{19} cm^{-3}) on the EPR spectrum was found, even when the color centers were induced in the crystal by passage of an electric current while the EPR spectrum was being recorded. The observed spectra are ascribed to Fe impurities. It is concluded that neither the F nor the V centers are single-electron centers or centers of any odd order. In a note added in proof the authors report observing in reduced barium titanate powders a weak line similar to that observed by Z. Stroubek and K. Zdansky (Czechoslovakian Phys. Jour. B13, 309, 1963) and ascribed by them to F centers. This line was not observed in all samples and it is not certain that it is due to F centers. Orig. art. has: 3 figures.

Card 2/3

L-57565-65

ACCESSION NR: AP5016137

ASSOCIATION: Leningradskiy gosudarstvennyy pedagogicheskiy institut
im. A.I.Gertsena (Leningrad State Pedagogical Institute)

SUBMITTED: 00

ENCL: 00

SUB CODE: SS *NP*

NR REF SOV: 001

OTHER: 006

ja
3/3
Card

L 11950-66 EWT(1)/ETC(F)/EPE(n)-2/EWG(m) LJP(c) AT
 ACC NR: AP6000740 SOURCE CODE: UR/0386/65/002/009/0426/0430

AUTHOR: ^{44,55} Blinov, P. I.; ^{44,55} Zakatov, L. P.; ^{44,55} Plakhov, A. G.; ^{44,55} Chikin, R. V.; ^{44,55} Shapkin, V. V.

ORG: none 80
74
B

TITLE: Influence of the mirror ratio on plasma heating by an electron beam in a "probkotron"

SOURCE: Zhurnal eksperimental'noy i teoreticheskoy fiziki. Pis'ma v redaktsiyu. Prilozheniye, v. 2, no. 9, 1965, 426-430

TOPIC TAGS: magnetic mirror machine, plasma interaction, plasma heating, ionized plasma, plasma electron temperature, *electron gun, plasma injection*

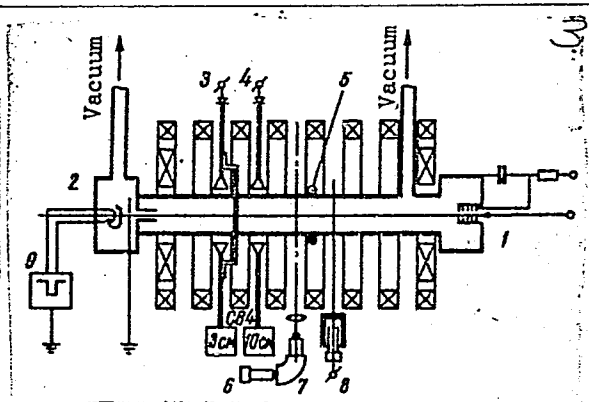
ABSTRACT: The authors investigated the interaction between an electron beam and a ready-made highly ionized plasma. The apparatus (Fig. 1) comprises a trap with magnetic mirrors. The electron gun is located on the trap axis behind the mirrors on one end, and the plasma injector is located on the other end. The electron gun operates in a pulsed mode. The square-wave voltage pulse is of 450 μ sec duration and 9 kv amplitude, the pulse current being 5 a. The plasma and the electron beam are injected into the trap simultaneously. The residual pressure in the chamber is 10^{-6} mm Hg. The electron density was measured with a microwave interferometer ($\lambda = 3$ cm). The quantity nT ($T =$ plasma temperature) was determined from the diamagnetic effect. The bremsstrahlung was registered by photomultiplier with NaI(Tl) crystal. When the plasma and the electron beam are simultaneously injected in the plasma, the concentration does not rise, but the energy released by the plasma increases strongly. The presence of

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L 11950-56

ACC NR: AP6000740

Fig. 1. Diagram of setup. 1 - Plasma injector, 2 - electron gun, 3, 4 - microwave source, 5 - diamagnetic probe, 6, 7 - electron-optical and spectral apparatus, 8 - bremsstrahlung recorder, 9 - low-voltage pulsed source.



"hot" electrons in the trap is evidenced by the prolonged, intense, and hard bremsstrahlung. The efficiency with which the plasma electrons are heated by the beam depends on the mirror ratio. As the mirror ratio is varied from 1.8 to 4, the plasma pressure increases tenfold. The plasma lifetime in the trap increases. A group of "hot" electrons, with a prolonged confinement time and with density close to 10^{10} cm^{-3} appears. Accordingly, the energy lost by the electron beam to plasma heating increases from fractions of one percent to 3.5%, and during the initial stage of the heating (the first 90 μsec) the loss reaches 10%. The influence of the mirror ratio on the heating of plasma with direct current was observed also in experiments of M. V.

