

KAPTELKIN, N.I.; SEMEYKO, P.A.; IVANKOV, A.A.

The best in the profession. Put' i put.khoz. 6 no.6:11, 17, 18, 23,
30 '62. (MIRA 15:7)

1. Nachal'nik Slavyanskoy distantzii puti Donetskoy dorogi (for
Kaptelkin).
(Railroads—Employees)

KAPTELKIN, N.I.

Is there a need for sign stakes? Put' i put. khoz. 7 no.5:4
'63. (MIRA 16:7)

1. Nachal'nik Slavyanskoy distant'sii puti Donetskoy dorogi.
(Signs and signboards)

KAPTELKIN, V.A., inzh.

Use of silicon rectifiers in the electric traction. Zhel.dor.transp.
46 no.6:31-33 Je '64. (MIRA 18:1)

S/089/60/008/04/03/009
B113/B017

AUTHORS: Sergeyev, G. Ya., Titova, V. V., Nikolayeva, Z. P.,
Kaptel'tsev, A. M.

TITLE: Thermal Treatment of Uranium ²¹

PERIODICAL: Atomnaya energiya, 1960, Vol. 8, No. 4, pp. 340-347

TEXT: The authors investigated the influence exercised by hardening on the macro- and microstructure as well as the mechanical properties of cast and hot-rolled uranium at increased and room temperatures. Uranium was hardened from various cooling media, in water of different temperatures, from different phases, with varying sample diameters. Repeated hardenings were made. Results of measurement are shown in figures, tables, and curves. Hardening reduces the grain size of uranium. Strength increases after the hardening from the beta phase by about 30%, from the gamma phase by 60%. Repeated hardening of uranium increases its creeping strength at temperatures below 400°C. The degree of change in the macro- and microstructure and strength properties depends on the chemical composition of uranium. Strength increases with the increase in the cooling rate from

Card 1/2

✓B

Thermal Treatment of Uranium

S/089/60/008/04/03/009
B113/B017

the beta and gamma phase. At all temperatures the strength of the alpha phase of hardened uranium is higher than that of non-hardened uranium. There are 8 figures, 4 tables, and 7 references: 4 Soviet and 3 American.

SUBMITTED: April 20, 1959

✓B

Card 2/2

KAPTELITSEY *M*

Gypsum deposits in Russia. M. D. KAPTELITSEY.
*Sbornik Trudov, Nauchno-Issledovatel. Inst. Gipsovot
 Prom., 1943, pp. 5-9.—A brief description of the chief
 gypsum deposits in Russia is given, and suggested distribu-
 tion of gypsum plants is outlined.* B.Z.K.

1-2-4

ASS-SLA METALLURGICAL LITERATURE CLASSIFICATION

A U I O P Q R S T U V W X Y Z

A B C D E F G H I J K L M N O P Q R S T U V W X Y Z

1ST AND 2ND COLUMNS 3RD AND 4TH COLUMNS

RECORDS AND PROPERTIES INDEX

KAPTELSEV, M. O.

90

Roof slate. M. O. Kartel'skiy. *Prum. Stroitel. Material.* 1940, No. 3, 72-9; *Chem. Zvest.* 1940, II, 1006. —
The geol. characteristics and chem. compn. of roof slate
deposits in Russia are compared with those of other lands.
M. V. Condoide

ASB-SLA METALLURGICAL LITERATURE CLASSIFICATION

MATERIALS INDEX COMMON ELEMENTS COMMON VARIETIES INDEX

1ST AND 2ND COLUMNS	3RD AND 4TH COLUMNS	5TH AND 6TH COLUMNS	7TH AND 8TH COLUMNS
A B C D E F G H I J K L M N O P Q R S T U V W X Y Z	A B C D E F G H I J K L M N O P Q R S T U V W X Y Z	A B C D E F G H I J K L M N O P Q R S T U V W X Y Z	A B C D E F G H I J K L M N O P Q R S T U V W X Y Z

KAPTEREV, L., inzhener-podpolkovnik

This is the way traffic accidents occur. Starsh.-serzh. no.11:30
O[i.e. N] '61. (MIRA 15:2)

(Traffic accidents)

KAPTEREV, L., inzhener-podpolkovnik

Equipment maintenance on the march. Voen. vest. 41 no.3:23-25
Mr '62. (MIRA 15:4)

(Armored vehicles)

KAPTEREV, N. N.

Kapterev, N. N.

Irregular Distribution in An Expanding Volume of Water on Freezing

Doklady Akademiyi Nauk, SSSR
Vol. 58, 1947, pp. 225

From: B. N. L. Guide to E-Scientific Per. Lit. No. 2, Vol. 1, May 1948, p. 22

KAPTEREV, P. N. and BYKOV, N. L. *Иванович де Н. Л. **

"Perma Frost and Construction," State Transport and Railroad Publ. House,
Moscow, 1940.

Содержит сведения о строительстве в Арктике
и в Якутии (1930-1940)
Книжка 1940 г.

"Vechnaya Merzlota i stroitel'stvo na ney (Permafrost and Construction on it - by
N. I. Bykov and P. N. Kapterev, Moskva, Transzheldorizdat, 1940 371 p. Charts, Diag)
Bibliografiya p 370-372

KAPTEREV, P. N. Dr. Geograph Sci.

Dissertation: "Temperature Conditions of Paleocrystic State in the Upper Amur Region." Inst of Geography, Acad Sci USSR, 27 Jun 47.

SO: Vechernyaya Moskva, Jun, 1947 (Project #17836)

PA 49737

KAPTEREV P. N.

ocean/Hydrography
Freezing

Oct 1947

"Uneven Distribution of Growth During the Change in Water as Result of Freezing," P. N. Kapterev, 4 pp

"Dok Akad Nauk SSSR, Nova Ser" Vol LVIII, No 2

Water expands by some 9% of its original volume on freezing. Briefly discusses experiments conducted during 1934-1936 at Skovorodinsk Scientific Research Freezing Station (Chitinsk Oblast) to study the uneven nature of expansion during freezing. Showed that whereas expansion can progress very greatly in one direction, it may on the other hand result in a decrease of volume. Submitted by Academician V. A. Chruchev, 10 Apr 1947.

49737

**Chitinsk - name of scientific center
observed in study of ice
name of the station in Chitinsk Oblast
Annot. 10 Apr 1947*

KAPTEREV, P.

KAPTEREV, P. Po taige; putevye ocherki. [Moskva], Moskovskii rabochii, 1948. 86 p.
(Priroda i chelovek.)

NcD

DLC: DK755.K28

So: LG, Soviet Geography, Part II, 1951/Unclassified.

KAPTEREV, P. N.

"Anabiosis Under Permafrost Conditions," Izvestiya Akademii Nauk: Seriya
Biologicheskaya, No. 6, 1948.

PA 63/49T35

KAPTEREV, P. N.

USSR/Geophysics
Freezing
Soils
May/Jun 49

"Movement of Earth Particles During Freezing," P. N. Kapterev, 4 pp

"Iz Ak Nauk SSSR, Ser Geog i Geofiz" Vol XIII, No 3

Refers to various experiments conducted to determine the freezing of clayey areas when certain parts were being subjected to temporary heating. Under laboratory conditions it was possible to determine conditions which cause movement of earth particles, and to establish certain regularities in the

63/49T35

USSR/Geophysics (Contd) May/Jun 49

Freezing of soils. Data obtained experimentally is now being tried in the field. Submitted 21 Aug 49.

63/49T35

112-57-7-14017

Translation from: Referativnyy zhurnal, Elektrotehnika, 1957, Nr 7,
pp 29-30 (USSR)

AUTHOR: Kaptereva, O. I.

