

Transistorized chronometers

S/115/63/000/001/009/017
E192/E382

circuits. The digital display is provided by six gas-discharge
number tubes. There are 5 figures and 1 table. ✓

Card 3/3

SHPOLYANSKIY, V.A.; CHERNYAGIN, B.M.

Transistor chronometers. Izv.tekh. (no.1:25-28 Ja '63.
(MIRA 16:2)

(Chronometer)

SHPOLYANSKIY, V.A.; CHERNYAGIN, B.M.; IVOBOTENKO, B.A., kand.
tekhn. nauk, retsenzent; BARANOVA, Z.S., inzh., red.

[Electrical timing devices] Elektricheskie pribory vre-
meri. Moskva, Mashinostroenie, 1964. 387 p.
(MIRA 17:11)

GALDIN, Mikhail Vasil'yevich; SHPOLYANSKIY, Vadim L'vovich;
SAVKIN, I.P., nauchn. red.; SHALYT, N.A., red.

[Ensilage harvester] Silosouborochnye kombainy. Moskva,
Proftekhizdat, 1963. 84 p. (MIRA 17:4)

hh653

S/196/63/000/001/008/035
E193/E383

27
AUTHOR: Shpolyanskiy, Ya.A.

TITLE: The effect of heat-treatment on the piezoelectric properties of sintered barium-titanate ferroelectrics

PERIODICAL: Reicrativnyy zhurnal, Elektrotehnika i energetika, no. 1, 1963, 18, abstract 1 B57. (In collection: Segnetoëlektriki (Ferroelectrics), Rostov-na-Donu, Rostovsk. un-t, 1961, 91-95)

TEXT: The effect of the mode of heat-treatment on the piezoelectric properties of sintered barium-titanate ferroelectrics was studied. The static piezomodulus was determined (with an accuracy of $\pm 6.5\%$) in the usual way by measuring the charge induced in the electrodes of a specimen on the application or removal of a compressive load. Apparatus was constructed for studying the temperature-dependence of the piezomodulus. The specimens were polarized during slow cooling from Θ to room temperature, the intensity of the polarizing field increasing from 6 kV/cm at 403 °K (150 °C) to 2 kV/mm at 313 °K (40 °C), with the current in the specimen not exceeding 0.5 mA. The experimental specimens were prepared from
Card 1/2

The effect of

S/196/63/000/001/008/055
E193/E383

TiO₂ and BaCO₃, the latter compound being obtained by passing CO₂ through an aqueous Ba(OH)₂ solution; the preliminary and final sintering operations were carried out, respectively, at 1493-1673 °K (1220-1400 °C) and 1603-1693 °K (1330-1420 °C). To study the effect of ageing, the piezomodulus d_{33} was measured at room temperature every day for three months (the first measurement being taken 10-15 min after polarization). It was established that on increasing the temperature of the preliminary sintering the magnitude of d_{33} increased. For a constant temperature of the preliminary sintering, the maximum steady value of the piezomodulus was observed in specimens given the final sintering treatment at 1653 °K (1380 °C). Comparison of results obtained for various batches of specimens showed that their properties were affected by the technological factors such as milling, mixing, etc., which are difficult to control. The specimens studied had high values of $\tan \delta$ (about 4% at $f = 1$ kc/s). The optimum method of preparation of specimens entailed a preliminary sintering at 1553-1623 °K (1280-1350 °C) and final sintering at 1653 °K (1380 °C).

[Abstracter's note: Complete translation.]

Card 2/2

A study of

S/196/63/000/001/009/035
E195/E383

temperature at which the perovskite modification changed to hexagonal. Comparison of the results of X-ray analysis, study of the temperature-dependence of ϵ in the 293-413 °K (20-140 °C) range (at 5×10^7 c.p.s.) and measurements of the piezomodulus of various specimens led to the conclusion that - depending on the temperature of the final sintering (1653 °K, i.e. 1380 °C, or 1703 °K, i.e. 1430 °C) - specimens with a low concentration of Ni and Co (and, probably, Cr and Mn) additions could have either perovskite or hexagonal structure with correspondingly high or low values of ϵ . The state and properties of specimens after repeated annealing depended on the temperature of the last treatment, which indicated that the transformation from perovskite to hexagonal modification was reversible. There are 2 figures and 3 references.

[Abstracter's note: Complete translation.]

Card 2/2

S/196/63/000/002/012/026
E194/E155

AUTHORS: Shpolyanskiy, Ya.A., and Gann, V.V.

TITLE: Equipment for measuring the piezo-modulus of seignette materials in the quasi-static condition

PERIODICAL: Referativnyy zhurnal, Elektrotekhnika i energetika, no.2, 1963, 17; abstract 2 B 85. (In collection: Segnetoelektriki, Rostov University, Rostov-on-Don, 1961, 147-151)

TEXT: Instead of existing equipment for obtaining pulsating loads, an electromagnet with a.c. supply was used and the measurements were made with an ordinary tube voltmeter. It is advantageous if the conditions of the piezo-electric under investigation are near to those of short circuit. Hence it is necessary to use an instrument of low input impedance or to diminish this latter artificially. In instrument type ЛВ-9-2 (LV-9-2) the input impedance is 600 kilohms so that it is quite permissible to take the equivalent resistance R_{eq} equal to the voltmeter resistance R_v . The points obtained lie very well on
Card 1/2

Equipment for measuring the ...

S/196/63/000/002/012/026
E194/E155

the calculated calibration curve, which confirms the possibility of the more convenient quasi-static method of determining the static value of the piezo-modulus. The accuracy of measurement then remains within the same limits as for equipment using the static method, i.e. 6%.
3 figures. 3 references.

[Abstractor's note: Complete translation.]

Card 2/2

ACCESSION NR: AR4046009

S/0058/64/000/007/E039/E040

SOURCE: Ref. zh. Fizika, Abs. 7E298

AUTHORS: Fesenko, Ye. G.; Prokopalo, O. I.; Komarov, V. D.;
Shpolyasnskiy, Ya. A.

TITLE: Investigation of the effect of modifiers with pentavalent cations on the properties of barium titanate

CITED SOURCE: Izv. Leningr. elektrotekhn. in-ta, vy*p. 51, 1963,
252-259

TOPIC TAGS: ferroelectric material, barium titanate, dielectric constant, x ray diffraction study, perovskite structure, pentavalent cation

TRANSLATION: To study the influence of modifiers on the properties of BaTiO_3 , the oxides V_2O_5 , Nb_2O_5 , Ta_2O_5 , and Sb_2O_5 were used and

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ACCESSION NR: AR4046009

were introduced into the BaTiO_3 by mixing for four hours in a ball crusher and sintering at 1380--1450C. The dielectric measurements have shown that with increasing V_2O_5 content the character of the curves $\epsilon = f(t)$ does not change, the maximum of ϵ decreases, and the Curie temperature drops 3--4%. Additions of Sb_2O_5 greatly reduce the value of ϵ at the Curie points, down to complete vanishing of the maximum of ϵ when 5% of Sb_2O_3 is introduced; a maximum of ϵ appears at room temperature, the magnitude of which decreases with increasing Sb_2O_5 content. When Ta_2O_5 or Nb_2O_5 is introduced into the BaTiO_3 , a decrease is observed in the value of ϵ at the maximum, and the Curie temperature remains unchanged. With increasing concentration of Nb_2O_5 , the average dimensions of the crystallites change from 30--50 μ for pure BaTiO_3 to 1 μ or less for samples with 5% Nb_2O_5 .

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ACCESSION NR: AR4046009

X-ray diffraction investigations have shown that in all cases the perovskite structure is retained and that there is no hexagonal phase whatever. Thus, the introduction of pentavalent ions stabilizes the ferroelectric modification of BaTiO_3 . G. Gol'der.

SUB CODE: MM, SS

ENCL: 00

Card 3/3

05-65 EWP(e)/EPA(s)-1/EWT(e)/EWP(i)/EPA(w)-2/EWP(b)/EWA(h) MR

ACC NR: AP5028127 SOURCE CODE: UR/0048/65/029/011/2086/2090

AUTHOR: Balash, V.A.; Kramarov, G. P.; Shpolyanskiy, Ya. A.