21,44,55

Card 2/3

1 11950-66

ACC NR: AP6000740

Babykin et al. Authors are grateful to ^{111,55}Ye. K. Zavoiskiy for continuous interest and valuable advice. Orig. art. has: 3 figures. 3

SUB CODE: 20/ SUBM DATE: 09Sep65/ ORIG REF: 005/ OTH REF: 002



Card 3/3

I. 21556-66 EWT(1)/EWG(m)/EPF(n)-2 IJP(c) AT
 ACC NR: AP6008752 SOURCE CODE: UR/0386/66/003/006/0255/0258

AUTHOR: Blinov, P. I.; Zakatov, L. P.; Plakhov, A. G.; Chikin, R. V.; Shapkin, V. V.

ORG: Institute of Atomic Energy im. I. V. Kurchatov (Institut atomnoy energii)

TITLE: Influence of magnetic-field configuration on the heating and containment of a plasma in a mirror trap (Probkotron)

SOURCE: Zhurnal eksperimental'noy i teoreticheskoy fiziki. Pis'ma v redaktsiyu. Prilozheniye, v. 3, no. 6, 1966, 255-258

TOPIC TAGS: magnetic mirror, plasma containment, plasma heating, magnetic trap, plasma radiation, ~~Probkotron~~ electron beam

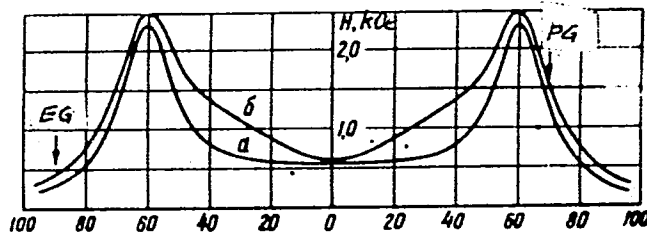
ABSTRACT: This is a continuation of earlier experiments on heating of a plasma by an electron beam in a mirror trap (ZhETF Pis'ma v. 2, 426, 1965), aimed at showing that heating and containment of the plasma depend strongly on the distribution of the magnetic field along the trap axis. The experiment was carried out with the earlier installation, which made it possible to operate with two different configurations of the magnetic field (Fig. 1). The mirror ratio and the field in the center remained unchanged in both cases. The plasma initial density was 10^{12} cm⁻³. A pulsed beam of electrons with current strength 1 a, energy 10 kv, and duration 500 μsec was injected into this plasma. The heating and decay of the plasma were investigated by measuring the time variation of the energy content (nT) and of the density n. On going over from a field configuration with local mirrors (a) to a configuration with extended mirrors (b) the maximum value of nT increases by a factor 1.5. The value of nT of the

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L 21556-66

ACC NR: AP6008752

Fig. 1. Distribution of the magnetic field of the trap. The arrows indicate the locations of the guns: electron (EG) and plasma (PG).



hot electrons was three times larger in the field configuration with extended mirrors than in the configuration with the local mirrors, and the decay time was 20 and 2 μ sec in the two cases, respectively. The time variation of the electron density was similar to that of nT. The prolonged containment of hot electrons in a trap with extended mirrors was evidenced also by the x-ray bremsstrahlung, which is observed for 100 msec. It is therefore concluded that the heating and containment of the plasma by a pulsed electron beam increase on going from a mirror trap with local mirrors to a mirror trap with extended mirrors. This may be due not only to the more effective transfer of energy from the beam to the plasma, but also to improvement in the containment of the hot electrons in the field with extended mirrors. Authors are sincerely grateful to A. V. Gordayev and G. V. Sholin for useful discussion, and also to G. A. Kudintseva and G. M. Kuznetsova for furnishing the cathodes. Orig. art. has: 3 figures.

SUB CODE: 20/ SUBM DATE: 06 Feb66/ ORIG REF: 001

Card 2/2 BLC

SHAPKIN, Ye.I., agronom po zashchite rasteniy mashinno-traktornoy stantsii.

Reconstruction of the OXP-15 spraying and dusting machine. Zashch.
rast. ot vred. i bol. } no.1:24 Ja-P '58. (MIRA 11:3)
(Spraying and dusting equipment)

GUSEL'TSEV, B.S.; SHAPKIN, Ye.I., agronom po zashchite rastney.

An-2 airplane in the protection of sugar beets. Zashch.rast.ot vred.
i bol. 3 no.2:10-12 Mr-Ap '58. (MIRA 11:4)

1. Direktor Kiseleyskoy mashinno-traktornoy stantsii, Shpolyanskiy
rayon, Charkasskoy oblasti (for Gusel'tsev).
(Aeronautics in agriculture) (Sugar beets--Diseases and pests)

SHAPKIN, Yu.A.