TITLE: Mechanical Strength of Insulation of Magnet Wires in Their Original
Condition and After Thermal Aging (Mekhanicheskaya prochnost' izolyatsii
obmotochnykh provodov v iskhodnom sostoyanii i posle teplovogo stareniya)

PERIODICAL: Inform. -tehn. sb. M-vo elektrotekh. prom-sti SSSR (Technical
Information Collection, Ministry of the Radio-Engineering Industry, USSR),
1955, Nr 3 (87), pp 3-10

ABSTRACT: Mechanical strength was investigated of magnet wires with enamel,
fibrous and combined insulation; crushing and abrasion were investigated under
initial conditions and after a thermal aging (8 hr at 150° C and 16 hr at 20° C,
including 2 hr of bringing up to 150° C and cooling down to 20° C, etc.). Crush-
ing strength was evaluated in terms of a breakdown voltage between two cross-
ing wires subjected to various loads. Under initial conditions, PBD wire
showed the poorest results; strength of vinyflex and metalvyn wires is appreci-

Card 1/2

PROTANSKIY, S.A., inzh.; KAPTEREVA, O.N., tekhnik

System for increasing the rigidity of the mechanical characteristics of d.c. electric drives. Vest.elektroprom. 33 no.12:
67-70 D '62. (MIRA 15:12)

(Electric driving)

S/020/61/141/006/021/021
B103/B147

AUTHORS: Krasil'nikov, N. A., Corresponding Member AS USSR, Aseyeva, I. V., Bab'yeva, I. P., Kaptereva, Yu. V., Shirokov, O. G., and Korshunov, I. S.

TITLE: Biosynthesis of amino acids by soil microorganisms

PERIODICAL: Akademiya nauk SSSR. Doklady, v. 141, no. 6, 1961, 1480 - 1482

TEXT: 1290 cultures were studied which consisted of a) bacteria, b) actinomycetes, and c) yeasts, isolated from USSR soils. Nutrient media according to T. Asai (see below) were used for a) and b), and according to J. Lodder (see below) for c). It was found that many cultures of soil microbes synthesize a single or several amino acids and excrete them into the nutrient medium. This is true for cultures raised in synthetic nutrient media containing glucose as carbon source and ammonium chloride as nitrogen source (apart from small amounts of other salts). No strong correlation exists between the species of the microbe

Card 1/A3

Biosynthesis of amino acids by soil...

S/020/61/141/006/021/021
B103/B147

and its capability of synthesizing amino acids. Different strains of the same species show a very different behavior in this respect. Nevertheless, a connection can be established in individual cases, at least with the group characteristic of the strains. N. A. Krasil'nikov assumes that the wellknown actively glutaminic-acid producing strain of *Micrococcus glutamicus* also belongs to the actinomycetes. Usually, several amino acids are exuded into the nutrient media. Cultures producing only one amino acid are rare. The majority of the active producers synthesize alanine. A smaller group of species produces glutaminic and aspartic acids, and very few produce lysine, valine, cystines, et al. Both the quantity and the type of the amino acids depend on the composition of the nutrient medium (particularly on the C and N source, and on vitamins, trace elements, etc.), furthermore on the conditions of growth (temperature, aeration, etc.). Some highly active alanine producers were isolated: four strains of *Mycobacterium*, which produced from 6 - 8 up to 14 - 16 mg/ml of nutrient medium. Some strains of actinomycetes produced 8 - 9 mg. Many active yeast strains produced 5 mg/ml. Valine producers with an activity of 3 - 4 mg/ml were found among a). From the

Card 2/43

Biosynthesis of amino acids by soil...

S/O20/61/141/006/021/021
B103/B147

strains considered as possible producers of amino acids, strains with increased activity were isolated by selection, which are able to guarantee industrial production. From *Mycobacterium cyaneum* which produces almost the same quantities of glutaminic acid and alanine varieties were obtained which synthesize exclusively (or dominantly) either glutaminic acid or alanine. Thus, the yield in glutaminic acid was increased by a multiple. There are 2 figures, 1 table, and 5 references: 2 Soviet and 3 non-Soviet. The three references to English-language publications read as follows: Ref.3: T. Asai, K. Aida, K. Oishi, Bull. Agr. Chem. Soc., 21, No.2, 134 (1957); Ref.4: S. Kinoshita, Advances Appl. Microbiol., 1, 201 (1959); Ref.5: J. Lodder, The Yeasts, Amsterdam, 1952.

ASSOCIATION: Moskovskiy gosudarstvennyy universitet im. M. V. Lomonosova
(Moscow State University imeni M. V. Lomonosov)
Institut mikrobiologii Akademii nauk SSSR (Institute of
Microbiology of the Academy of Sciences USSR)

SUBMITTED: September 20, 1961

Card 3/4
13

LAFITSKAYA, T.N.; KAPTEREVA, Yu.V.; ASEYEVA, I.V.

Biosynthesis of free amino acids by sporeforming bacteria. Vest. Mosk.
un. Ser.6: Biol., pochv. 20 no.3:65-71 My-Je '65. (MIRA 18:7)

1. Kafedra biologii pochv Moskovskogo universiteta.

KRASIL'NIKOV, N.A.; ASEYEVA, I.V.; BAB'YEVA, I.P.; KAPTEREVA, Yu.V.;
SHIROKOV, O.G.; KORSHUNOV, I.S.

Biosynthesis of amino acids b soil micro-organisms. Dokl. AN SSSR
141 no.6:1480-1482 D '61. (MIRA 14:12)

1. Moskovskiy gosudarstvennyy universitet im. M.V.Lomonosova i
Institut mikrobiologii AN SSSR. 2. Chlen-korrespondent AN SSSR
(for Krasil'nikov).
(AMINO ACIDS) (SOIL MICRO-ORGANISMS)

KAPTEV, I. B.

The State Publishing House of Political Literature has published a textbook entitled "Political Economics." The textbook has been compiled by a group of economists: led by Academician K. V. Ostrovityanov; associate member of the USSR Academy of Sciences, D. T. Shepilov; Associate Member of the USSR Academy of Sciences, L. A. Leontyey; member of the All-Union Academy of Agricultural Sciences Named After Lenin, I. B. Kaptev; ~~Prof. I. I.~~ I. Kuzminov; Doctor of Economics L. M. Gatovsky; Academician P. F. Yudin; Associate Member of USSR Academy of Sciences, A. I. Pashkov; Economics Candidate V. I. Pereslegin.

In the compiling and finishing of statistical materials included in the textbook, Doctor of Economics V. N. Starovsky took part. The textbook contains three sections: 1—Precapitalist means of production; 2—Capitalist means of production; 3—Socialist means of production. The textbook is being issued in a mass edition.

KAPTOV,

"Electric Phenomena in Gas and Vacuum," 1951.