ORG: none

TITLE: Investigation of the direct and inverse piezoelectric effects in ferroelectric ceramics Report, Fourth All-Union Conference on Ferro-electricity held at Rostov-on-the Don 12-16 September 1964

SOURCE: AN SSSR. Izvestiya. Seriya fizicheskaya, v. 29, no. 11, 1965, 2086-2090

TOPIC TAGS: ferroelectric material, piezoelectric ceramic, piezoelectric modulus, electric polarization, solid solution, barium titanate, lead, strontium, zirconate, niobium, calcium, cobalt, dielectric constant

ABSTRACT: The direct and inverse piezoelectric effects were investigated in 15 30 x 3 x 1.5 mm³ specimens of polarized and unpolarized ferroelectric ceramics with the compositions Pb_{0.95}Sr_{0.05}(Zr_{0.53}Ti_{0.47})O₃ + 1% Nb₂O₅ and (Ba_{0.95}Ca_{0.05})TiO₃ + 0.75% CoCO₃ in fields up to 26 kV/cm and at stresses up to 25 kg/cm². The strain gauge employed in the static measurements had a sensitivity of 10⁻⁶ cm/scale division. The specimens were poled for 1 hour at 140°C in a 20 kV/cm field. The deformation hysteresis loops of the unpolarized materials, recorded in cyclicly varying electric fields, were symmetric and had sharp minima, the positions of which depended on the maximum strength of the electric field. The corresponding hysteresis loops of the

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L 7855-66

ACC NR: AP5028127

0

polarized materials were asymmetric; the minima were shifted in the direction opposite to that of the polarizing field and the deformation maxima were greater when the applied field was in the direction of the polarization. A tendency to saturation was evinced at the deformation maxima. The deformation in the direction of the applied field was greater than that in the perpendicular direction by a factor 3 for the barium titanate base material and by a factor 4 for the lead titanate-zirconate base material. Piezoelectric moduli were measured both statically and by the resonance - antiresonance method. Lower values were obtained for the modulus d_{31} when it was measured dynamically than when it was measured under static conditions. The magnitudes of the static piezoelectric moduli depended on the sign of the deformation during measurement. Dielectric constants were measured under the same conditions as were the piezoelectric moduli. The ratio of the modulus to the dielectric constant was found to be much less sensitive to the conditions of measurement than modulus and the dielectric constant themselves; the ratio was the same whether measured statically or dynamically. Orig. art. has: 3 formulas, 4 figures and 2 tables.

SUB CODE: SS, ME, EM SUBM. DATE: 00/ ORIG. REF: 006 OTH. REF: 002

Card 2/2

Yugoslavia/General Problems of Pathology - Comparative Oncology U-1

Abs Jour : Ref Zhur - Biol., No. 18, 1958, 84903

Author : ~~Shpolyar, Milan~~

Inst : No institute is given

Title : The Problem of Cancer and Its Control in Yugoslavia

Orig Pub : Med. glasnik, 1957, Vol. 11, No. 7-8, 248-253

Abstract : No abstract is given

Card 1/1

23

GDR/Chemistry of the High Molecular Compounds.

I.

Abs Jour : Ref Zhur - Khimiya, No 24, 1958, 83944

Author : Shponar, J., Lesticky, C., Lacko, L., Malek, J.

Inst : -

Title : Dextran. V. The Shape and Size of Molecules of Certain
Dextran Fractions. VI. The Effect of Dextran Concentra-
tion, Temperature and pH Upon the Solubility of Dextran
in a Water - Alcohol Solution at Various Ionic Strengths.

Orig Pub : Collect. czechosl. chem. commun., 1958, 23, No 5, 818-827,
828-832;

Abstract : See R. Zh. Khim., 1958, 63271.

Card 1/1

SHPON'KO, G. A.

26565 Podvoi iz seyantsev kul'turnykh sortov yabloni. Sad i ogorod, 1949, No. 8, s. 18-23.

SO: LETOPIS' NO. 35, 1949

SHPOR, K.K.

VINITI, ul. Zhukovskiy, 47, Moscow, USSR.
 KZSVO i KZSVA, Moscow, USSR.
 Trudovye Respublikanskoye i Odeskenskoye Organizatsionnyye Tsentri
 All-Union Committee for the Use of Radioisotopes in Industry, Agriculture
 and Medicine in the National Economy and Science; Publishing Main
 Street Manufacturing Moscow, Izd-vo AN SSSR, 1956. 356 p.
 4,500 copies printed.
 Sponsoring Agencies: USSR, Glavnoye upravleniye po ispol'zovaniyu
 atomnoy energii, and Akademiya nauk SSSR.
 Editorial Board of Set: V.I. Dikushin, Academician (Resp. Ed.), K.M. Shumilovskiy (Deputy Resp. Ed.), Yu. S. Zaslavskiy (Deputy Resp. Ed.), L.K. Tatrochenko, B.I. Verkhovskiy, S.G. Zhurav, L.I. Petrenko and N.G. Zelyevskaya (Secretary).
 Ed. of Publishing House: P.N. Belyanin; Tech. Ed.: T.P. Polenova.

PURPOSE: This book is intended for specialists in the field of machine and instrument manufacture who use radioactive isotopes in the study of materials and processes.

COVERAGE: This collection of papers covers a very wide field of the utilization of tracer methods in industrial research and control techniques. The topic of this volume is the use of radioisotopes in the machine and plant manufacturing industry. The individual papers discuss the applications of radioisotope techniques in the study of metals and alloys, problems of friction and lubrication, metal cutting, engine performance, and defects in metals. Several papers are devoted to the use of radioisotopes in the automation of industrial processes, recording and measuring devices, quality control, flowmeters, level gauges, safety devices, radiation counters, etc. These papers represent contributions of various Soviet institutes and laboratories. They have appeared in the Transactions of the All-Union Conference on the Use of Radioisotopes and Stable Isotopes and Radiation in National Economy and Science, April 4-12, 1957. At least of the papers are mentioned: Baekov, I.M.; A.M. Bogachev, L.A. Brodskiy, B.I. Verkhovskiy, A.N. Mekarov, N.S. Kopyshenya, and L.A. Rubinshteyn (Central labor. avtomatiki Min-va Chern. Metallurgii SSSR); Lit. Institut Leningrad, Stal'proukhatny i provolochno-kannomy zavod; metal-lurg. zavod "Zaporozhstal"; imeni Ordzhonikidze - Central Automation Laboratory of the Ministry of Ferrous Metallurgy, USSR; Institute of Physics imeni P.N. Lebedev, Academy of Sciences, USSR; Leningrad Steel Rolling Mill and Steel Rope Plant; Metalurgical Plant "Zaporozhstal" imeni Ordzhonikidze). Use of Absorbents for the Measurement of the Thickness of Rolled Steel and Coatings 236

Novoshenya, M.S. (Dnepropetrovskiy zavod "Zaporozhstal" - Dnepropetrovsk "Zaporozhstal" Plant). Use of Thickness Gauge at the "Zaporozhstal" Plant 240
 Takkar, I.M., and V.A. Yanushkovskiy (Institut fiziki Akademiya nauk Latvyskoy SSR - Institute of Physics, Academy of Sciences, Latvian SSR). Consideration of the Control-Signal Statistics in Recording Radioactive Radiation With Relay-type Instruments 241
 Lazhnevskiy, V.K., V.V. Lyudin, S.V. Medvedev, Yu. S. Piskvin, L.K. Tatrochenko, and V.I. Shul'ga (Institut metalovedeniya i fiziki metallov IMIChM - Institute of Metallography and the Physics of Metals, IMIChM). Certain Problems in Designing Gamma-Ray Level Indicators 247

Oucharenko, Ya. Ya. (Konstruktorskoye byuro "Vavetstatartekhnika" NIK SSSR - Design Engineering Office of "Vavetstatartekhnika"; USSR). Use of Scintillation Counters With Electron Modulation for Gamma Radiation Recording 252

Shpor, K.K., and V.A. Yanushkovskiy (Institut fiziki AN Latvyskoy SSR - Institute of Physics, Academy of Sciences, Latvian SSR). Portable Radioactive Level Indicators 255
 Briik, Ya.A., Level Indicator for Free-Flowing Materials 258

SHPOR, K.K.; YANUSHKOVSKIY, V.A.

Using radioisotopes in checking production processes by standard
equipment. Biul.tekh.-ekon.inform. no.2:29-30 '58. (MIRA 11:4)
(Radioisotopes--Industrial applications)
(Electronic instruments)

SHIR, K K

137

PHASE I BOOK EXPLOITATION

SOV/5486

Vsesoyuznoye soveshchaniye po vnedreniyu radioaktivnykh izotopov i yadernykh izlucheniya v narodnoye khozyaystvo SSSR. Riga, 1960.

Radioaktivnyye izotopy i yadernyye izlucheniya v narodnom khozyaystve SSSR; trudy soveshchaniya v 4 tomakh. t. 1: Obshchiye voprosy primeneniya izotopov, pribory s istochnikami radioaktivnykh izlucheniya, radiatsionnaya khimiya, khimicheskaya i neftepererabatyvayushchaya promyshlennost' (Radioactive Isotopes and Nuclear Radiations in the National Economy of the USSR; Transactions of the Symposium in 4 Volumes. v. 1: General Problems in the Utilization of Isotopes; Instruments With Sources of Radioactive Radiation; Radiation Chemistry; the Chemical and Petroleum-Refining Industry) Moscow, Gostoptekhizdat, 1961. 340 p. 4,140 copies printed.

Sponsoring Agency: Gosudarstvennyy nauchno-tekhnicheskiy komitet Soveta Ministrov SSSR, and Gosudarstvennyy komitet Soveta Ministrov SSSR po ispol'zovaniyu atomnoy energii.

Ed. (Title page): N.A. Petrov, L.I. Petrenko and P.S. Savitskiy; Eds. of this Vol.: L.I. Petrenko, P.S. Savitskiy, V.I. Sinitsin, Ya. M. Kolotyarkin, N.P. Syrkus and R.F. Rozm; Executive Eds.: Ye. S. Levina and B. F. Titskaya; Tech. Ed.: E.A. Mukhina.

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Radioactive Isotopes (Cont.)