Clinical aspects and the course of epileptiform syndromes
(diencephalic variant) of posttraumatic origin and their
forensic psychiatric evaluation. Probl.sud.psikh. 11:64-
80 '61. (MIRA 16:3)
(FORENSIC PSYCHIATRY) (EPILEPSY)

14-57-7-15379
Translation from: Referativnyy zhurnal, Geografiya, 1957, Nr 7,
p 183 (USSR)

AUTHOR: Shapkin, Yu. D.

TITLE: Distribution of Viniculture in Turkmen SSR (K voprosu
o razmeshchenii vinogradarstva v Turkmenistane)

PERIODICAL: Izv. AN TurkmSSR, 1956, Nr 3, pp 57-61

ABSTRACT: Turkmen SSR is an area with a great potential for the
widespread development of viniculture. In the main
grape-growing region of the republic--the Ashkhabad
Oblast--the climate is such that grapes can be grown
without any need for winter covering when irrigation
is applied for the purpose of storing moisture. This
circumstance reduces work expended, permits a more
equitable distribution of labor during winter months,
and also cuts down on the amount of irrigation water
needed during summer (a very important matter in

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14-57-7-15379

Distribution of Viniculture in Turkmen SSR (Cont.)

growing area of the Turkmen SSR was more than doubled. Even with this increase in the number of vineyards viniculture represents a small part of agriculture. At the present stage of its development it cannot meet local demands, much less provide crops for export. According to data on vineyards in 1953, their total area (including single plants) in the Turkmen SSR was distributed as follows: collective farms-77.4 percent, state farms-15 percent, personal plots of collective farmers-5.7 percent. The Ashkhabad Oblast contained 64.9 percent of the total vineyard area, the Mary Oblast 19 percent, and the Chardzhou Oblast 12.4 percent. Among the state enterprises, the bulk of the land under grapes is concentrated in three specialized state farms operated by the Turkmensadvintrest. The Sandykachi State Farm has 320 hectares, the Karabekaul has 188 hectares, and the Geok Tepe has 142 hectares. The absence of such state farms in the Tashauz Oblast may be partly explained by the fact that this area was not on the railroad until recently. Most of the vineyards owned by the collective farmers are in the Ashkhabad and Mary Oblasts.
Card 3/4

USSR/Cultivated Plants - Fruits. Berries.

11.

Ref Jour : Ref Zhur - Bibl., No 10, 1958, 44342

Author : Shapkin, Yu.D.

Inst : "

Title : Viticulture in Turkmenistan.

Orig Pub : Sad i oporod, 1957, No 11, 47-50.

Abstract : No abstract.

Card 1/1

- 175 -

COUNTRY : USSR M
 CATEGORY : Cultivated Plants. Fruits. Berries. Nuts. Tea.
 ABSTRACT : RZhBiol., No. 4, 1959, No. 15833
 AUTHOR : Shapkin, Yu.D.
 TITLE : The Variety Composition of Grape Plantations
 in Turkmenia and Ways to Improve It.
 ORIG. PUB. : Izv. AN TurkmenSR, 1958, No. 1, 37-43
 ABSTRACT : The assortment of industrial vineyard grapes
 in Turkmenia is listed and ways for further
 improvement indicated. Brief characteristics are
 given of the main sorts of Turkmenian grapes
 (Terbash, Kara-Uzyum Ashkhabadskiy, Kizyl, Sapak,
 group of Knaiili variety). Noted is the
 insufficient spread of the seedless grape varie-
 ties and also of the early and very late vari-
 eties, which limits the period of consumption of
 fresh grapes. Enlargement of the assortment is
 recommended by reproduction and putting into

Card: 1/1

YELYAKOV, G.B.; STRIGINA, L.I.; SHAPKINA, E.V.

Panaxgenins A and B, products of the advanced hydrolysis of
ginseng glycosides. Soob. DVFAN SSSR no.17:17-21 '63.

(MIRA 17:9)

1. Dal'nevostochnyy filial im. V.L. Komarova Sibirskigo otdeleniya
AN SSSR.

LEONOV, V.N.; SHAPKINA, E.V.; ANANCHENKO, S.N.; TORGOV, I.V.

Configuration of epimeric d,l-17a-alkyl-19-nor-D-homotestosterones.
Izv.AN SSSR.Ser.khim. no.2:375-377 F '64. (MIRA 17:3)

1. Institut khimii prirodnykh soyedineniy AN SSSR.

OKSENGENDLER, G.M. [deceased]; GERASIMENKO, Yu.Ye.; Prinimali uchastiye:
CHERNYAVSKAYA, Ye.D.; SHAPKINA, M.M.