ACC NR: AF6021405 (N) SOURCE CODE: UR/0387/66/000/006/0039/0046

AUTHOR: Kaptsan, A. D.ORG: Academy of Sciences SSSR, Institute of Earth Physics (Akademiya nauk SSSR, Institut fiziki Zemli)

TITLE: Investigation of a waveguide with diffuse boundaries by means of two-dimensional model

SOURCE: AN SSSR. Izvestiya. Fizika zemli, no. 6, 1966, 39-46

TOPIC TAGS: waveguide propagation, waveguide acoustics, ultrasonic wave propagation, seismic wave

ABSTRACT: The author investigates the kinematic and dynamic singularities of longitudinal and transverse waves propagating inside and outside a waveguide when the wavelength is smaller than, equal to, and larger than the width of the waveguide. Waveguide models were made of perforated duraluminum sheets measuring 1500 x 600 x 2 mm. In two models the perforations were holes of different diameters on a triangular grid with pitch 5 mm. The velocity of the longitudinal waves in the waveguide was 4400 m/sec. and in the surrounding medium 5500 m/sec. The radiators used were Rochelle-salt crystals with 45° X cut measuring 0.6 x 0.6 x 0.6, 1 x 1 x 1, and 2 x 2 x 2 cm. The radiator was on the waveguide axis in all the experiments. The ultrasonic oscillations were received with a point-like broadband receiver constructed at IFZ by L. I. Bokanenko (Izv. AN SSSR, Fizika Zemli no. 1, 1966). An analysis of the obtained os-

Card 1/2

UDC: 534.222.1: 550.834

ACC NR: AP6021405

cillograms and photographs of the first-arrival wave phases shows that the energy focusing depends on the ratio of the width of the waveguide to the wavelength. Normal dispersion of the waves is observed, the obtained distances between the energy maxima inside the waveguide being in satisfactory agreement with those calculated by the formula of L. M. Brekhovskikh (Volny v sloistykh sredakh [Waves in Layered Media], AN SSSR, 1957). Qualitative agreement between the wave pattern in solid and liquid waveguides with diffused boundaries is observed. The experiments confirm the possible existence of the channel wave proposed by P. Caloi (Ann. Geofiz. v. 7, no. 4, 1954). The results imply that the alternation of maxima and minima of energy outside the waveguide, connected with the consecutively created frontal waves, should be observed rhythmically in belts on the earth's surface. Subsequent analysis of the waves registered from earthquakes with foci within the asthenospheric layer would make it possible to compare the experimental data with the real wave picture. Orig. art. has: 8 figures.

SUB CODE: 0920/ SUBM DATE: 01Jun65/ ORIG REF: 018/ OTH REF: 008

Card 2/2

L 09157-67 EWT(1) GW

ACC NR: AP7002324

SOURCE CODE: UR/0387/66/000/007/0020/0025

AUTHOR: Kaptsan, A. D.; Kislovskaya, V. V. 22ORG: Institute of Physics of the Earth, AN SSSR (Institut fiziky zemli AN SSSR);
Physics Faculty, Moscow State University, AN SSSR (Fizicheskiy fakul'tet,
Moskovskiy gosudarstvennyy universitet AN SSSR)

TITLE: Energy focusing in the asthenospheric layer

SOURCE: AN SSSR. Izvestiya. Fizika zemli, no. 7, 1966, 20-25

TOPIC TAGS: earthquake, seismologic station

ABSTRACT: Data from five deep-focus earthquakes with magnitudes $M = 6.8-7.3$, recorded by Soviet seismic stations, were used in investigating some dynamic characteristics of the P_a wave which propagates in the low-velocity asthenospheric layer. On the amplitude hodograph of this wave there is a regular alternation of the maxima and minima. On the basis of collected data on the distances between extremal points the authors have computed the thickness of the waveguide layer in the asthenosphere. The thickness of the waveguide obtained using these data was 156 km. It was concluded that the low-velocity layer in the mantle under the territory of the USSR experiences no variations in thickness. Orig. art. has: 3 figures, 3 formulas and 1 table. [JPRS: 37,397]

SUB CODE: 08 / SUBM DATE: 21Sep65 / ORIG REF: 007 / OTH REF: 009

Card 1/1 nst

UDC: 550.342

0125

06.53

L 37647-66 EWT(m)/T DJ

ACC NR: AP6021823

SOURCE CODE: UR/0413/66/000/012/0118/0118

INVENTOR: Kaptsan, D. Kh.; Pirogov, B. V.; Yeletin, V. S.

17
B

ORG: none

TITLE: Brake-clutch. Class 47, No. 182983 [announced by the Experimental Scientific Research Institute of Forging and Pressing Machine-Building (Eksperimental'nyy nauchno-issledovatel'skiy institut kuznechno-pressovogo mashinostroyeniya)]

SOURCE: Izobreteniya, promyshlennyye obraztsy, tovarnyye znaki, no. 12, 1966, 118

TOPIC TAGS: clutch, brake

ABSTRACT: An Author Certificate has been issued for a brake-clutch consisting of a flywheel, a single-disk pneumatic friction coupling comprising a spring-loaded disk

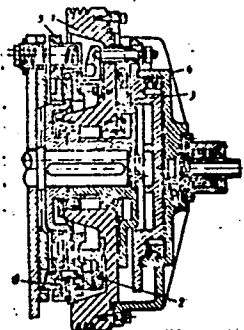


Fig. 1. Brake-clutch

- 1 - Flywheel; 2 - spring-loaded disk; 3 - piston;
- 4 - cylinder; 5 - sliding disk; 6 - rollers.

Card 1/2

UDC: 621.825.54:62-592.52

L 37647-66

ACC NR: AP6021823

and piston with a pneumatic cylinder, and a single-disk friction brake with a sliding disk (see Fig. 1). To provide compactness and design simplicity with a small bracket, to raise operating reliability and improve operating conditions, and to increase the number of possible engagements, conical rollers, connected through a spring-loaded disk to the pneumatic-cylinder piston, are mounted on the brake's sliding disk. Orig. art. has: 1 figure. [WH]

SUB CODE: 13/ SUBM DATE: 08Feb65/ ATD PRESS: 5048

Card 2/2 vmb

Kaptsan, O. L.

Cand Chem Sci

Dissertation: "Kinetics of the Decomposition of Amalgams."

16 November 49

Moscow Order of Lenin State U imeni M. V. Lomonosov.

SO Vecheryaya Moskva
Sum 71

KAPTSAN, O. L.

57/49T16

USSR/Chemistry - Films, Monomolecular Apr 49
Chemistry - Cations

"Action of the Adsorption of Polyvalent Cations on the Electrical Properties of a Monomolecular Film of Palmitic Acid," M. Gerovich, O. Kaptan, Lab of Electrochem, Moscow State U, 7 pp

"Zhur Fiz Khim" Vol XXIII, No 4 pp 445-51

Investigated effect of polyvalent cations of K, Ba, La and Th on electrical properties of monolayers of palmitic acid. Variation of surface potential of the monolayer under the influence of the cations was connected with the reaction between the adsorbed

57/49T16

USSR/Chemistry - Films, Monomolecular Apr 49
(Contd)

polyvalent cation and the ions and molecules of the fatty acid. Submitted 1 Jul 48.

57/49T16

KAPTSAN, O. L. and NEYMAN, M. B.

"Review of Soviet Progress in the Polarography of Organic Compounds", Zhurnal Analiticheskoy Khimii (Journal of Analytical Chemistry), Vol. 5, No. 3, 1950. p. 178-192

A Digest W-12968, 29 Aug 1950

[This is a digest of review of recent Soviet improvements in polarographic technique and polarographic appliances. These improvements are largely based on research done in the USSR and reflect a demand for efficient analytical and automatic plant control appliances, particularly in branches of chemical production where poisonous or otherwise dangerous substances are handled. The development of solid electrodes, which permit polarographic analyses of high melting materials or of substances which react with mercury, is emphasized in the paper and in other recent Russian work on the Subject.]

KAPTON, O. L.

Chem 2³

Nuclear Sci Abs.
V-8 Jan 15, 1954
Mineralogy Metallurgy
and Ceramics

ON THE THEORY OF DECOMPOSITION OF AMALGAMS BY SOLUTIONS OF ELECTROLYTES. O. L. Kaptan and Z. A. Iofa. Translated from Zhur. Fiz. Khim. 26, 193-200 (1952). 15p. (AEC-tr-1715)

The decomposition of amalgams of alkali and alkaline earth metals by aqueous solutions of electrolytes represents a typical electrochemical process. The process of decomposition of amalgams consists of two interconnected electrochemical reactions. The first reaction is the ionization of the metal dissolved in Hg: $Me \leftrightarrow Me^+ + e$. The second reaction is the discharge of H^+ in acid solutions, $H_3O^+ + e \rightarrow H_2O + H$, or in alkaline solution, $H_2O + e \rightarrow OH^- + H$. Expressions for the potentials of decomposition and the reaction kinetics of the amalgam in acid and alkaline solutions are derived. (J.S.R.)