SOV/5486

PURPOSE: The book is intended for technical personnel concerned with problems of application of radioactive isotopes and nuclear radiation in all branches of the Soviet economy.

COVERAGE: An All-Union Conference on problems in the introduction of radioactive isotopes and nuclear radiation into the national economy of the Soviet Union took place in Riga on 12-16 April 1960. The Conference was sponsored by: the Gosudarstvenny nauchno-tekhnicheskiy komitet Soveta Ministrov SSSR (State Scientific and Technical Committee of the Council of Ministers, USSR); Glavnoye upravleniye po ispol'zovaniyu atomnoy energii pri Sovete Ministrov SSSR (Main Administration for the Utilization of Atomic Energy of the Council of Ministers, USSR); Academy of Sciences, USSR; Gosplan USSR; Gosudarstvennyy komitet Soveta Ministrov SSSR po avtomatizatsii i mashinostroyeniyu (State Committee of the Council of Ministers, USSR, for Automation and Machine Building) and the Council of Ministers of the Latvian SSR. The transactions of this Conference are published in four volumes. Volume I contains articles on the following subjects: the general problems of the Conference topics; the state and prospects of development of radiation chemistry; and results and prospects of applying radioactive isotopes and nuclear radiation in the petroleum refining and chemical industries. Problems of designing and manufacturing instruments which contain sources of radioactive radiation and are used for checking and automation of technological processes are examined, along with problems of accident prevention in their use. No personalities are mentioned. References accompany some of the articles.

Card 2/12

Radioactive Isotopes (Cont.)

SOV/5486

- Karpov, V.L. Prospects of Industrial Application of Radiation Chemistry in the USSR and Abroad 42
- Zhernov, V.S., and S.V. Mamikonyan. New Industrial Checking and Measuring Apparatus for Operation With Radioactive Isotopes and Radiation 49

INSTRUMENTS WITH RADIOACTIVE RADIATION SOURCES

- Lade, G.I., K.K. Shpor, and V.A. Yanushkovskiy. Instruments With Radioactive Radiation Sources Manufactured at the Tallin Experimental KIP [Checking and Measuring Instrument] Plant 69
- Gol'din, M.L., A.P. Krivchikov, and M.S. Gorodetskaya. Instruments With Radioactive Radiation Sources Manufactured at the Khar'kov KIP Plant 75
- Sul'kin, A.G. [Present] State and Prospects of the Construction and Manufacture of γ -Apparatus at the "Mosrentgen" Plant 80
- Atopkina, M.S., V.A. Kiryukhin, I.A. Prager, A.D. Tumul'kan, V.G. Chaykovskiy, and V.A. Yamushkovskiy. Low-Voltage Gas-Discharging Counters in the Radioactive Pickups of Apparatus for Technological Checking of Production 88
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Radioactive Isotopes (Cont.)

SOV/5486

- Svilans, M.P. Development of Instruments Using Radioactive Isotopes at the VEF Plant 131
- Barabanov, B.V., E. Ya. Vaynu, V.M. Znamenskiy, K.K. Shpor, and V.A. Yamushkovskiy. Standardization of Instruments With Radioactive Isotope Sources for Measuring the Thickness of Sheet Materials and Coatings 134
- Zhdanov and Makarov. High-Speed Automatic Signal Indicator for Detecting the Breaking Out of Fires 137
- Balabina, G.V. Utilization of Bremsstrahlung X-Ray Radiation for Materiology 141
- Arkhangel'skiy, A.A., and S.A. Stepanov. Instruments for Checking Air and Surface Pollution by Soft β -Radiators 144
- Starik, I. Ye., V.P. Shamov, Kh. A. Arslanov, and A.P. Zharkov. Measurement of Small Quantities of C^{14} by the Scintillation Method 147
- Vasil'yev, A.G., and K.S. Klempner. Methods of Comparative Testing of Relays With Radioactive Sources and Problems of Terminology in the Definition of Basic Parameters 151

Card 6/12

S/263/62/000/005/005/010
1007/1207

Authors: Lade, G. I., Shpor, K. K., Yanushkovskiy, V. A.

Title: RADIOACTIVE MEASURING DEVICES PRODUCED BY THE TALLIN OPTICAL PLANT OF CONTROL -MEASURING DEVICES (KIP)

Periodical: Referativnyy zhurnal, Mashinostroyeniye, no. 5, 1962, 61 abstract 32.5.340 (In sb. "Radioakt. izotopy i yadern. izlucheniya u nar. kh-ve SSSR" v. 1, 1961, 69-74, Moscow, Gostoptekhizdat).

Text: The Tallin optical plant for control measuring devices started in 1959 the mass production of radioactive instruments of the relay type for automation of production processes. These instruments are assembled of standard components: beta and gamma radiation sources, radioactive transducers and electronic relay units of the УРАП (URAP) type. These standard components form the basis of the following apparatus: radioactive multiposition level-controllers of the РПРУ-1 (RPRU-1) type consisting of a single-position or a two-position РД-11 (RD-11) radioactive transducer and of the electronic relay units УРАП-3 (URAP-3) or УРАП-2 (URAP-2); the radioactive source consists of a float containing a cobalt 60 isotope or cesium 137 isotope; the РПРУ-3 (RPRU-3) type containing one or two radioactive РД-9 (RD-9) transducers and a standard radioactive beta source БИ-2 (BI-2); radioactive blocking devices: of the БРП-1 (BRP-1) type consisting of the radioactive РД-6 (RD-6) transducer, a УРАП-3 (URAP-3) unit and a БИ-2 (BI-2) source; the БРП-2 (BRP-2) type comprising instead of the radioactive РД-6 (RD-6) transducer, a small size РД-10 (RD-10) transducer; radioactive РК-4 (RK-4) controller for regulating the degree of filling of nontranslucent vessels by liquids; this controller is assembled of the radioactive РД-10 (RD-10) transducer:

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S/263/62/000/007/003/014
1007/1207

AUTHOR: Barabanov, B. V., Vaynu, E. Ya., Znamenskiy, V. M., Shpor, K. K. and Yanushovskiy, V. A.

TITLE: Standard radioactive thickness gage for measuring the thickness of coatings and sheet materials

PERIODICAL: Referativnyy zhurnal, otdel'nyy vypusk. Ismeritel'naya tekhnika, no. 7, 1962, 11, abstract 32.7.70. Collection "Radioakt. izotopy i yadern. izlucheniya v nar. kh.-ve SSSR", Moscow, Gostoptekhizdat, v. 1, 1961, 134-140

TEXT: The economic effectiveness of standard radioactive thickness gages for the routine production control of various sheet materials is stressed. It is shown that standardization of radioactive measuring instruments, apart from conventional advantages (improved mass production, reduced prime cost, interchangeability, etc.) permits the use of standard radioactive sources. The paper presents data on the following radioactive measuring instruments produced at the Tallin pilot plant for control and measuring instruments:
1) Noncontact weighing gage of the БИВ-1 (BIV-1) type for continuously measuring the weight of a coating applied to a fabric. The gage works on the compensation principle and is provided with two ionization chambers. The weight-measuring range for surface coatings varies from 200 to 800 g/m², and the accuracy is 2%. The gages work with a Tl²⁰⁴ source; 2) The noncontact gamma-thickness gage of the ИТУ-495 (ITU-495)

Card 1/2

Ca1

PLESHCHENKO, I.V.; SHPORA, L.D.

Characteristics of the rhythms of the stratification of the
Naukat manifestation of cuprous sandstone. Nauch. trudy TashGU
no.256 Geol. nauki no.22:120-127 '64 (MIRA 18:2)

Morphology of the outcrop of fluvial sandstones of Brown series
in the southern wing of the Supetau anticline in northwestern
Fergana. Ibid.:128-131

Sedimentations of the lacustrine and bog facies of the Brown
series of the Lower and Middle Pliocene in the Supetau.
Ibid.:132-135.

SHFORA, L.D.

Epigenetic formation of cuprous sandstones in Naukat. Nauch.
trudy TashGU no.25: Geol. nauki no.22:136-139 '64
(MIRA 18:2)

GORYANIN, A.B.; SHPORA, L.D.

History of the relief of the Naukat ore manifestation in connection with the genesis of ores. Nauch. trudy TashGU no.256
Geol. nauki no.22:140-144 '64 (MIRA 18:2)

MOGUZOV, V.I.; SHPORIN, N.S., otv. red.; GERASIMOVA, Ye.S., tekhn.
red.

[Machine tools; brief manual] Metallorezhushchie stanki;
kratkii spravochnik. Moskva, Izd-vo ekon. lit-ry, 1961. 815 p.
(MIRA 15:3)

(Machine tools)

UL'YANOV, N.N., inzh.; SHPORKHUN, V.I., inzh.

Distributing device for the refluxing of packed columns. Khim.
mashinostr. no.3:3-4 My-Je '63. (MIRA 16:11)

SHPORN, A.B.

Hygienic evaluation of taste-stimulating substances. Trudy
LSGMI 25:88-104 '55. (MIRA 12:8)

1. Kafedra gigiyeny pitaniya (zav. kafedroy - dotsent .Z.M.
Agranovskiy) i Kafedra farmakologii (zav. kafedroy - deystv.
chlen AMN SSSR, prof. S.V.Anichkov) Leningradskogo sanitarno-
gigiyenicheskogo meditsinskogo instituta.