Spectrophotometric analysis of thioindigo dyes. Org. poluprod.
i kras. no.2:215-222 '61. (MIRA 14:11)
(Thioindigo) (Spectrophotometry)

MOSTOSLAVSKIY, M.A.; IZMAIL'SKIY, V.A.; SHAPKINA, M.M.

Absorption spectra of 3-keto-2,3-dihydrothionaphthene and its derivatives. Part 4: Effect of solvents on the value of the solvatochromic shift of the absorption maximum. Zhur.ob.khim. 32 no.6:1746-1755 Je '62. (MIRA 15:6)

1. Laboratoriya khimii krasiteley i problemy tsvetnosti pri Moskovskom pedagogicheskom institute im. Lenina. Rubezhanskiy filial instituta organicheskikh poluproduktov i krasiteley.
(Benzothiophene--Spectra) (Solvents)

MOSTOSLAVSKIY, M.A.; IZMAIL'SKIY, V.A.; SHAPKINA, M.M.

Effect of solvents on the process of photochemical and thermal
cis-trans-isomerization of perinaphththioindigo. Zhur.VKHO 7
no.1:108-109 '62. (MIRA 15:3)

1. Laboratoriya krasiteley i problemy tsvetnosti pri Moskovskom
pedagogicheskom institute imeni V.I.Lenina i Rubezhanskiy
filial Gosudarstvennogo nauchno-issledovatel'skogo instituta
organicheskikh poluproduktov i krasiteley.
(Indigo) (Isomerization) (Solvents)

TRAVEL SKIY, V.N., 1941; SLAVINA, I.N., 1941.

Reconstruction construction machinery plant by welding and
building up. Stal. 1 div. mass. 10 n. 1988-91, 2a 105
(1988 18:2)

NARINSKAYA, A.R.; SHAPKINA, G.S.; YAKOVLEVA, M.G.; PUSHKIN, P.S.

Economic advantages of manufacturing oilcloth with a latex
coating. Kozh.-obuv.prom. 3 no.1:13-15 Ja '61. (MIRA 14:5)
(Oilcloth) (Latex)

PUSHKIN, P.S., kand.tekhn.nauk; TIKHOMIROVA, B.V., inzh.; SHAPKINA, O.S.,
inzh.

Technical and economic characteristics of the various types of
artificial leather for boots. Kozh.-obuv.prom. 4 no.12:8-9 D
'62. (MIRA 16:1)

(Leather, Artificial—Testing)

SHAPKINA, T. A.

SHAPKINA, T. A. - "The effect of light intensity on the development and seed productivity of red clover". Leningrad, 1955. Min Higher Education USSR. Leningrad Agricultural Inst. (Dissertation for the Degree of Candidate of Biological Sciences).

SO: Knizhnaya Letopis' No. 46, 12 November 1955. Moscow

FAYERMAN, I. S.; BONGARD, E. M.; ZHAI.NINA, L. V.; SHAPKINA, T. G.;
SOINA, A. Ya. (Gor'kiy i Volgograd)

Some characteristics of the clinical course of acute mercaptophos
intoxication. Gig. truda i prof. zab. no.12:45-47 '61.
(MIRA 14:12)

1. Gor'kovskiy institut gigiyeny truda i profbolezney, Volgogradskaya
bol'nitsa No. 13.

(MERCAPTOPHOS--TOXICOLOGY) (POISONING)

SHAPKINA, T.I.

"Concise general geography" by K. Arsen'ev. Vest. LGU 14 no.24:
160-161 '59. (MIRA 12:12)
(Geography--Textbooks)

SHAPKINA, V. F. Cand ^{Geog} ~~Sci~~ Sci -- (diss) " Forecast of water temperature in the areas of Kurosiwo, Tsushima, and Primorskoye streams." Mos, 1959. 9 pp (Main Administration of the Hydrometeorological Service under the Council of Ministers USSR. Central Inst of Forecasts), 180 copies (KL, 52-59, 117)

SOV/50-59-6-9/17

3(7)

AUTHOR:

Shapkina, V. F.