MF
4-21-54

KAPTSAN, O.L.

DECOMPOSITION OF AMALGAMS AND OVERVOLTAGE OF HYDROGEN ON MERCURY IN ALKALINE SOLUTIONS.
O. L. Kaptzan and Z. A. Iofa. Translated from Zhur. Fiz. Khim. 28, 201-10(1952). 18p. (AEC-tr-1716).

nuclear Sci. Abstr.
V-8 Jan 15, 1954
Mineralogy, Metallurgy
and Ceramics

It was proved that the decomposition of amalgams diluted by water mixtures of electrolytes in an electrochemical reaction limited by the speed of the H₂ discharge. Decomposition kinetics for amalgams of K, Li, and Ca were studied in solutions of their hydroxides, and kinetic formulas deduced theoretically from the electrochemical theory of interlinking electrode processes, are given. The value for H₂ overvoltage on a Hg cathode in alkaline solution was found. The dependence of the amount of overvoltage on the concentration of hydroxyl ions can be expressed as $\eta = 1.507 - 0.105 \log C_{OH^-}$. The influence of surface-active ions on the overvoltage of H₂ is discussed. (U.S.R.)

AF
4-21-54

KAPTSAN, O.L.; TEPLIAKOV, V.A.

High-frequency titration. Zhur. Anal. Khim. 8, 131-9 '53.
(CA 47 no.20:10397 '53)

(MLBA 6:5)

I. V.I.Vernadskiy Inst. of Geochem. and Anal. Chem., Acad. Sci. U.S.S.R.,
Moscow.

KAPTSAN, V.Kh.; POLEV, P.V.; SAFAROV, E.I.

Recent data on the Upper Paleozoic in Moldavia. Dokl. AN SSSR
150 no.4:882-884 Ja '63. (MIRA 16:6)

1. Predstavleno akademikom D.V. Nalivkinym.
(Moldavia---Geology, Stratigraphic)

KAPTSAN, V.Kh.; SAFAROV, E.I.

Significance of some results of paleontological and
palynological studies of the Upper Paleozoic in Moldavia.
Izv.AN Mold.SSR no.7:81-84 '64.

(MIRA 18:12)

SAFAROV, E.I.; KAPTSAN, V.Kh.

New data on Carboniferous sediments in Moldavia. Dokl. AN
SSSR 157 no.6:1366-1368 Ag '64. (MIRA 17:9)

1. Predstavleno akademikom D.V. Nalivkinym.

BOBRINSKIY, V.M.; BUKATCHUK, P.D.; BURGELYA, N.K.; DRUMYA, A.V.;
KAPTSAN, V.Kh.; MAKARESKU, V.S.; NEVRYANSKIY, D.G.;
NEGADAYEV-NIKONOV, K.N.; PERES, F.S.; ROMANOV, L.F.;
ROSHKA, V.Kh.; SAFAROV, E.I.; SAYANOV, V.S.; SOBETSKIY,
V.A.; TKACHUK, V.A.; KHUBKA, A.N.; EDEL'SHTEYN, A.Ya.;
LUTOKHIN, I., red.

[Paleogeography of Moldavia] Paleogeografia Moldavii.
Kartia, moldoveniaske, 1965. 145 p. (MIRA 18:9)

1. Otdel palenotologii i stratigrafii AN Moldavskoy SSR
(for Negadayev-Nikonov, Roshka, Romanov, Sobetskiy, Khubka).
2. Institut geologii i poleznykh iskopayemykh Gosudarstvennogo
geologicheskogo komiteta SSSR (for Bobrinskiy, Burgelya,
Nevryanskiy, Tkachuk, Edel'shteyn).
3. Opornaya seysmostantsiya
AN Moldavskoy SSR (for Drumya).
4. Gosudarstvennyy proizvod-
stvennyy geologicheskiy Komitet Moldavskoy SSR (for Bukatchuk,
Kapsan, Safarov).

KAPTSAN, V.Kh.; SAFAROV, E.I.

Find of native Carboniferous sediments in Moldavia. Dokl. AN SSSR
161 no.3:659-662 Mr '65. (MIRA 18:4)

1. Upravleniye geologii i okhrany nedr pri Sovete Ministrov
Moldavskoy SSR. Submitted November 23, 1964.

BOBRINSKAYA, O.G.; BOBRINSKIY, V.M.; BUKATCHUK, P.D.; DANICH, M.M.;
KAPTSAN, V.Kh.; NEGADAYEV-NIKONOV, K.N.; POPOVA, T.V.;
ROSHKA, V.Kh.; SAFAROV, E.I.; SOBETSKIY, V.A.; EDEL'SHTEYN,
A.Ya.; BURGELYA, N.K., red.; DRUMYA, A.V., red.; KUZNETSOVA,
E., red.

[Stratigraphy of sedimentary formations in Moldavia] Strati-
grafia osadochnykh obrazovani Moldavii. Kishinev, Kartia
moldoveniaske, 1964. 129 p. (MIRA 19:1)

1. Otdel paleontologii i stratigrafii AN Moldavskoy SSR (for
Bobrinskaya, Danich, Negadayev-Nikonov, Popova, Roshka,
Sobetskiy). 2. Institut geologii i poleznykh iskopayemykh,
gorod Kishinev (for Bobrinskiy, Edel'shteyn). 3. Upravleniye
geologii i okhrany neдр pri Sovete Ministrov Moldavskoy SSR
(for Bukatchuk, Kapsan, Safarov).

KACHAN, V.M.; KAPTSANEL', A.E.

Press-mold for bent-and-glued chair backs. Der. prom. 14
no.9:27 S '65. (MIRA 18:12)

KAPTSKV, L.N.; ABDYUKHANOV, M.A.; KASHIN, A.A.

Application of a quasi-linear method to the analysis of a transistor
h.f. oscillator. Radiotekh. i elektron. 2 no.9:1170-1173 S '57.

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1. Fizicheskiy fakul'tet Mozkovskogo gosudarstvennogo universiteta
im. M.V. Lomonosova.

(Oscillators, Transistor)

STEKOL'NIKOV, I.S. [author]; KAPTSEV, N.A. [reviewer].

"Electronic oscillography of processes of short duration." Izv. AN SSSR Otd.
tekh.nauk no.8:1201-1205 Ag '53.

(MIRA 6:8)

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Rolling helical threads with rolls on thread-rolling machines.
Mashinostroenie no.4:27-29 J1-Ag '62. (MIRA 15:9)

1. Luganskiy teplovozostroitel'nyy zavod.
(Rolling (Metalwork))

KAPTSEV, N. N.; MOROZOV, I. A.

Pneumatic tools used at the Lugansk Diesel-Locomotive Plant.
Mashinostroitel' no.12:26-27 D '62.

(MIRA 16:1)

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Machining holes with burnishing broaches. Mashinostroenie
no.3:43-44 My-Je '65. (MIRA 18:6)

KOLESHNIKOV, Venedikt Andreyevich, prof., doktor sel'skokhoz.nauk; ZHURIN, Aleksy Borisovich, agronom; KAPTSINEL', Mikhail Abramovich, agronom; KAPTSINEL', Anna Petrovna, agronom; KOVAL', Alla Alekseyevna, kand. sel'skokhoz.nauk; KORCHAGIN, Vladimir Nikolayevich, entomolog; ZUBAREV, N.A.; LUR'YE, B.D., red.; RAZGULYAYEVA, N.G., tekhn.red.