(VEGETABLES,

onions, eff. on appetite (Rus))

(GARLIC, effects,

on appetite (Rus))

(APPETITE, physiology,

eff. of garlic & onions (Rus))

SHPORN, A.B., PERETSIANU, Zh.M., GAL'PERIN, Zh.S.

Investigation on toxicity of chemical food additives. Vop.dit.
17 no.4:48-53 Je-Ag '58 (MIRA 11:7)

1. Iz otdela gigiyeny pitaniya (zav. - kand.med.nauk A.B. Shporn)
Instituta gigiyeny i zdravookhraneniya Rumynskoy Narodnoy Respubliki,
Bukharest.

(FOOD,
additives, tox. (Rus))

YEPINAT'YEVA, A. M. ; IVANOV, L. A. ; KUN, V. V. ; SHEPORT, L. P.

Some problems relative to seismic prospecting in the Paleozoic
foundation in Western Siberia. Trudy Inst. fiz. zem. no.12:3-67
'60. (MIRA 13:10)

(Siberia, Western--Seismic prospecting)

SOLLOGUB, V.B.; CHEKUNOV, A.V.; PAVLENKOVA, N.I.; GARKALENKO, I.A.;
KHILINSKIY, L.A.; SHPORT, L.P.

Crustal structure of the Crimean plain and Sivash region
according to geophysical data. Sov. geol. 7 no.8:44-56
Ag '64. (MIRA 17:10)

1. AN UkrSSR.

RYNG, V.M., inzh.; SHPORT, N.S., inzh.; GAVRUTSKIY, A.Ye.; MUSHINSKIY, G.N.

Folding metal sheathing in Krivoy Rog Basin mines. Shakht.stroi.
4 no.2:15-19 F '60. (MIRA 13:5)

1. Rudoupravleniye imeni Dzerzhinskogo Nauchno-issledovatel'skogo
geolog-razvedochnogo instituta, g.Krivoy Rog.
(Krivoy Rog--Iron mines and mining)
(Shaft sinking)

GAVRUTSKIY, A.Ye.; MUSHINSKIY, G.N.; SHPORT, N.S.

Using metallic folding formwork in shaft sinking. Sbor. nauch.
trud. NIGRI no.7:11-14 '60. (MIRA 14:12)
(Shaft sinking)
(Concrete construction—~~Formwork~~)

SHPORTENKO, O.I., inzhener.

Experience in using rapid drying mold mixes for cast iron and
steel founding. Lit. proizv. no.3:32 Mr '57. (MLBA 10:4)
(Iron founding) (Steel castings) (Sand, Foundry)

1ST AND 2ND ORDERS PROCESSES AND PREPARATIONS 3RD AND 4TH ORDERS

1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49 50 51 52 53 54 55 56 57 58 59 60 61 62 63 64 65 66 67 68 69 70 71 72 73 74 75 76 77 78 79 80 81 82 83 84 85 86 87 88 89 90 91 92 93 94 95 96 97 98 99 100

CA 7

Determination of copper in steels by the cyanide method.
P. I. Shportenko and V. F. Garan. *Zavodskaya Lab.* 7, 1189(1938).- In the method of Shkotova (C. A. 32, 45P), the dissolving of Cu in dil. H₂SO₄ cannot be prevented entirely by introducing an Fe wire. Any traces of Cu in the soln. are best removed with Na₂S₂O₅. C. B.

ASB-SLA METALLURGICAL LITERATURE CLASSIFICATION

1ST AND 2ND LETTERS 3RD AND 4TH LETTERS 5TH AND 6TH LETTERS

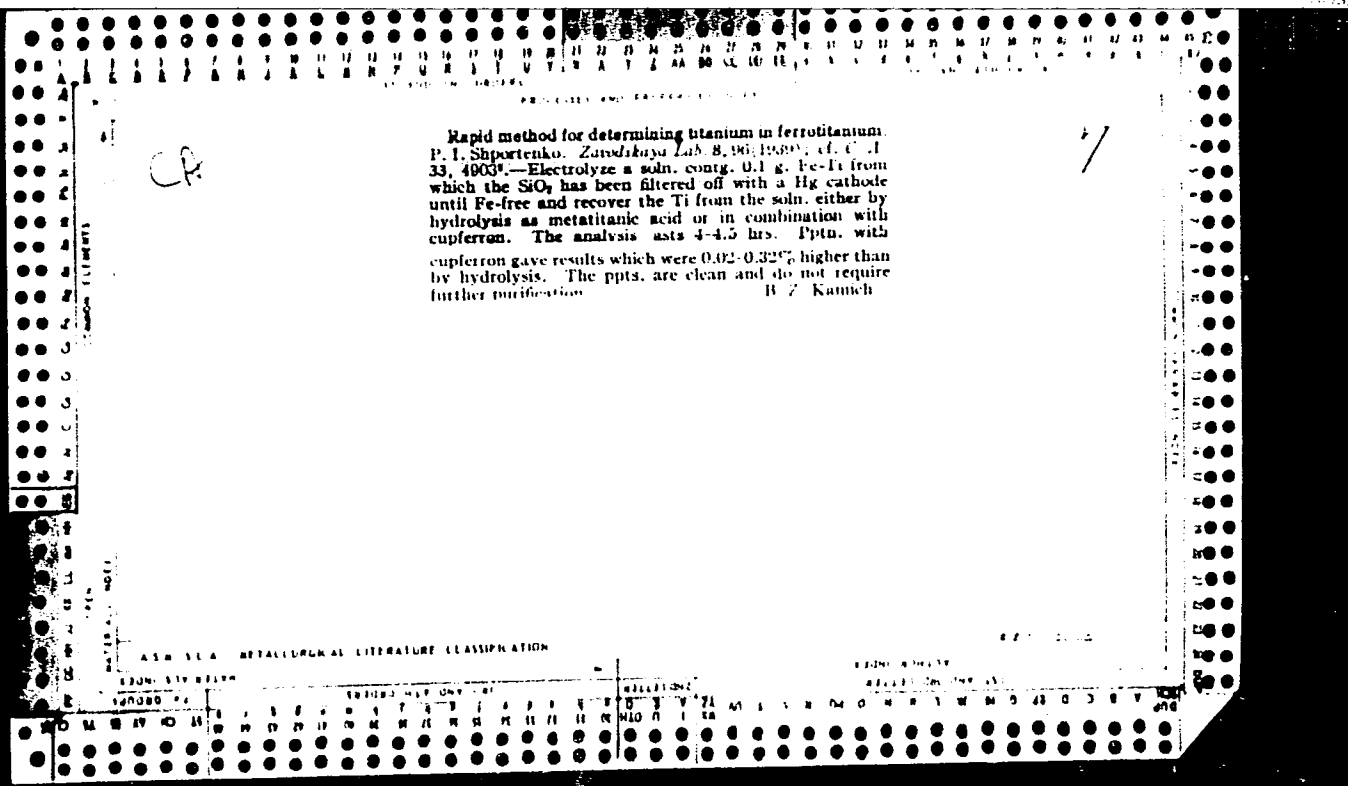
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49 50 51 52 53 54 55 56 57 58 59 60 61 62 63 64 65 66 67 68 69 70 71 72 73 74 75 76 77 78 79 80 81 82 83 84 85 86 87 88 89 90 91 92 93 94 95 96 97 98 99 100

TITANIUM AND TITANIUM ORES

Determination of titanium in ores by electrolysis with a mercury cathode. *I. I. Shporenko - Zashchita Laz 7, 1431(1038).* -Ppt. 0.2 g. of Ti ore with Na_2CO_3 + K_2CO_3 , leach the melt with dil. HCl, neutralize with 20% NaOH to phenolphthalein, boil, add 15-20 ml. NaOH, digest the soln. at 60-70° for 10-15 min. and filter. Wash the Fe + Ti ppt., transfer it to the same flask with a little H_2O and 25 ml. of hot 50% HCl, evap. the soln. to 2-3 ml., add 10 ml. HCl and 2-2.5 g. of concd. H_2SO_4 and evap. to fumes. Dissolve the residue in 40-50 ml. H_2O with gentle heating (to prevent the hydrolysis of TiSO_4), filter, wash the SiO_2 with hot H_2O , cool, dil. to 200 ml. and ppt. Fe in an aliquot part (100 ml) by electrolysis with the Hg cathode at 3-3.5 amp. Det. Ti in the filtrate (1) by pptg. Ti with 3% cupferron and 5 ml. HCl or (2) by hydrolyzing with the addn. of 300 ml. H_2O by boiling for 1 hr., filtering off FeO , washing it with hot H_2O and 1% AcOH , igniting and weighing. 7

Chas. Blau

ANAL. METALLURGICAL LITERATURE CLASSIFICATION



02 7

The substitution of calcium hydroxide for cadmium and zinc acetates in the determination of sulfur by the method of Schulte. P. I. Shportenko and V. F. Garan. *Zavodskaya Lab.* 8, 604-6(1939); *Chem. Zentr.* 1940, II, 2189.—Ca(OH)₂ can be used instead of Cd and Zn acetates for the absorption of the H₂S in the detn. of S in iron and steel. About 50-60 g. of pure CaO in a l. flask is treated with hot water in small portions, shaken well and filtered. About 100-120 cc. of the soln. is used in a wash bottle for the absorption of the H₂S. The white ppt. is treated with excess I₂, dissolved in excess HCl and the detn. is completed according to the method of Schulte.