TITLE:

Long-period Forecast of the Water Temperature in the Japan Sea (Dolgosrochnyy prognoz temperatury vody v Yaponskom more)

PERIODICAL:

Meteorologiya i gidrologiya, 1959, Nr 6, pp 34 - 38 (USSR)

ABSTRACT:

Aim of the present investigation was the finding of the relationship for long-period water-temperature forecasts in the Japan Sea. For this purpose the data of the Japanese deep-sea observations made between 1928 and 1939 were used. Six standard cross sections were selected in the Japan Sea. The observation data at these cross sections were taken from the annual registers and then dealt with by Yu. V. Istoshin. In addition to this two cross sections were taken East of Japan in the Pacific. The analysis of the data shows that in the 25-200 m layer the water temperature anomalies occur simultaneously and as a result of the same reasons. The observations of the water temperature in the Japan Sea show that the intensity of cooling-down plays an important role in winter also in this part. Many authors (Refs 4,5) found

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Long-period Forecast of the Water Temperature in the
Japan Sea

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that the variations of the water temperature in the Japan Sea and in the north-western part of the Pacific are every year to a considerable extent due to the variations of the Siberian anticyclone, the Aleutian minimum and the Pacific pressure maximum. In order to be able to consider the effect of these processes the fields of the anomalies of the cyclone- and anticyclone activity were investigated over the regions of Siberia, Far East and the north-western Pacific. In order to be able to determine the quantitative relations between water temperature anomalies and these fields it was necessary to express these fields by means of series the coefficients of which may be introduced into the forecasting equations. The polynomials of Chebyshev (Ref 1) were used for the analytical representation of the fields. These computations and the equations obtained are given here. On the basis of investigations it was possible to determine the following: 1) The water temperature anomalies in the regions of the Kuro Shio, the Tsushima- and the coastland current (Primorskoye tekheniye) are the result of the total effect in

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Long-period Forecast of the Water Temperature in the
Japan Sea

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connection with the change of the heat balance of the surface of the sea and the oscillations in the system of the currents themselves. 2) The variability of the currents and the migration of their axes are determined by the atmospheric processes just like the fluctuations of the heat supply on the water-surface. Therefore, a relation exists between the water-temperature anomalies in the mentioned regions and the baric fields over East Siberia, Far East and the North-western Pacific. 3) The equations obtained on the basis of these relations permit a forecast of the water-temperature during the whole year. There are 1 figure, 4 tables, and 5 references, 3 of which are Soviet.

Card 3/3

3 (9)

AUTHOR:

Shapkina, V. F.

SOV/50-59-9-13/16

TITLE:

A. M. Murontsev. Fundamentals of Hydrology of the Pacific Ocean. Gidrometeoizdat. Leningrad, 1958

PERIODICAL:

Meteorologiya i gidrologiya, 1959, Nr 9, pp 50 - 53 (USSR)

ABSTRACT:

This is a book review. In the first 2 chapters, the author describes the state of investigation of the Pacific Ocean, and evaluates the data obtained from observations of expeditions. The author collected and evaluated the deep-water observations from 1804 to 1955. Accordingly, she compiled tables for the mean-, maximum- and minimum values of temperature, salt content, density and oxygen content for every ten-degree square. In the other 6 chapters, the temperature conditions of the ocean, the salt content, density, oxygen content, a detailed classification of the waters of the Pacific Ocean, and a total circulation scheme are put forward. Some shortcomings of representation, stylistic mistakes, etc are pointed out.

Card 1/1

SHAPKINA, V.F.

Water temperature forecasts in regions of the Kuroshio,
TSushima, and Maritime Currents. Trudy TSIP no.91:18-50
'59. (MIRA 12:8)
(Japan, Sea of--Ocean temperature)

VAPNYAR, D.U.; SHAPKINA, V.F.

Calculation of the elements of internal tidal waves and related
periodic variations of the water temperature. Okeanologiya 3
no.5:814-823 '63. (MIRA 16:11)

1. Dal'nevostochnyy nauchno-issledovatel'skiy gidrometeorolo-
gicheskiy institut.

SHAPKINA, V.F.

Turbulent mixing of waters in the case of tidal currents. Izv.
AN SSSR. Ser. geofiz. no.8:1223-1231 Ag '64 (MIRA 17:8)

1. Morskoy gidrofizicheskiy institut AN SSSR.

SHAPKINA, V.F.

Determining the turbulent heat exchange coefficients on a vertical
line in the sea in the presence of currents. Trudy Dal'nevost.
MIRN no.17:47-53 1964. (MIRA 17:11)

VESELOVA, L.Ya.; SHAPKINA, V.F.

Hydrological observations in tidal seas. Trudy Dal'nevost. NIGMI
no.17:54-61 '64. (MIRA 17:11)

135-7-14/16

21/1/1 11/14-V/11
SUBJECT: USSR/Welding

AUTHORS: Meyyer, A.V., Engineer, and Shapkina, V.M., Engineer.

TITLE: Device for Automatic Welding Longitudinal Seams on Thin-Wall Pipes. (Ustanovka dlya prodol'noy avtomaticheskoy svarki tonkostennykh trub).

PERIODICAL: "Svarochnoye Proizvodstvo", 1957, # 7, pp 28-29.