[Amateur fruitgrower's reference manual] Kalendar'-spravochnik sadovoda-liubitelia. Moskva, Izd-vo M-va sel'.khoz.SSSR, 1959.
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(Fruit culture)

KOLESSNIKOV, Venedikt Andreyevich, prof., doktor sel'skokhoz.nauk; ZHURIN, Aleksey Borisovich, agronom; KAPTSINEL', Mikhail Abramovich, agronom; KAPTSINEL', Anna Petrovna, agronom; KOVAL', Alla Alekseyevna, kand.sel'skokhoz.nauk; KORCHAGIN, Vladimir Nikolayevich, entomolog; ZUBAREV, N.A.; LUR'YE, B.D., red.; RAZGULYAYEVA, N.G., tekhn.red.

[Amateur fruitgrower's reference manual] Kalendar'-spravochnik sadovoda-liubitelia. Moskva, Izd-vo M-va sel'.khoz.SSSR, 1959.
494 p. (MIRA 13:4)

(Fruit culture)

1ST AND 2ND DEGREES 3RD AND 4TH DEGREES

PROCESSES AND PROPERTIES INDEX

CA

Cultivation of the cinchona plant in the U.S.S.R.
M. A. Kaptsov, *Chemist and Druggist* 144, 244-7
(1948).—A discussion. H. M. Burlage

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COMMON ELEMENTS

COMMON VARIABLES INDEX

ASB-31A METALLURGICAL LITERATURE CLASSIFICATION

EDON SYVIBELV	EDON SYVIBELV	EDON SYVIBELV	EDON SYVIBELV
EDON SYVIBELV	EDON SYVIBELV	EDON SYVIBELV	EDON SYVIBELV

Reference
About All-Union Sub-tropical Crops Institute

Soviet Source: N: Moscow News, '46, Soviet Union

Abstracted in USAF "Treasure Island", Report No.
3968, on file in Library of Congress, Air
Information Division

APPROVAL, H.

Chief Agronomist

About lemon, orange, tangerine, grapefruit production
(Transcaucasus, Georgia, USSR)

Soviet Source: N: Moscow News, '46, Soviet Union

Abstracted in USAF "Treasure Island", Report No.
3763, on file in Library of Congress, Air
Information Division.

Mr. [Name],

Chief Agronomist

About oil, quinine, eucalyptus, bamboo (USSR)

Soviet Source: N: Moscow News, '46, Soviet Union

Abstracted in USAF "Treasure Island", Report No.
3764, on file in Library of Congress, Air
Information Division.

KAPTSINELI, N.H.
BEREZHOY, I.M., ~~KAPTSINELI, N.H.~~; NESTERENKO, G.A.; ROSSOSHANSKIY, A.A.,
redaktor; KHOKHRINA, N.M., tekhnicheskiy redaktor

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sel'khoz.lit-ry, 1951. 576 p. (MIRA 10:9)
(Tropical plants)

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Citrus Fruits

Basic problems in cultivating citrus crops in new areas. Sad i og., No. 6, 1952.

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

1. KAPTSINEL, M.S.
2. USSR (600)
4. Citrus Fruits
7. Prospects for developing citrus culture. Sad i og. no. 11. 1952

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

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ODINTSOV, Vasily Alekseyevich, kandidat sel'skokhozyaystvennykh nayk;
KAPTSINEL', M.A., redaktor; SERGEEV, V.I., redaktor; ZUBRILINA,
Z.P., tekhnicheskiy redaktor

[Ponology on leading farms in the central provinces of the
U.S.S.R.] Sadovodstvo v peredevykh khesiaistvakh; v tsentral'nykh
oblastiakh SSSR. Moskva, Gos. izd-vo sel'khoz. lit-ry, 1956.
60 p. (MLRA 10:4)

(Fruit culture)

KAFTSINEL', M., agronom-sadovod

From the crops of your garden. Mast. ugl. 9 no. 9:30-31 S'60.

(MIRA 13:10)

(Fruit culture) (Canning and preserving)

KAPTSINEL', Mikhail Abramovich; KOLESNIKOV, Ye.V.; KORCHAGINA, V.A.;
KORCHAGIN, V.N.; SMOYANINOVA, N.K.; YEFIMOV, A.L., red.;
MAKHOVA, N.N., tekhn. red.

[Fruit culture] Plodovodstvo; uchebno-spravochnoe posobie dlia
IX-XI klassov sel'skoi srednei shkoly s proizvodstvennym obu-
cheniem. [By]M.A.Kaptsinel' i dr. Moskva, Uchpedgiz, 1963.
327 p. (MIRA 16:5)

(Fruit culture)

KAPTSTOVSKAYA, L.S.

Obturatoral intestinal obstruction caused by cancer of the rectum
in elderly persons. Trudy Inst. im. N.V. Sklif. 9:119-124 '63.
(MIRA 18:6)

1. Moskovskiy gorodskoy nauchno-issledovatel'skiy institut
skoroy pomoshchi imeni Sklifosovskogo.

KAPTSOV, L. N.

Defended his Candidates dissertation in the Physics Faculty of Moscow State University on 3 July 1952.

Dissertation: "Experimental Study of Self-Excited Oscillatory Systems With Thermistors."

SO: Vestnik Moskovskogo Universiteta, Seriya Fiziko-Matematicheskikh i Yestestvennykh Nauk, No. 1, Moscow, Feb 1953, pp 151-157: transl. in W-29782, 12 April 54, For off. use only.

KAPTSOV, L.N. KAPTSOV, L. N.
USSR/Electronics

FD 231

Card 1/1

Author : Kaptsov, L. N.

Title : Stability of oscillations of thermistor-equipped tube generators of almost harmonic oscillations

Periodical : Radiotekhnika 9, 47-52, Mar/Apr, 1954

Abstract : Gives theoretical analysis, verified by experiment, of frequency and amplitude stability of two types of tube generators of almost harmonic oscillations with inertial-nonlinear amplitude regulation by heat sensitive resistance (thermistor). Thanks Professor K. F. Teodorchik for assistance. Five references: 4 USSR.

Institution :

Submitted : January 8, 1954

Abs Jour : Ref Zhur - Fizika, No 5, 1957, No 12599

Author : Rzhevkin, K.S., Lagunov, L.A., Kaptsov, L.N.

Institution : Physics Department, University, USSR

"APPROVED FOR RELEASE: 06/13/2000 CIA-RDP86-00513R000720510019-6"

Title : Analysis of a Nearly-Harmonic Transistor Oscillator at Frequencies Above Critical.

Orig Pub : Radiotekhn. i elektronika, 1956, 1, No 5, 647-653

Abstract : A linear calculation is made of a transistorized oscillator with capacitor feedback, taking into account the phase-frequency dependence of the transistor current gain, in the form:

$$\alpha = \alpha_0 \operatorname{sech} \sqrt{j 2.43 \frac{\omega}{\omega_{cr}}}$$

where α_0 is the gain coefficient at low frequencies, ω_{cr} is the critical frequency of the transistor relative to the

Card : 1/2

Card : 2/2

KAPTSOV, L.N.

USSR / Radiophysics, Application of Semiconductors

KAPTSOV, L.N.

Using unexcited R-G oscillators as band filters. Radiotekh. i elektron.
1 no. 9:1258-1261 S '56. (MIRA 10:1)

1. Fizicheskiy fakul'tet Moskovskogo Gosudarstvennogo universiteta.
(Electric filters) (Oscillators, Electron-tube)

KAP/SCV, L.N.

Semiconductor - L.N. 1154
Frequency RC Oscillator L.N.

SOV/112-59-5-9961

9(2)

Translation from: Referativnyy zhurnal. Elektrotehnika, 1959, Nr 5,
pp 219-220 (USSR)

AUTHOR: Rzhevkin, K. S., and Kaptsov, L. N.