M. G. Moore

Microfilm frame containing a document page. The page is titled "DETERMINATION OF CHROME IN ACID SLAGS" and includes a detailed procedure for analysis. The document is surrounded by a perforated border with labels for various sections: "1ST AND 2ND LETTERS", "3RD AND 4TH ORDERS", "WATERIALS INDEX", "COMMON ELEMENTS", "PROPERTIES AND PROPERTIES INDEX", "1ST AND 2ND ORDERS", "3RD AND 4TH ORDERS", "COMMON ELEMENTS", and "PROPERTIES AND PROPERTIES INDEX".

R

Budaev, S. V., and Shportenko, P. I. DETERMINATION OF CHROME IN ACID SLAGS. *Zapovedskaya Lab.*, 9, 1028 (1940).—Instead of being fused with sodium peroxide with a subsequent separation of the precipitate, the sample is dissolved in a sulfophosphoric mixture, 15 ml. H₃PO₄ (1.70) + 85 ml. H₂SO₄ (1:4) in the presence of 2 to 3 gm of fluoride. Vd can then be determined without any separate fusing together.

19

CA

PROCESSES AND PROPERTIES INDEX

Preparation of ammonium molybdate from ferromolybdenum. P. I. Shportenko. *Zavodskaya Lab.* 13, 1502 (1947). -Powd. ferromolybdenum is dissolved in cold HNO₃ (d. 1.2), neutralized with 12% NH₄OH (in excess), the blue soln. is filtered, evapd., and the product is dried at 120-30°.

G. M. Koval'soff

ASB-31A METALLURGICAL NATURE CLASSIFICATION

1ST AND 2ND LETTERS

COMMON VARIANTS INDEX

PROCESSES AND PROPERTIES INDEX

H

3772. CORES WITH COAL TAR PITCH. Shportenko, P. I. (Stal, 1948, (3), 268-271). An account is given of a successful investigation into the possibility of applying coal-tar pitch in the foundry as a core-binder, with particular reference to the following points: Amount of gas produced by coal-tar pitch mixtures and the effect of this on the quality of the casting; their screen analysis, giving the necessary porosity; the effect on the cohesion of mixtures of the pitch at high temperatures and under considerable hydrostatic pressure by the metal; the strength of the cores after drying and their behaviour during casting (i.e., pliability and thermal stability); the hygroscopic nature of coal-tar pitch cores, their adhesion to the pattern and their ability to retain a given shape. The coal-tar pitch was introduced into the core mixture either as an emulsion or as a fine powder. It is stated that certain other materials, such as manure, sawdust, coal, etc., give satisfactory cores when added to silica sand.

I.S.I.

METALLURGICAL LITERATURE CLASSIFICATION

CLASSIFICATION

Shportenko, P. I.

PA 3/49T10

USSR/Chemistry - Laboratories, Industrial Aug 48
Chemistry - Analysis

"Progressive Standards - Fundamental Indication of
the Work of a Laboratory," P. I. Shportenko,
Sr Res Engr, Novo-Kramatorsk Mach Bldg Factory
imeni I. V. Stalin, 3 pp

"Zavod Lab" Vol XIV, No 8

Shportenko describes equipment and work of his
laboratory: analysis of ferrous and nonferrous
metals, slags, fuels and gases. Tabulates time
taken for various determinations.

~~3/49T10~~
3/49T10

1ST AND 2ND ORDERS PROCESSES AND PROPERTIES INDEX 3RD AND 4TH ORDERS

5 21

A MECHANICAL MORTAR. P. I. Shportenko. (Zavolnskaya
Laboratoriya, 1949, vol. 15, Jan., pp. 125, 126). (In Russian).
A mechanically operated mortar is described, which, working
at about 1 kW., can crush an average sample of cast iron, slag
or ferrosilicon in 10 to 15 min., the time for a sample of ferro-
chromium being 90 min. S. K.

ASS-SLA METALLURGICAL LITERATURE CLASSIFICATION

GROUP	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80	81	82	83	84	85	86	87	88	89	90	91	92	93	94	95	96	97	98	99	100
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SHFORTENKO, P. I.

PA 233T77

USSR/Metallurgy - Foundry, Materials

Sep 52

"Water-Resisting Coatings for Wooden Patterns," P.I.
Shportenko, Engr

"Litey Proizvod" No 9, pp 18-21

Discusses protection of patterns by coating with oil
paints, varnishes, nitro-lacquers, nitro-enamels, and
polishes. Presents in tabulated form tech character-
istics of various materials recommended for painting
patterns, listing compn of some products, application,
thinners, etc.

233T77

SH:ORTENKO, P. I.

γ
①

Some experiments in making foundry molds with water glass. P. I. Shportenko. *Litinae Proizvodstvo* 1953, No. 8, 17-18. ~~Molds having~~ 10-15 kg./sq. cm tensile strength when dry are made with a mixt. of 89.5-90.5% sand, 3-4% fat clay, and 6.5-7.5% water glass with the $SiO_2:Na_2O$ ratio of 2.2-2.5. Molds are dried at 250° on the floor and at 300-360° in the ovens, since higher temp. cracks molds by steam generation under hardened case. Sticking of sand to the pattern is prevented by rubbing it with graphite.

J. D. Gat

SHPORTENKO, P.I.

Experimental use of liquid glass in the manufacture of casting molds. Lit.
proizv. no.8:19-20 Ag '53. (MLRA 6:8)
(Founding)

SHPORTENKO, P.I.

Chill casting of vessels. Lit.proizv. no.2:25-27 F '55.
(Die casting)

(MIRA 8:4)

Shportenko, P. I.

Distr: 4E2c

18
Preventing Sticking with Large Castings. P. I. Shportenko.
(Litsinoe Proizvodstvo, 1937, (3), 27). [In Russian]. Experi-
ence at the Novo-Kramatorsk metallurgical works in the
production of large castings using various mould and core
mixtures is briefly described. Good surfaces were obtained
with mixtures of 100 parts by weight of chromite ironstone,
2-3% of 1.27 sp.gr. sulphite lye and 5.5-6% water. — a, 5
RT

3
1

SHPORTENKO, P.I., inzhener.

Control of sticking of large castings. Lit. proizv. no.2:27 F '57.
(Founding) (MLRA 10:4)

SEPORTENKO, P.I.

Mold and core finishing. Lit. proizv. no.2:26 F '58. (MIRA 11:3)
(Shell molding (Founding)) (Coremaking)

PLEASE I DON'T UNDERSTAND

Moscow. Theoretical and experimental study of the process of the formation of risers in castings.

Primeniya khimicheskikh slonov dlya razresheniya zadach razliva metallov. Khimicheskie smesi dlya razliva metallov. Khimicheskie smesi dlya razliva metallov. Khimicheskie smesi dlya razliva metallov.

Additional Comments: Moscow. Khimicheskie smesi dlya razliva metallov. Khimicheskie smesi dlya razliva metallov. Khimicheskie smesi dlya razliva metallov.

PURPOSE: This collection of articles is intended for engineers and metallurgs of re-rolling plants.

COMMENTS: Articles of this collection review various methods of increasing the yield of suitable castings by preheating risers with the aid of exothermic mixtures. Comments and conclusions of the authors are indicated. Higher yields, higher quality of castings, and lower metal are pointed out by authors. The advantages derived by the process of preheating of risers by exothermic mixtures are described. The conditions for different types of risers and sleeves are described. No precautions are mentioned. There are no references.

TABLE OF CONTENTS:

Alshbachina, O.M., G.A. Evtich, N.G. Solov'yeva, and O.J. Yablonovich. Increasing the Yield of Suitable Castings by Preheating Risers With the Aid of Exothermic Mixtures 3

Shporenko, P.I. Exothermic Mixtures Used for Heating Risers of Nonferrous Metals 24

Manzhik, A.F., and B.K. Dymchik. Preheating of Risers With Exothermic Mixtures 32

AVAILABLE: Library of Congress (10236477)

VK/ps/ky
6-30-68

SHPORTIY, N.Ya., kand.ekonomicheskikh nauk

Economic efficiency of the manufacture of reinforced structural
details from lime-sand autoclaved concrete. Sbor. trud. ROZNIIMS
no.17:146-155 '60. (MIRA 14:12)
(Sand-lime products)

SHPORTIY, N. Ya., kand. ekonom. nauk; LINESKIY, Ya.I., inzh.;
GINDINA, I.M., inzh.

Developing the production and use of perlite concrete elements
and products using perlites from the Mukhor-tala deposit in
the Buryat A.S.S.R. Sbor. trud. BOCSNIIMS no.25:160-165 '62
(MIRA 17:8)

NAUMOV, M.M., kand.tekhn.nauk; SHPORTIY, N.Ya., kand.ekonomicheskikh nauk

"Economic efficiency of organizing wall material enterprises"
by IA.A.Rekitar. Reviewed by M.M.Naumov, N.IA.Shportii. Stroi.
mat. 7 no.6:40 Je '61. (MIRA 14:7)
(Building materials industry)
(Rekitar, IA.A.)