ABSTRACT: The described device, designed and put into service at the Kalinin RR Car Plant, is used for mass production of pipes of 80-150 mm in diameter, 100-1,000 mm in length, and 2-3 mm in wall thickness. It works with the welding tractor "TC-17M" for arc-welding under flux.

The device consists of a frame composed of U-iron, with a top-plate carrying the tracks for the welding tractor. All mechanical elements of the device are mounted on this frame. The pipe to be welded is hung on a round copper bar inside the frame, the rear end of which is rigidly fastened. The upper portion of the bar serves as a cooled support for the welding seam. Four pneumatic clamps on each side of the bar hold the ends of the pipes in place.

Card 1/2

SHAFKIN, V.S. (Kirov (obl), ul. Gaydara, d 6, kv.73)

Case of the absence of the left lung in conjunction with a congenital
diaphragmatic hernia. Grud. khir. 6 no.4:100-102 J1-Ag '64.
(MIRA 18:4)

AFONIN, I. P.; GAVRILOV, B. I.; ZAVOYSKIY, Ye. K.; KARMANOV, F. V.;
MAKSIMOV, G. P.; FLAKHOV, A. G.; CHEREMNYKH, P. A.;
SHAPKIN, V. V.

The experimental plasma apparatus C-1 with screw magnetic
fields. Atom. energ. 14 no.2:143-150 F '63.
(MIRA 16:1)

(Plasma(Ionized gases)) (Magnetic fields)

LEBEDEV, V.I.; NAGAYTSEV, Yu.V.; FOTOTSKAYA, V.Ye.; TRUDNIKOV, Ye.D.;
SHAFKINA, Yu.S.; YUROVA, G.M.

Materials on the study of the mineralogy of metamorphic rocks
in the northwestern part of the Lake Ladoga region. Min. i
geokhim. no.1:131-156 '64. (MIRA 18:9)

5(4)

SOV/54-59-2-14/24

AUTHORS: Lilich, L. S., Shapkina, Yu. S.

TITLE: Vapor Pressure Over the Systems: $\text{MeCl}_2\text{-HCl-H}_2\text{O}$. The Systems: $\text{MgCl}_2\text{-HCl-H}_2\text{O}$; $\text{SrCl}_2\text{-HCl-H}_2\text{O}$; $\text{HgCl}_2\text{-HCl-H}_2\text{O}$ (Davleniye para nad sistemami: $\text{MeCl}_2\text{-HCl-H}_2\text{O}$. Sistemy: $\text{MgCl}_2\text{-HCl-H}_2\text{O}$; $\text{SrCl}_2\text{-HCl-H}_2\text{O}$; $\text{HgCl}_2\text{-HCl-H}_2\text{O}$)

PERIODICAL: Vestnik Leningradskogo universiteta. Seriya fiziki i khimii, 1959, Nr 2, pp 93-99 (USSR)

ABSTRACT: As an extension to the investigations of ternary systems of the type mentioned in the title, the change of the chemical potential of the volatile components over these systems (the change of this potential is in connection with the periodical law) was systematically investigated. In this paper, the systems containing bivalent cations of the metals of the 2nd group of the periodic system were considered. The elements Mg, Sr, and Hg were chosen (other elements of this group had already been investigated in previous papers, Refs 1,2,3) because Mg is typical for this group, Sr belongs to the prin-

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SOV/54-59-2-14/24

Vapor Pressure Over the Systems: $\text{MgCl}_2\text{-HCl-H}_2\text{O}$. The Systems: $\text{MgCl}_2\text{-HCl-H}_2\text{O}$;
 $\text{SrCl}_2\text{-HCl-H}_2\text{O}$; $\text{HgCl}_2\text{-HCl-H}_2\text{O}$

cipal subgroup, and Hg to the secondary subgroup. The working method, the computation methods and the measuring accuracy are the same as in the mentioned papers. In the analysis, Mg^{++} was determined by trilon "B" with the indicator "eriochrome black" (Ref 4), Sr^{++} by precipitation from alcoholic solutions with sulphuric acid, and Hg^{++} by indirect filtration by means of NH_4CNS (Ref 6), and the oxygen was determined potentiometrically. The partial pressures of the volatile components (H_2O and HCl) over the solution at 25° were determined for the investigations indicated. The total results of the investigations are represented in tables 1-3 and in figures 1-8. The representation of the isothermals/isobars for a number of pressures shows: The isothermals/isobars of the systems $\text{MgCl}_2\text{-HCl-H}_2\text{O}$ and $\text{SrCl}_2\text{-HCl-H}_2\text{O}$ are completely straight, whereas the isothermals/isobars of the system $\text{HgCl}_2\text{-HCl-H}_2\text{O}$ differ from those of the other two systems in shape and position. On the basis