TITLE: Analysis of FM Almost Harmonic Oscillators and Equivalent-Reactance
Transistor Circuits

PERIODICAL: Tr: 1-y Mezhvuzovsk. konferentsii po sovrem. tekhn. dielektrikov
i poluprovodnikov, 1956, L., 1957, pp 220-224

ABSTRACT: Frequency, self-excitation conditions, and the cutoff frequency of
oscillation have been determined with certain assumed approximations for
transistors used in the common-base circuit of LC- and RC-oscillators
designed with point-type and junction-type transistors. It is noted that the
frequency modulation can be easily realized. Experimental testing has proven
that an LC-oscillator has a frequency deviation of about 10%. To cut down the
spurious amplitude modulation, it is desirable that the FM of the point-type

Card 1/2

SOV/112-59-5-9961

Analysis of FM Almost Harmonic Oscillators and Equivalent-Reactance
transistor oscillator be made by varying the collector voltage, and the FM of the junction-type transistor oscillator by varying the emitter current. The frequency swing of an RC-oscillator, with a spurious AM not over 10%, has been 30%, the character of the swing being in good agreement with estimated data. Investigations of transistorized equivalent-reactance circuits with a grounded emitter, which are similar to electron-tube circuits, have shown that such schemes permit frequency swing within 100-150%. However, the oscillation amplitude varies several times. Besides, such systems are possible only at the frequencies up to $0.5\omega_{critical}$.

V.M.L.

Card 2/2

KAPTSOV, L.N.

109-9-9/15

AUTHORS: Kaptsov, L.N., Abdyukhanov, M.A. and Kashin, A.A.

TITLE: Application of the Quasi-Linear Method to the Analysis of a High Frequency Oscillator Employing a Transistor (Primeneniye kvazilineynogo metoda k analizu vysokochastotnogo generatora na poluprovodnikovom triode)

PERIODICAL: Radiotekhnika i Elektronika, 1957, Vol.II, Nr 9, pp. 1170 - 1173 (USSR)

ABSTRACT: A simple oscillator circuit containing a parallel RC network in the emitter and employing a single point-contact transistor (see Fig.1) is considered. The system is assumed to be operating at a comparatively high frequency so that the equivalent circuit of the transistor can be represented as an inductance L_T and a negative resistance R_T . It is assumed that under these conditions the waveform of the oscillations is sinusoidal. The circuit can easily be analysed by determining its $R_T = f_1(u_{\omega 0})|_{\omega = \text{const}}$ and its $L_T = f_2(u_{\omega 0})|_{\omega = \text{const}}$, where $u_{\omega 0}$ is the amplitude of the first harmonic of the transistor input voltage. It is more convenient, however, to replace the function L_T by a function C_T such that $C_T = 1/\omega^2 L_T$. A set of functions

Card 1/3

109-9-9/15

Application of the Quasi-Linear Method to the Analysis of a High Frequency Oscillator Employing a Transistor.

R_T and C_T for various frequencies was determined for the Soviet point contact transistor, type CIA, operating at the emitter current of 0.1 mA and collector voltage of -20 V (see Fig.3). From these curves it is possible to determine R_T and C_T and the amplitude of the oscillations for a given frequency. It is found that C_T decreases as a function of the amplitude (of oscillations) for increasing frequencies while R_T increases with increasing amplitudes. At comparatively low frequencies R_T is practically independent of u_{co} . It was also observed that oscillations of the sinusoidal form can take place only above certain minimum frequencies, f_{min} . The values of f_{min} are of the order of 15% f_{α} , where f_{α} is the cut-off frequency of the transistor. There are 5 figures and 1 table. There is 1 Slavic reference.

Card 2/3

109-9-9/15

Application of the Quasi-Linear Method to the Analysis of a High Frequency Oscillator Employing a Transistor.

ASSOCIATION: Physics Faculty of the Moscow State University
im. M.V. Lomonosov (Fizicheskiy Fakul'tet Moskovskogo Gosu-
darstvennogo Universiteta im. M.V.Lomonosova).

SUBMITTED: February 20, 1957.

AVAILABLE: Library of Congress.

Card 3/3

KAPTSOV, L.N.

109-9-5/15

AUTHOR: Kaptsov, L.N.

TITLE: Some Properties of the Oscillators Employing Transistors.
(Nekotoryye osobennosti avtogeneratorov na poluprovodnikovyykh triodakh)

PERIODICAL: Radiotekhnika i Elektronika, 1957, Vol.II, Nr 9,
pp.1127-1137 (USSR)

ABSTRACT: An LC oscillator employing the Soviet П1А type transistor is considered. The oscillator has a resonant circuit in its collector, and an inductive coupling to its emitter. The operation of the circuit was investigated experimentally and the resulting waveforms are shown in Fig.2. The first set of the waveforms shows the operation of the oscillator in the vicinity of the critical coupling, while the second set of curves refers to the operation in the overcoupled state. It is found that the waveform is nearly sinusoidal in the first case, but it becomes distorted when the coupling is overcritical. Similar curves were taken for an oscillator operating in the grounded emitter circuit and these are shown in Fig.4. On the basis of the above results it is concluded that the usual methods of analysis of the operation of an oscillator such as: (1) the method of the slowly changing amplitudes proposed by Van der Pol, or (2) the

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109-9-5/15

Some Properties of the Oscillators Employing Transistors.

Andronov small parameter method, or (3) the Teodorchik energy method, can be applied only for the case of the feedback coefficients which are near to the critical value. For this case the oscillator of Fig.1 can be represented by the equivalent circuit of Fig.5 and its operation can be described by Eq.(7), which leads to:

$$\frac{d^2 u_e}{dt^2} + \frac{1}{LC} u_e = \frac{M}{R_H LC} \left\{ \frac{d\beta}{du_e} u_e + \beta - \frac{RR_H C}{M} \right\} \frac{du_e}{dt}, \quad (11)$$

where u_e is the emitter AC component, R_H is the resistance of the load at the resonant frequency, r and α' are the input resistance and the current amplification factor of the transistor, $\beta = \frac{\Delta u_H}{\Delta u_e}$ is the amplification factor of the transistor and u_H is the AC voltage component across the resonant circuit. The meaning of the remaining symbols of Eq.(11) can be understood by referring to Figs.1 and 5. The analysis of Eq.(11) is carried out semi-experimentally. For

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109-9-5/15

Some Properties of the Oscillators Employing Transistors.

this purpose curves of V_H versus V_3 (at E_K constant) are plotted (see Fig.7), from which β as a function of V_3 is determined (see Fig.8). A function :

$F(V_3) = \frac{d\beta}{du_3} u_3 + \beta$ is then computed on the basis of the

previous graphs and the critical mutual inductance for the oscillator is determined (see Eq.(12)). Operation of the oscillator with the critical inductance thus determined was in agreement with the predicted values and the oscillator had an efficiency of up to 50%. The transient of the oscillator can be investigated by assuming that β is a quadratic polynomial of u_3 (see Eq.(16)). Eq.(11) can now be solved by the method of the slowly changing amplitudes and the resulting solution is given by Eq.(18), where U_1 is the initial amplitude of oscillations. Eq.(18) is in fairly good agreement with the experimental results which are plotted in Fig.11 and shown in the oscillogram of Fig.12.

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109-9-5/25

Some Properties of the Oscillators Employing Transistors.

There are 12 figures and 6 references, of which 4 are Slavic.

ASSOCIATION: Physics Faculty of the Moscow State University im.
M.V. Lomonosov (Fizicheskiy Fakul'tet Moskovskogo Gosudarst-
vennogo Universiteta im. M.V.Lomonosova).

SUBMITTED: February 25, 1957.

AVAILABLE: Library of Congress.