REKITAR, Ya. A., kand. ekon. nauk; BOBYLEVA, N. M., inzh.;
CHULITSKIY, S. P., inzh.; SHER, B. M., inzh.; SHPORTIY, N. Ya.,
kand. ekon. nauk

Economic efficiency of producing and using silicate-concrete
elements in construction. Stroi. mat. 8 no.9:3-8 S '62.
(MIRA 15:10)

(Sand-lime products)
(Building materials industry)

SHPORTIY, N.Ya., kand.ekon.nauk; BOBYLEVA, N.M., inzh.

Present state of the production of large silicate products. Sbor.
trud. ROSNIIMS no.20:126-139 '61. (MIRA 16:1)
(Sand-lime products)

L 62531-65 EPF(c)/EWP(z)/EWA(c)/EFT(m)/EWP(t)/T/EWA(d)/EWP(w)/EWP(t) MJW/JD/WB

ACCESSION NR: AP5012654

UR/0369/65/001/002/0209/0213

AUTHOR: Boltarovich, A. V.; Pokhmurskiy, V. I.; Tabinskiy, K. P.; Shportko, V. P.

TITLE: The effect of heat treatment on the structure, mechanical properties and corrosion properties of VTZ-1 alloy

SOURCE: Fiziko-khimicheskaya mekhanika materialov, v. 1, no. 2, 1965, 209-213

TOPIC TAGS: metal mechanical property, corrosion resistance, titanium alloy, heat treatment

ABSTRACT: The effects of heat treatment on the structure, mechanical properties, and corrosion properties of VTZ-1 alloy are studied. Alloy composition: Cu--0.06, Si--0.22, Cr--1.7, Fe--0.32, Al--5.03, N₂--0.032, H₂--0.015, Mo--2.64, Ti--remainder. Tests show that the duration of holding during annealing greatly affects the mechanical properties and corrosion properties of VTZ-1 alloy. At the recommended aging temperature (500°C) a maximum increase in mechanical properties occurs in a comparatively short holding time (nearly 2 hours). The alloy acquires maximum corrosion resistance to sulfuric acid with a second heating for 2-5 hours. The reannealing temperature also greatly affects the mechanical and corrosion properties of the al-

Card 1/2

L 62531-65

ACCESSION NR: AP5012654

loy. The alloy attains maximum mechanical properties and considerable corrosion resistance at an annealing temperature of 600°C. Minimum corrosion resistance is observed after reannealing near 700°C. Orig. art. has: 5 figures, 1 table.

ASSOCIATION: FMI AN UkrSSR, Lvov

SUBMITTED: 07Jan65

ENCL: 00

SUB CODE: MM

NO REF SOV: 003

OTHER: 000

cc
Card 2/2

ARKHIPETS, Ye.Ya. (Kiyev); BONDAROVICH, I.M. (Khar'kov); BULANOV, V.N. (Kiyev);
GALUSKIN, V.B. (Kiyev); GOGOTSI, G.A. (Nikolayev); GORBUNOVA, N.N.,
(Kiyev); GORLITSKIY, B.A. (Kiyev); DYADYUSHA, G.G. (Kiyev); KATSHEL'SON,
I.Ye. (Dnepropetrovsk); KVITCHUK, E.A. (Kiyev); KIRILLOV, I.A., (Krym)
KONOPLYASOVA, N.S. (Chernovtsy); NIKOL'SKIY, V.V. (Kiyev); PONOMARENKO,
A.A. (Stanislav); PESCHANSKIY, A.I. (Kiyev); POPOV, V.N. (Kiyev);
PTASHNIKOVA, I.V. (Uzhgorod); STESHENKO, N.G. (Kiyev); CHAYKIN, M.M.
(Vinnitsa); SHAPOSHNIKOVA, N.N. (Kiyev); SHCHETLYUK, V.I. (Kiyev);
YANKO, N.M. (Stalinskaya oblast'); SVECHNIKOVA, N., redaktor;
SMORODSKIY, V., tekhnicheskij redaktor

[Tourist routes through the Ukraine] Turistskie marshruty po Ukraine.
Kiev, Izd-vo TsK LKSMU "Molod'," 1957. 368 p. (MLBA 10:8)
(Ukraine--Description and travel)

KOLOBKOV, Nikolay Vasil'yevich [Kolobkov, M.V.]; KUVSHINOVA, K.V., kand.
fiz.-matem.nauk, retsenzent; SHPORTYUK, V.I., red.; VOLKOVA,
N.K., tekhn.red.

[The atmosphere and life in it] Povitrianyi okean i ioho zhyttia.
Perekl. z dr.perer. i dop. vyd. geogr. Kyiv, Derzh.uchbovo-
pedagog.vyd-vo "Radiants'ka shkola," 1958. 232 p. (MIRA 14:4)

(Meteorology)

KHIZHNYAK, Andrey Andreyevich [Khyzhniak, Andrii Andriiovych]; SHPORTYUK,
V.I. [Shportiuk, V.I.], red.; PIPA, L.D. [Pypa, L.D.], red.kart;
GORBUHOVA, N.M. [Horbunova, N.M.], tekhn.red.

[Zaporozh'ye Province; geographical study] Zaporiz'ka oblast';
geografichnyi narys. Kyiv, Derzh.uchbovo-pedagog.vyd-vo "Ra-
dians'ka shkola," 1959. 123 p. (MIRA 13:5)
(Zaporozh'ye Province--Geography)

KOVALEVSKAYA, Tat'yana Nikolayevna [Kovalevs'ka, T.M.]; SHPORTYUK, V.I.
[translator]; MEZHINIPAPA, V.Ya. [Nezhnypapa, V.IA.], red.;
LEBEDEV, I.P. [Lebediev, I.P.], red. kart; GORBUNOVA, N.M.,
[Horbunova, N.M.], tekhn. red.

[Lvov Province; geographical study] L'vivs'ka oblast'; geografichnyi
narys. Kyiv, Derzh. uchbovo-pedagogo. vyd-vo "Radiants'ka shkola,"
1961. 122 p. (MIRA 15:3)

(Lvov Province--Geography)

MARINICH, Aleksandr Mefod'yevich[Marynych, O.M.]; SHPORTYUK, V.I.,
red.; LEBEDEV, I.P., red. kart.; GORBUNOVA, N.M., tekhn.red.

[Ukrainian Polesye; physicogeographical sketch]Ukrains'ke
Polissia; fizyko-geografichnyi narys. Kyiv, Radians'ka shkola,
1962. 161 p. (MIRA 16:2)
(Polesye---Physical geography)

YANKO, Nikolay Timofeyevich; ~~SHPORTYUK, V.I.~~, red.; GORBUNOVA, N.M.
[Horbunova, N.M.], tekhn. red.

[Home-made visuals aids for geography and how to work with
them] Samorobni naochni posibnyky z geografii ta rabota z
nymy. 2., perer. i dop. vyd. Kyiv, Radians'ka shkola, 1962.
184 p. (MIRA 16:4)
(Geography--Audio-visual aids)

VISHNYAKOV, Valentin Vasil'yevich [Vyshniakov, V.V.]; BEZUGLYY, A.M.
[Bezuhliy, A.M.], kand. geol.-miner. nauk, red.; SHPORTYUK,
V.I., red.; GORBUNOVA, N.M. [Horbunova, N.M.], tekhn. red.

[Concised geological dictionary-handbook] Korotkyi geologichnyi
slovnik-dovidnyk. Za red. A.M. Bezuhloho. Kyiv, "Radians'ka
shkola," 1962. 112 p. (MIRA 16:3)
(Geology--Dictionaries)

SHPORIGIN, P. P.

USSR/Physics - Polarization

21 May 51

"Depolarization of Lines in the Spectra of Combination Scattering of Light," P. P. Shporygin

"Dok Ak Nauk SSSR" Vol LXXVIII, No 3, pp 469-472

Shporygin found faster method to measure deg of depolarization of spectral lines. His expts prove deg of depolarization of local oscillations of carbonyl group $C=O$ depends on geom configuration of the whole syst of conjugate multiple bonds. Submitted 24 Mar 51 by Acad G. S. Landsberg.

186T107

SHPOTA, A.I.

G.A. Evtushenko's simplified transpirometer; method of construction
and principles of use. Uch. zap. Biol.-pochv. fak. Kir. un.
no.7:77-81 '58. (MIRA 15:10)
(Plants—Transpiration)

SHPOTA, G.P.; BOGATSKIY, MA.; VISHNEVSKIY, V.M.

Demineralization of antibiotic solutions of the basic type by
means of sulfocationites. Antibiotiki 7 no.8:714-718 Ag '62.
(MIRA 15:9)

1. Institut fizicheskoy khimii imeni L.V.Pisarzhhevskogo AN UkrSSR
i Zavod meditsinskikh preparatov, Kiyev.
(ION EXCHANGE RESINS) (ANTIBIOTICS)

ШПОТЯ
POPOVA, L.I.; PROSKURNIKOVA, T.A.; KIRSANOVA, Yu.V.; SHPOTYA, L.A.