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SOV/54-59-2-14/24

Vapor Pressure Over the Systems: $\text{MeCl}_2\text{-HCl-H}_2\text{O}$. The Systems: $\text{MgCl}_2\text{-HCl-H}_2\text{O}$;
 $\text{SrCl}_2\text{-HCl-H}_2\text{O}$; $\text{HgCl}_2\text{-HCl-H}_2\text{O}$

of the available experimental material, and of materials from previous papers (Refs 1-3), it could be ascertained that there are two types of isothermals/isobars: one type is characteristic of systems in which there are no complex-forming ions, the other one of systems with a marked complex formation. In systems containing no complex-forming ions, the vapor pressure of the water over the ternary system is determined by the properties of two two-component systems which are formed in them (e.g. for the three-component system $\text{MgHCl}_2\text{-HCl-H}_2\text{O}$, the two two-component systems $\text{HCl-H}_2\text{O}$ and $\text{MgCl}_2\text{-H}_2\text{O}$). This fact is characteristic of the elements of the principal subgroup of the periodic system. It had already been ascertained by several authors (Zdanovskiy, Ref 7, and L. Ezrokhi, Ref 8). The complex-forming ions, present in the solution, show a tendency of forming complexes with the Cl-ions, and thus they weaken the hydrate envelope around the metal ion; they have a "salting" effect on HCl and a "desalting" effect on water. The inverse circumstances apply to the ions which do not form

Card 3/4

SOV/54-59-2-14/24

Vapor Pressure Over the Systems: $\text{MeCl}_2\text{-HCl-H}_2\text{O}$. The Systems: $\text{MgCl}_2\text{-HCl-H}_2\text{O}$;
 $\text{SrCl}_2\text{-HCl-H}_2\text{O}$; $\text{HgCl}_2\text{-HCl-H}_2\text{O}$

complexes. There are 8 figures, 3 tables, and 9 references,
8 of which are Soviet.

SUBMITTED: June 29, 1958

Card 4/4

LILICH, L.S.; SHAPKINA, Yu.S.

Vapor pressures over the $M\text{eCl}_2 - \text{HCl} - \text{H}_2\text{O}$ systems. Systems:

Systems: $\text{MgCl}_2 - \text{HCl} - \text{H}_2\text{O}$; $\text{SrCl}_2 - \text{HCl} - \text{H}_2\text{O}$; $\text{HgCl}_2 - \text{HCl} - \text{H}_2\text{O}$.

Vest.LGU 14 no.10:93-99 '59. (MIRA 12:6)

(Systems (Chemistry) (Vapor pressure)

USSR/Corrosion - Protection From Corrosion

J.

Abs Jour : Referat Zhur - Khimiya, No 9, 1957, 33162

Author : Cherkasov, N.Kh., Shapko, T.S., Shiroglazova, M.A.

Inst :

Title : Corrosion of Primary Gas Condensers

Orig Pub : Koks i khimiya, 1956, No 5, 45-48

Abstract : The causes have been determined of the corrosion of primary gas condensers at the Nizhne-Tagilsk coking plant. To control the corrosion it is proposed to treat the water with water glass.

Card 1/1

L6378-66 EWT(1) GW

ACC NR: AP5026764

SOURCE CODE: UR/0286/65/000/017/0044/0044

INVENTOR: Dzhemilev, R. A.; Dolgirev, Ye. I.; Lyubavin, Yu. P.; Meyyer, V. A.; Nakhabtsev, V. S.; Ochkur, A. P.; Shapkov, G. G.

TITLE: Pickup for a radiometric x-ray analyzer. Class 21, No. 174285 [announced by Special Design Office of the State Geological Committee SSSR (Osoboye konstruktorskoye byuro Gosudarstvennogo geologicheskogo komiteta SSSR); Leningrad State University (Leningradskiy gosudarstvennyy universitet); and All-Union Scientific Research Institute of Exploratory Geophysics (Vsesoyuznyy nauchno-issledovatel'skiy institut razvedochnoy geofiziki)]

SOURCE: Byulleten' izobreteniy i tovarnykh znakov, no. 17, 1965, 44

TOPIC TAGS: x ray analysis, x ray equipment, radiometry

ABSTRACT: This Author's Certificate introduces a pickup for a radiometric x-ray analyzer. The unit consists of a housing and a lead shield with collimation channels at an angle. A primary gamma source and x-ray detector are located in these channels. X-radiation is recorded in ore and rock deposits under natural conditions through a window in the housing made of a material with a low atomic number located at the vertex of the angle formed by the collimation channels.