Card 4/4

KAPTISOV, L.N.

109-9-6/15

AUTHORS: Kaptsov, L.N. and Yablonskiy, V.V.

TITLE: Analysis of a High Frequency Oscillator Employing a Junction Transistor (Analiz vysokochastotnogo avtogeneratora na ploskostnom poluprovodnikovom triode)

PERIODICAL: Radiotekhnika i Elektronika, 1957, Vol.II, Nr 9, pp. 1138 - 1145 (USSR)

ABSTRACT: It is assumed that a junction transistor at high frequencies can be represented by the usual three frequency independent resistances and a collector capacitance C_k (see Fig.1).

The equivalent circuit is employed in the analysis of a grounded base oscillator which contains a resonant circuit in its collector (see Fig.3) and in which the feedback to the emitter is provided by means of a coupling capacitor C_c .

It is assumed that the condition of oscillation requires that the input admittance of the transistor plus feedback circuit be equal to the admittance of the resonant circuit (see Fig.4). It is shown that this condition results in an oscillation frequency:

$$\omega_r \approx \frac{1}{\sqrt{L(C + C_c + C_k)}} \quad (12)$$

Card 1/3 while the self-excitation condition is expressed by Eq.(13) which can approximately be represented by:

109-9-6/15

Analysis of a High Frequency Oscillator Employing a Junction Transistor.

$$|\omega_r C_c \text{Im } \alpha| \geq \omega_r^2 (C_k + C_c)^2 r_{\sigma 0} \quad (14)$$

From the above it follows that the maximum oscillation frequency can be attained when $C_k = C_c$, in which case:

$$\left| \frac{\text{Im } \alpha}{\omega_n} \right| = 4C_k r_{\sigma 0} \quad (15), \text{ where } \text{Im } \alpha \text{ is the imaginary}$$

part of the transistor current amplification factor. It is shown that $\frac{\text{Im } \alpha}{\omega_n}$ can be approximately represented by Eq.(16) where $x = \sqrt{1.215 f/f_{kp}}$, where f_{kp} is the limiting frequency for α . Eq.(15) can then be represented by Eq.(17) and this is plotted in Figs.6 for a transistor having $f_{kp} = 500 \text{ kc/s}$, $r_{\sigma 0} = 140 \text{ ohms}$, and $C_k = 19 \text{ pF}$. The results obtained from the above analysis were checked experimentally on a number of Soviet junction transistors and it was found that the calculated values for the maximum oscillation frequencies were up to 30% higher than the

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Analysis of a High Frequency Oscillator Employing a Junction Transistor.

measured quantities. From both the theory and experiments it is concluded that the maximum oscillation frequency can be 3 to 4 times higher than f_{kp} .

There are 7 figures, 2 tables and 9 references, 2 of which are Slavic.

ASSOCIATION: Physics Faculty of the Moscow State University im. M.V. Lomonosov (Fizicheskiy Fakul'tet Moskovskogo Gosudarstvennogo Universiteta im. M.V.Lomonosova)

SUBMITTED: February 25, 1957.

AVAILABLE: Library of Congress.

Card 3/3

KAPISOV, L. N.

Л. Н. Капилов
Известные нелинейные свойства оптоэлектронного
трена, обусловленные эффектом модуляции тол-
щины beams

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О релаксации конструированных нелинейных не-
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А. И. Смирнов**
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соких на частотности устройств с нелинейными
свойствами в виде катушек с параллельной индуктив-
ной связью и аналоговой цепи

В. Н. Пустынский
Коррекция нелинейных фазовых модуляторов в авто-
матических системах связи

В. Н. Соловьев
Об эффективности нелинейных преобразователей в
системах СВЧ

**Г. Н. Шендеров,
О. Н. Востриков**
Методы автоматической регулировки мощности при
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report submitted for the Centennial Meeting of the Scientific Technical Society of
Radio Engineering and Electrical Communications in A. S. Paper (VRSR), Moscow,
8-10 June, 1959

9(4)

PHASE I BOOK EXPLOITATION

SOV/3233

Az'yan, Yu. M., G. N. Berestovskiy, L. N. Kaptsov, K. S. Rzhavkin,
and K. Ya. Senatorov

Poluprovodnikovyye triody v regenerativnykh skhemakh (Semiconductor
Triodes In Regenerative Circuits) Moscow, Gosenergoizdat, 1959.
311 p. 12,000 copies printed.

Ed.: S. S. Akalunin; Tech. Ed.: G. Ye. Larionov.

PURPOSE: This book is intended for scientific workers and engineers
interested in problems of transistor application, and for
advanced students specializing in radio physics.

COVERAGE: The book is devoted to investigation of physical pro-
cesses occurring in transistorized feedback circuits, including
generators of quasi-harmonic oscillations, relaxation oscillators
with transformer feedback (blocking oscillators, converters),
and in relaxation oscillators with RC feedback (multivibrators,
triggers). The book begins with a systematic presentation of

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Semiconductor Triodes (Cont.)

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basic physical processes occurring in the transmission of electric signals through transistors. Material is based on the results of investigations made by the department of wave theory at the physics division of MGU, where samples of Soviet alloy-type transistors were used. No personalities are mentioned. References follow each chapter.

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05209

SOV/142-2-3-17/27

9(2,3)

AUTHORS:

Az'yan, Yu.M., Kaptsov, L.N., Rzhavkin, K.S., Senatorov, K.Ya.

TITLE:

The Terminology Problem in the Field of Semiconductor Electronics

PERIODICAL:

Izvestiya vysshikh uchebnykh zavedeniy, Radiotekhnika, 1959, Vol 2, Nr 3, pp 372-374 (USSR)

ABSTRACT:

The authors refer to the article (Ref.1) by T.M. Agaldhanyan B.N. Kononov and A.P. Stepanenko titled "The Terminology in the Field of Transistor Electronics", published in Izvestiya vysshikh uchebnykh zavedeniy, Radiotekhnika, 1958, Vol 1, Nr 4. The authors agree in principle with the content of this article but present some of their own ideas and recommendations. They followed the pattern of ref.1 and divided the article in General Problems, Junctions and Contacts, Diodes, Triodes, Triode Parameters and Circuit Problems. They believe that the term "tranzistor" (transistor) should be replaced by the term "poluprovodnikovyy triod" ("semiconductor triode"), since there is no other term in Russian for "poluprovodnikovyy diod" (semiconductor diode). Two entirely different terms should not be used for designating two closely related devices. The majority of the other suggestions con-

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The Terminology Problem in the Field of Semiconductor Electronics

tained in ref.1 were acknowledged by the authors of this article as being correct. There is 1 Soviet reference.

ASSOCIATION: Fizicheskiy fakul'tet Moskovskogo gosudarstvennogo universiteta imeni M.V. Lomonosova (Faculty of Physics of the Moscow State University imeni M.V. Lomonosov).

SUBMITTED: February 16, 1959

Card 2/2

BENDRIKOV, G.A.; KRASNUSHKIN, P.Ye.; REYKHREDEL', E.M.; POTEKIN, V.V.;
MUSTEL', Ye.R.; RZHEVKIN, K.S.; IVANOV, I.V.; KHARLAMOV, A.A.;
TIKHONOV, Yu.V.; STRELKOVA, L.P.; KAPTSOV, I.N.; ORDANOVICH,
A.Ye.; KHOKHLOV, R.V.; VORONIN, E.S.; BERESTOVSKIY, G.N.; KRASNO-
PEVTSEV, Yu.V.; MINAKOVA, I.I.; YASTREBTSEVA, T.N.; SEMENOV, A.A.;
VINOGRADOVA, M.B.; KARPEYEV, G.A.; DRACHEV, L.A.; TROFIMOVA, N.B.;
SIZOV, V.P.; RZHEVKIN, S.N.; VELIZHANINA, K.A.; NESTEROV, V.S.;
SPIVAK, G.V., red.; NOSYREVA, I.A., red.; GEORGIYEVA, G.I., tekhn.
red.