Tau-saghyz species of Kirghizia. Trudy Inst.bot. i rast.KirFAN
SSSR no.1:11-23 '54. (MIRA 10:1)
(Kirghizistan--Tau-saghyz)

HHH

SHPOTA, L. A., Cand Biol Sci -- (diss) "Physiological peculiarities of apple trees *affected with chlorosis* under conditions of the *Chuykass* Chu Valley." Frunze, 1957. 18 pp (Kirgiz State Univ, Chair of Physiology of Plants), 100 copies (KL, 2-58, 112)

SHPOTA, L.A.

Field apparatus for studying photosynthesis by the method of
tagged atoms with the use of radioactive C^{14} . Uch. zap.
Biol.-pochv. fak. Kir. un. no.7:65-76 '58. (MIRA 15:10)
(Photosynthesis) (Carbon-Isotopes)

SHPOTA, L.A.; YEVTUSHENKO, G.A., red.; ANOKHINA, M.G., tekhn.red.

[Physiological characteristics of apple trees attacked by chlorosis
in the Chu Valley] Fiziologicheskie osobennosti iablon' bolei-
shchikh khlorozom v usloviakh Chuiskoi doliny. Frunze, Akad.
nauk Kirgizskoi SSR, 1958. 32 p. (MIRA 11:4)
(Chu Valley--Chlorosis (Plants))

YEVTUSHENKO, G.A.; SHFOTA, L.A.

Intensity and qualitative directivity of photosynthesis in
chlorotic apple trees. Fiziol.rast. 6 no.6:679-685 H-D '59.
(MIRA 13:4)

1. Department of Plant Physiology, Khirgiz State University,
Frunze.
(Kirghizistan---Chlorosis (Plants)) (Apple---Diseases and pests)
(Plants, Effect of iron on)

YEVTUSHENKO, G.A.; SHPOTA, L.A.; SHKAF, Ye.S.

Photosynthesis and respiration in irrigated sugar beets in relation to the density of stands. Fiziol. rast. 8 no.1:13-18 '61. (MIRA 14:3)

1. Department of Plant Physiology Kirghiz State University, Frunze.
(Kirghizistan--Sugar beets--Irrigation)(Plants--Respiration)
(photosynthesis)

~~SHPOVA, V.I.~~

Allyl-rich mustard-rape hybrids. Masl.-zhir.prom. 25 no.1:20-
22 '59. (MIRA 12:1)

1. Vsesoyuznyy nauchno-issledovatel'skiy institut maslichnykh i
efiromaslichnykh kul'tur. (Oilseed plants)
(Mustard oils)

17(O)

AUTHORS:

Voskresenskaya, G. S., Shpota, V. I.

SOV/20-124-1-56/69

TITLE:

Genetic Neoplasms in Plant Hybrids Between Distant Related Parents and Their Utilization in Breeding (Geneticheskiye opukholi u otdalennykh rastitel'nykh gibridov i ikh ispol'zovaniye v selektsii)

PERIODICAL:

Doklady Akademii nauk SSSR, 1959, Vol 124, Nr 1, pp 195-197 (USSR)

ABSTRACT:

At present genetic neoplasms in the hybrids mentioned in the title are explained by the disturbance of phytohormonal metabolism of the hybrid organism with hereditary elements being disarranged (Refs 4, 5, 7). The author investigated the mentioned neoplasms in hybrids between *Sarepta* mustard (*Brassica juncea* Czern.) and summer rape (*Br. oleifera* Moench. f. *annua*) as well as winter rape (*Br. oleifera* f. *biennis*). Figure 1 shows such formations on the roots. According to the anatomical description (by A. I. Il'ina) secondary and tertiary tissue formations of parenchyma dominate in the zones of growth. They contain a number of vascular bundles and large "hydrozytic" (*gidrotsitnyye*) nodes. The parenchyma cells are abundantly filled with starch. The degree of development of the root growths

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varies considerably: from a small number of pin-head size root tubercles to 100-200 g of weight. In the generations I. - IV. of hybrids there is no difference with respect to development of the neoplasms. The frequency of occurrence of plants with neoplasms runs as follows: F_1 70.1%, F_2 and F_3 52 and 50% and in F_4 only 32.5%. The parent plants did not develop any neoplasms. The hybrids between mustard and summer rape developed more neoplasms (F_1 76% , F_2 52%) than is the case with winter rape (F_1 65% , F_2 25%). The analysis of families in F_3 (Table 2) showed that the F_2 plants with neoplasms inherit the inclination towards the formation of neoplasms to F_3 . Families with neoplasms are morphologically variegated. There is a relation between the occurrence of neoplasms and the constancy of hybrids: among the constant families only 15.8% in F_3 and in F_4 23.8% of the families had neoplasms. From the results obtained the conclusion can be

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drawn that the occurrence of root growths is actually a sign of the unbalanced state of hybrid plants. What is most important is the fact that the missing of neoplasms can be utilized as a new feature in selection towards constancy. There are 1 figure, 3 tables, and 10 references, 4 of which are Soviet.

ASSOCIATION: Vsesoyuznyy nauchno-issledovatel'skiy institut maslichnykh i efiromaslichnykh kul'tur (All-Union Scientific Research Institute of Plants Producing Oil and Volatile Oils)

PRESENTED: September 2, 1958, by A. L. Kursanov, Academician

SUBMITTED: September 1, 1958

Card 3/3

VOSKRESENSKAYA, G.S.; SHPOTA, V.I.

Root tumors in mustard-rape hybrids and their significance for
breeding. Bot. zhur. 46 no.12:1787-1793 D '61. (MIRA 15:1)

1. Vsesoyuznyy nauchno-issledovatel'skiy institut maslichnykh
i efirnomaslichnykh kul'tur, Krasnodar.
(Tumors, Plant)
(Hybridization, Vegetable)

NIKITINA, Ye.V.; PROTOPOPOV, G.F.; ROZHEVITS, R.Yu. [deceased]; POPOVA, K.I.,
KASHCHENKO, L.I.; SMIRNOV, L.A.; TKACHENKO, V.I.; YAKUBOVA, P.A.;
GOLOVKOVA, A.G.; AYDAROVA, P.A.; SHPOTA, Ye.I.; SHEVCHENKO, D.A.;
SHISHKIN, Boris Konstantinovich, professor, doktor biologicheskikh
nauk, nauchnyy redaktor; VVEDENSKIY, A.I., nauchnyy redaktor;
YEVRUSHENKO, G.A., professor, otvetstvennyy redaktor; KOVALEV, V.N.,
otvetstvennyy redaktor; SEREBRYAKOV, V.I., tekhnicheskiy redaktor

[The flora of Kirghizistan; classification of the plants of
Kirghizistan] Flora Kirgizskoi SSR; opredelitel' rastenii Kirgizskoi
SSR. Sost. E.V.Nikitina i dr. Frunze, Izd-vo Akademii nauk Kirgizskoi
SSR. Vol.1. [Pteridophyta, Gymnosperms and Monocotyledons of the
Angiosperms] Paporotnikoobraznye, golosemennye i odnodol'nye iz
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Orkhidnye. 1951. 148 p. Vol.4. [Salicaceae - Polygonaceae] Ivovye -
Grechishnye. 1953. 153 p. Vol. 5. [Families: Chenopodiaceae,
Amaranthaceae, Portulacaceae, Caryophyllaceae] Semeistva: Marevye,
Amarantovye, Portulakovye, Gvozdichnye. 1955. 185 p. Vol. 6.
[Families: Ceratophyllaceae, Ranunculaceae, Berberidaceae,
Papaveraceae, Capparidaceae, Cruciferae] Semeistva: Rogolistnikovye,
Liutikovye, Barbarisovye, Makovye, Kapersovye, Krestotsvetnye. 1955.
297 p. (MIRA 9:10)

1. Chlen-korrespondent Akademii nauk SSSR (for Shishkin)
(Kirghizistan--Botany)

NIKITINA, Ye.V.; AYDAROVA, R.A.; KASHCHENKO, L.I.; UBUKEYEVA, A.U.;
POPOVA, L.I.; TKACHENKO, V.I.; GOLOVKOVA, A.G., SHPOTA, Ye.I.;
FILATOVA, N.S.; SHARASHOVA, V.S.; VVEDENSKIY, A.I., nauchnyy red.;
VYKHODTSEV, I.V., red.; ANOKHINA, M.G., tekhn.red.

[Flora of the Kirghiz S.S.R.; key to the plants of the Kirghiz
S.S.R.] Flora Kirgizskoi SSR; opredelitel' rastenii Kirgizskoi
SSR. Sost: E.V.Nikitina i dr. Nauchn.red. A.I.Vvedenskii. Frunze,
Izd-vo Akad.nauk Kirgizskoi SSR. Vol.8. [The carrot, dogwood, winter-
green, heath, primrose, leadwort, olive, gentian, dogbone, milkweed,
and morning-glory families] Semeistva: zontichnye, kizilovye, grushan-
kovye, vereskovye, pervotsvetnye, svinchatkovye, maslinovye, gore-
chavkovye, kutrovye, lastovnevye, v'iunkovye. 1959. 222 p. Vol.9.
[The mint and nightshade families] Semeistva: gubotsvetnye i pasle-
novye. 1960. 213 p. (MIRA 13:7)
(Kirghizistan--Dicotyledons)

NIKITINA, Ye.V.; AYDAROVA, R.A.; UBUKEYEVA, A.U.; FILATOVA, N.S.;
SUDNITSYNA, I.G.; TKACHENKO, V.I.; SHARASHOVA, V.S.;
KASHCHENKO, L.I.; SHPOTA, Ye.I.; VVEDENSKIY, A.I., nauchnyy
red.; VYKHODTSEV, I.V., otv. red.; SORONBAYEVA, N.V., red.
izd-va; ANOKHINA, M.G., tekhn. red.