UDC: 550.839 : 621 : 308.8

Card 1/2

L 6378-66
ACC NR: AP5026764

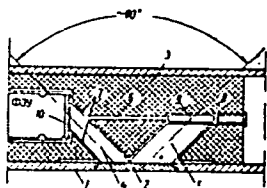


Fig. 1. 1--probe covering; 2--input window made of a material with a low atomic number; 3--lead shielding; 4--collimation channel of the detector; 5--collimation channel for the source; 6--channel for primary gamma rays used as a reference; 7--layer of material for screening out rays from the shielding; 8--can for the source; 9--source of gamma rays; 10--x-ray detector

SUB CODE: EE,EM/ SUBM DATE: 19Mar64/ ORIG REF: 000/ OTH REF: 000

BC
Card 2/2

KYARDI, Ya., brigadir (g.Tallin); KAPRANOV, G. (g.Nal'chik); KNYAZEV,
Yu. (g.Nal'chik); SHAPKUN, N., inzh. (g.Krasnodar); KHOKHLOV,
Yu. (g.Ural'sk); VALENTINOV, N., inzh.; NOVINSKIY, G., vrach

Innovations. Izobr. i rats. no.9:12-13 S '61. (MIRA 14:8)

1. Nachal'nik tekhnicheskogo otdela zavoda imeni Zemlyachki,
g. Ural'sk (for Khokhlov).

(Technological innovations)

ISAYEV, P.S. [Isaiev, P.S.]; KONDRATYUK, I.T.; SHAPLIK, O.V. [Shaplyk, O.V.]

Gas potential of coal-bearing sediments in the Pavlograd-Petro-
pavlovka area of the western Greater Donets Basin. Geol.zhur.
22 no.5:35-49 '62. (MIRA 15:12)

1. Dnepropetrovskaya ekspeditsiya Ukrainского nauchno-issledo-
vatel'skogo geologorazvedochnogo instituta.
(Donets Basin--Gas, Natural--Geology)

KOMISSAROVA, L.N.; POKROVSKIY, B.I.; GRANOVSKIY, Yu.V.; SHAPLYGIN, I.S.

Solid solutions based on scandium oxide in the system
 $Sc_2O_3 - Fe_2O_3 - MnO_x$ studied by the statistical method of
experiment planning. Zhur.neorg.khim. li no.1:151-155
Ja '66. (MIRA 19:1)

1. Moskovskiy gosudarstvennyy universitet imeni M.V.Lomonosova,
kafedra neorganicheskoy khimii. Submitted March 27, 1965.

SEMENOV, I.N.; POKROVSKIY, B.F.; GRANOVSKIY, Yu.V.; TRAPLUGIN, I.S.

Solid solutions based on scandium oxide in the system
 $Sc_2O_3 - Fe_2O_3 - MnO_x$ studied by the statistical method of
experiment planning. Zhur.neorg.khim. 11 no.1:151-155
Ja '66. (MIRA 1961)

1. Moskovskiy gosudarstvennyy universitet imeni M.V.Lomonosova,
kafedra neorganicheskoy khimii. Submitted March 27, 1965.

L 23800-66 EWT(m)/EWP(t) IJP(c) JD/JG

ACC NR: AP6007251

(A)

UR/0363/66/002/002/0275/0280

AUTHOR: Komissarova, L.N.; Po rovskiy, V.I.; Shaplygin, I.S. 26
BORG: Moscow State University im. M.V. Lomonosov. Department of Chemistry
(Moskovskiy gosudarstvennyy universitet, Khimicheskij fakul'tet)TITLE: Reaction of manganese and scandium oxides in airTOPIC TAGS: manganese compound²⁷, scandium²⁷ compound²⁷, chemical reactionSOURCE: AN SSSR. Izvestiya. Neorganicheskiye materialy, v.2, no.2, 1966,
275-280

ABSTRACT: A table shows the composition of the samples investigated, the calcining temperature, and the calcining time. The mole % content of scandium oxide in the samples varied from 0 to 100%, the calcining temperature from 700 to 1100°C, and the calcining time from 2 to 100 hours. The starting samples were prepared by precipitation of scandium and manganese hydroxides by a mixture of $\text{NH}_4\text{OH} + \text{H}_2\text{O}_2$ from nitric acid solutions. The samples were calcined in a platinum boat at 700-1500°C and then quenched in liquid nitrogen. An X-ray analysis was made of the samples. An NTR-62¹⁶ unit was used for thermal analysis. The magnetic susceptibility was determined by the Faraday method. The article gives a phase diagram of the system, constructed from the experimental data. The work

Card 1/2

UDC: 546'713-31 + 546.631-31 2