[Special physics practicum] Spetsial'nyi fizicheskii praktikum.
Moskva, Izd-vo Mosk.univ. Vol.1. [Radio physics and electronics]
Radiofizika i elektronika. Sost. pod red. G.V.Spivaka. 1960.
600 p.

(MIRA 13:6)

1. Professorsko-prepodavatel'skiy kollektiv fizicheskogo fakul'teta
Moskovskogo universiteta im. M.V.Lomonosova (for all except Spivak,
Nosyreva, Georgiyeva).

(Radio)

(Electronics)

S/109/60/005/07/016/024
E140/E163

9.4310

AUTHOR: Kaptsov, L.N.

TITLE: Effect of Collector pn-junction Thickness Modulation on the Operation of a Transistor Oscillator

PERIODICAL: Radiotekhnika i elektronika, Vol 5, No 7, 1960,
pp 1165-1172 (USSR)

ABSTRACT: The collector junction capacitance averaged with respect to the first harmonic voltage component C_{c1} increases with increase of signal amplitude. For certain operating conditions this ensures a weak operating condition of the oscillator, constituting a generator of almost harmonic oscillations in the ultrasonic and higher frequency band. The oscillator transfer characteristic is obtained and it is shown to be a function of frequency. Therefore in transitions from the audio region to higher frequencies low-power alloy transistors cause a change in oscillator regime from stiff to weak. A quasi-linear analysis is given. The theoretical conclusions are verified experimentally. The basic factor is the dependence of C_{c1} on oscillation amplitude. At low frequencies the basic non-linear parameter is the input admittance. Passage to the weak

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6.9411 (2903, 3703)
9.4310 (1143, 1150)

20434
S/109/60/005/012/032/035
E192/E582

AUTHORS: Kaptsov, L.N., Kurochkin, V.A. and Senatorov, K.Ya.

TITLE: Investigation of Low Frequency Noise in Alloyed and Diffusion Transistors

PERIODICAL: Radiotekhnika i elektronika, 1960, Vol.5, No.12, pp. 2062-2063

TEXT: The dependence of the noise figure F of a number of transistors (types П1 (P1), П5 (P5), П6 (P6), П401 (P401), П402 (P402) and П403 (P403) on frequency in the range from 0.4 to 47 kc/s was investigated experimentally at the Laboratoriya impul'snykh protsessov kafedry teorii kolebaniy, MGU (Laboratory of Pulse Processes of the Chair of Oscillation Theory of the Moscow State University). The effect of the operating conditions and the magnitude of the internal resistance of the signal source was also studied. The measurements were carried out by the substitution method. The noise of a transistor was estimated by comparing with and measuring the noise level in an ohmic resistance of a known value. The equipment permitted the measurement of F in the range of 1 to 70 db with an absolute error of ± 0.5 db. Ten samples of each of the above types were measured. The results of the
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Investigation of Low Frequency Noise in Alloyed and Diffusion Transistors

measurements of F as a function of frequency f are shown in Fig.1. The dependence of F on the operating conditions was determined at frequencies from 1 to 25 kc/s and the results showing F as a function of the emitter current are given in a figure. From these experimental data it is found that F of the diffusion transistors increases with increasing emitter current much faster than in the alloyed transistors. The dependence of F on the collector voltage was also investigated experimentally (the resulting data are shown in a figure). From these it is found that F for both the diffusion and alloyed transistors is practically independent of the collector voltage at the frequency of 22 kc/s. On the other hand, F at 1 kc/s increases with the collector voltage in the alloyed transistors but is practically constant in the diffusion transistors. It was found that the optimum values of the internal resistance, which give a minimum F , lie in the range 400 to 1000 Ohms. There are 3 figures.

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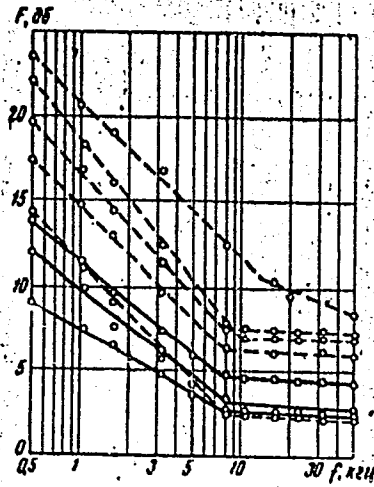
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Investigation of Low Frequency Noise in Alloyed and Diffusion Transistors

Fig.1



Card 3/3

DOBRYUK, N.I.; KARTSOV, L.N.

Self-oscillatory system involving a four-layer diode. Vest.
Mosk. un. Ser. 3: Fiz., astron. 18 no.2:58-66 Apr '63.
(MIRA 16:6)
(Diodes) (Oscillators, Electric)

KAPTSOV, L.N.

Lecture demonstration of ponderomotor forces in electrostatics
with the aid of a soap bubble. Usp. fiz. nauk 79 no.4:741-742
Ap '63. (MIRA 16:3)
(Physics--Study and teaching) (Electrostatics)

KAPTSOV, L.N.

Four lecture demonstrations for courses in oscillation theory
and radio engineering. Usp. fiz. nauk 81 no.4:763-771 D '63.
(MIRA 17:1)

CHILIKIN, M.G., prof., red.; KAPTSOV, L.N., red.

[Regulated semiconductor rectifiers (p-n-p-n devices)]
Poluprovodnikovye upravliaemye ventili-tiristory; sbornik statei. Moskva, 1964. 64 p. (Biblioteka po avtomatike, no.109. Elektroprivody s poluprovodnikovym upravleniem) (MIRA 17:10)

KAPTSOV, L.N.; SENATOROV, K.Ya.

Operation of a saw-tooth wave RC generator with an inertial
active two-terminal network. Radiotekh. i elektron. 9 no.10:
1757-1762 0 '64.

(MIRA 17:11)

21498-05
ACCESSION NR: AP4046675

S/0109/64/099/010/1752/1762

AUTHOR: Kaptsov, L. N.; Senatorov, K. Ya.

... RC-oscillator with an inertial ...

SOURCE: Radioelekhnika i elektronika, ...

TOPIC TAGS: NPNP diode, sawtooth oscillator, relaxation oscillator

... investigation by T. Misawa ...
... negative resistance and ...
... The processes transpire ...

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L 11452-65

ACCESSION NR: AP4046675

theoretically analyzed. Transients in the oscillator were also experimentally studied (oscillograms presented). The resistances ratio was brought to $R = 1.0$. The transient process was found to consist of two stages: the first stage is characterized by a gradual decrease of the amplitude of the oscillations, resulting in its complete turn-off. Orig. art. has: 5 figures, 12 tables.

NO REF SOV: 065

NO REF SOV: 065

ACCESSION NO: AP5014880

UR 50142755/4000000
01 51 1965

AUTHOR: T. Misawa, N.

TITLE: Turn-on transients in a thyristor 25 77

SOURCE: IEEE, Radiotechnical, v. 8, no. 2, 1965, pp. 1-4

TOPIC TAGS: pnpn diode, four region diode, thyristor

ABSTRACT: T. Misawa believed that the turn-on transient process consisted of two stages and that the current rise during the first stage

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L 63852-65

ACCESSION NO. 63852-65

During the course of the investigation, the following data were obtained for estimating the current rate-of-rise and the delay of the turn-on. (Orig. art. has 7 figures and 25 formulas.)

ASSOCIATION none.

SUBMITTED: 07Oct64

ENCL: 00

SEE SUBJECT

NO REF SOV: 004

OTHER: 004

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