[Flora of the Kirghiz S.S.R.; classification key of the plants
of the Kirghiz S.S.R.] Flora Kirgizskoi SSSR; opredelitel' ra-
stenii Kirgizskoi SSSR. Sost. E.V. Nikitina i dr. Nauchn. red.
A.I. Vvedenskii. Frunze, Izd-vo Akad. nauk Kirgizskoi SSR.
Vol. 10. [Families: Cuscutaceae, Polemoniaceae, Boraginaceae,
Verbenaceae, Scrophulariaceae, Bignoniaceae, Orobanchaceae,
Lentibulariaceae, Plantaginaceae, Rubiaceae, Caprifoliaceae,
Adoxaceae, Valerianaceae, Morinaceae, Dipsacaceae, Cucurbitaceae,
Campanulaceae, Lobeliaceae] Semeistva: Povilikovye, Siniukhovye,
Burachnikovye, Verbenovye, Norichnikovye, Bignonievye, Zarazi-
khovye, Puzyrchatkovye, Podorozhnikovye, Marenovye, Zhimolostnye,
Adoksovye, Valerianovye, Morinovye, Vorsienkovye, Tykvennye,
Kolokol'chikovye, Lobelievye. 1962. 387 p. (MIRA 15:9)
(Kirghizistan--Dicotyledons)

SHPOTAKOVSKIY, V.S., inzh.

Portable snow-melting unit for removing snow from the roofs of industrial buildings. Suggested by V.S. Shpotakovskii. Rats. i izobr. predl. v stroi. no. 14:90-93 '60. (MIRA 13:6)

1. Gosudarstvennyy proyektnyy institut Ukgiproshakht.
(Snow removal)

SHPOTAKOVSKIY, V.S.

Design of a building for the administration and general services combine of the Zaporozh'ye Iron Ore Combine. Adm.-byt. komb. ugol'. shakht no.5:36-39 '62. (MIRA 17:8)

1. Gosudarstvennyy nauchno-issledovatel'skiy i proyektnyy institut ugol'noy, rudnoy, neftyanoy i gazovoy promyshlennosti Ukrainskoy SSR.

SHPOVAL, A.N.; SARMANOVA, Ye.S. (Leningrad)

Clinical manifestations of epidemic encephalitis in a district in
Western Siberia. Klin.med. 35 [i.e.34] no.1 Supplement:46 Ja '57.
(MIRA 11:2)

1. Iz laboratorii entsefalitov (zav. - prof. Ye.N.Levkovich)
Instituta virusologii imeni D.I.Ivanovskogo AMN SSSR (dir. - prof.
P.N.Kosyakov)

(SIBERIA, WESTERN--ENCEPHALITIS)

SHPRAKH, A., prepodavatel'

Operating model of a pneumatic chuck. Prof.-tekh.obr. 19
no.10:16 0 '62. (MIRA 15:11)

1. Tekhnicheskoye uchilishche No.22, Omsk.
(Chucks)

BERNSHTEYN, A.L., kand.med.nauk; ZHDANOV, V.S., kand.med.nauk;
SHPRAKH, M.D. (Moskva)

Periarteritis nodosa with significant neural lesions. Klin.
med. 39 no.5:138-140 My '61. (MIRA 14:5)

1. Iz Gorodskoy klinicheskoy bol'nitsy No.13 Moskvy (glavnyy
vrach N.A. Nikolayeva).
(ARTERIES--DISEASES)

RACHKOV, N., kand.tekhn.nauk; SHPRENGEL', A.

Economical experimental farm on the "Golovkovo"
State Farm. Sel'. stroi. no.10:3-5 0 '62. (MIRA 15:11)

1. Zamestitel' direktora Nauchno-issledovatel'skogo instituta sel'skogo stroitel'stva (for Rachkov).
2. Nachal'nik proyektno-konstruktorskogo byuro Nauchno-issledovatel'skogo instituta sel'skogo stroitel'stva (for Shprengel').

(Dairy barns)

L 12770-66 EWT(1)/FCC GW
ACC NR: AP6002748 (N) SOURCE CODE: UR/0203/65/005/006/1034/1045

AUTHOR: Lauter, Ye. A.; Khruskova, Yu.; Nestorov, G.; Shprenger, K.

ORG: Ionospheric Research Observatory, Kdhlungsborn, GDR (Observatoriya ionosfernykh issledovaniy) 37
B

TITLE: Variations in ionospheric absorption with respect to time and space in the long-wave region when the sun is low and at night

SOURCE: Geomagnetizm i aeronomiya, v. 5, no. 6, 1965, 1034-1045

TOPIC TAGS: ionospheric absorption, ionospheric radio wave, solar activity

ABSTRACT: The authors give the results of measurements made over several years by the atmospheric probe method in the long-wave region on lines up to 350 km long in Middle and Eastern Europe. The frequency relationship is given for midnight absorption in the long, medium-long and medium wavelength regions with a maximum of about 17 db at 200 to 400 kc. The diurnal variation in ionospheric absorption in the long-wave region when the sun is low and at night shows that absolutely nocturnal conditions prevail at solar zenith angles $\chi > 100^\circ$, while the photodissociation process takes place at values of χ to -9° . The annual varia-

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UDC: 550.388.2

L 12770-66

ACC NR: AP6002748

tion in nighttime absorption has the form of a double curve with maxima in summer and winter, and minima immediately following the equinoxes. The injection of high-energy particles into the lower ionosphere during and following magnetic storms strongly increases absorption in the long-wave region, especially at χ between -10 and $+10^\circ$, and at night. In these cases, the frequency at a geomagnetic latitude of 55° depends on the solar activity cycle, while penetration of high-energy particles below 50° is extremely rare. Orig. art. has: 12 figures and 1 table.

SUB CODE: 17,04 SUBM DATE: 28Apr65/ OTH REF: F014/ATD PRESS: 4/84 [14]

Card 2/2 HW

SHPREREGEN, G. ^B sud'ya respublikanskoy kategorii po avtomodel'nomy sportu

Success of model builders from Rostov Province. Za rul. 18
no.9:21 S'60. (MIRA 13:10)
(Automobiles--Models)

SHTEINBERG, G. B.

Competition of automobile models. Za rul. 19 no.9:15 S '61.
(MIRA 14:10)

(Automobiles--Models)

BEKHTEREV, Yuliy Germanovich; SHPREREGEN, Georgiy Borisovich;
YEFREMOVA, Ye.V., red.; KOROLEV, A.V., tekhn. red.

[Automobile in the palm of the hand; sketches on automobile-
model racing] Avtomobil' na ladoni; ocherki ob avtomodel'nom
sporte. Moskva, Izd-vo "DOSAAF," 1962. 98 p. (MIRA 15:6)
(Automobiles--Models)

ЖИЛИНОВ, Р. И.

Cand. Tech. Sci.

Dissertation: "Dynamic Forces in a Horizontal Drawing-Softening Machine TMT and Foundation Vibrations Caused by These Forces." Moscow Technological Inst of Light Industry under L. M. Keresovich, 19 Jun 47.

SO: Vechnyaya Moskva, Jun, 1947 (Project #17-36)

F

Country :USSR
Category :Microbiology. Microbes Pathogenic For Man and Animals.
Listerellosis.
Abs. Jour :Ref Zhur-Biol., No 23, 1958, No 105672
Author :Shpringbakh, O. G.
Institut. :Siberian Scientific Research Veterinary Institute
Title :The Problem of Serologic (Complement-Fixation Reaction)
Diagnosis of Listerellosis
Orig Pub. :Byul. nauchno-tekhn. inform. Sibirsk. n.-i. vet. in-t,
1957, No 2, 25-26
Abstract :According to data in the literature, the agglutination
reaction is unsuitable for the diagnosis of listerellosis
on account of its lack of specificity. The value of
the complement-fixation reaction was studied for the
diagnosis of sheep listerellosis. The method of
preparing antigen from listerella is described in detail;
it was checked with the complement-fixation reaction
using sera of 454 animal hosts in which listerellosis
had been established clinically and bacteriologically.
Six had a positive complement-fixation reaction; 57, a
doubtful reaction. Checking the antigen against reactive
sera of brucellous, glanders-afflicted, trypanosome-
afflicted and paratyphoid-afflicted animals confirmed its
specificity. M. Ya. Boyarskaya
Card: 1/1

POPYK, K.G.; SHPRINK, B.E., prof., retsenzent

[Dynamics of motor-vehicle and tractor engines] Dinamika
avtomobil'nykh i traktornykh dvigatelei. Moskva, Mashinc-
stroenie, 1965. 257 p. (MIRA 18:7)

SHPRINGEL', G., arkhitektor.

House with a cane slab framework. Stroitel' no.9:26-27 S '57.
(MIRA 10:12)

(Building)