

MAUROV, V.K., Doc Tech Sci--(112) "~~Design~~ and construction of steam
turbine ^{boilers} ~~frames~~." Len, 195 . 10 pp (Min of Higher Education USSR. Len Po-
lytech Inst im L.I. Krolin), 100 copies (E1, 26-50, 10)

NAUMOV, V.K.
NAUMOV, V.K., dots.

Conference on long-period static strength of turbomachinery.
Energomashinostroenie 4 no.1:47 Ja '58. (MIRA 11:1)
(Turbines) (Strength of materials)

KAUMOV, V.E., kand. tekhn. nauk

Designing casing walls of a steam turbine. [Trudy] MIZ no. 6:267-
285 '60. (MIRA 13:12)

(Steam turbines)

КАУКОВ, В.К., канд.техн.наук

Graphs for calculating toroidal parts. [Trudy] IMZ no.6:286-294
'60. (MIPA 13:12)
(Elastic plates and shells--Graphic methods)

KAJMOV, V.K., kand.tekhn.nauk

Experimental investigation of stresses in casings of steam turbines.
[Trudy] LNZ no.6:295-305 '60. (MIRA 13:12)
(Steam turbines)

HAUMOV, V.K., kand.tekhn.nauk; ISHONINA, T.A., inzh.

Unit for continuous testing of diaphragms at high temperatures.
[Trudy] IZM no.6:477-479 '60. (NIDA 13:12)
(Diaphragms (Mechanical devices)—Testing)

NAUKOV, V. M.

Forest utilization. Moskva, Goslesbumizdat, 1953, 266 p.

NAUMOV, Vasilii Mikhailovich; PROTANSKIY, V.V., retsenzent; SHELONIN, A.S., retsenzent; KOROVIN, V.N., red.; SVETLAYEVA, A.S., red. izd-va; SHIBKOVA, R.Ye., tekhn. red.

[Forest exploitation] Lesoekspluatatsiya. 2. dop. i perer. izd. Moskva, Goslesbumizdat, 1962. 410 p. (MIRA 15:7)
(Lumbering)

NAUMOV, Viktor Mikhaylovich; SKONECHNYI, Leonid Ivanovich; SMORODOV,
P.V., red.; POD'YEL'SKAYA, K.M., tekhn.red.

[Olonetsk Land Improvement Machinery Station] Olonetskais
mashinno-meliorativnaia stantsiia. Petrozavodsk, Gos.isd-vo
Karel'skoi ASSR, 1957. 13 p. (MIRA 14:1)
(Olonetsk District--Agricultural machinery)

NAUMOV, V.M.

"Introductory work on the fundamentals of the lake fishing industry"
[in Polish]. Reviewed by V.M. Naumov, *Zool. zhur.* 35 no. 7:1101-1104 J1
'56. (Tajty, Lake--Fisheries) (MIRA 9:9)

NAUMOV, V.M., redaktor

[Fish resources of the U.S.S.R.] Rybnye bogatstva SSSR. Moskva,
1957. 31 p. and 230 plates (MLWA 10:10)

1. Moscow. Vsesoyuznyy nauchno-issledovatel'skiy institut morskogo
rybnogo khozyaystva i okeanografii.
(Fishes)

NAUMOV, V.M., kand.biol. nauk.

Feeding of codfish in the Baltic Sea [with summary in English].
Trudy VNIRO 34:127-132 '58. (MIRA 11:9)
(Baltic Sea--Codfish) (Fishes--Food)

NAUMOV, V.M., kand.biol.nauk

Conditions of the formation of spawning congregations of Baltic
cod. Trudy VNIRO 36:128-131 '58. (MIRA 12:4)
(Baltic Sea—Codfish)

NAUMOV, V.H.

Fond rearing of salmon trout and brook trout and their hybrids
in Poland. Vop.ikht. no.12:141-143 '59. (MIRA 13:4)

1. Vsesoyuznyy nauchno-issledovatel'skiy institut morskogo
rybnogo khozyaystva i okeanografii - VNIRO.
(Poland-Trout) (Fishes--Migration)

NAUMOV, V.M.

Research in the field of ichthyology and hydrobiology at the
Scientific Research Institute of Fisheries in Varna. Zool.
zhur. 38 no.8:1276-1279 Ag '59. (MIRA 12:11)
(Bulgaria--Fisheries--Research)

MARTI, Yu.Yu., *otv. red.*; ALEKSEYEV, A.P., *zam. otv. red.*; NOSKOV, A.S., *zam. otv. red.*; BORODATOV, V.A., *red.*; VINOGRADOV, L.G., *red.*; ZAYTSEV, G.N., *red.*; IZHEVSKIY, G.K., *red.*; KAZANOVA, I.I., *red.*; KONSTANTINOV, K.G., *red.*; MUNTIAN, V.M., *red.*; NADMOV, V.M., *red.*; SEDYKH, K.A., *red.*; FEDOSOV, M.V., *red.*; CHUMAKOVA, L.S., *red.*; AYNZAFI, Yu.S., *red.*; MUKHINA, Ye.M., *red.*; FORMALINA, Ye.A., *tekhn. red.*

[Soviet fishery research in the northwestern part of the Atlantic Ocean] Sovetskie rybokhoziaistvennye issledovaniia v severo-zapadnoi chasti Atlanticheskogo okeana. Moskva, Izd-vo zhurnala "Rybnoe khoziaistvo," 1962. 375 p. (MIRA 15:7)

1. Moscow. Vsesoyuznyy nauchno-issledovatel'skiy institut morskogo rybnogo khozyaystva i okeanografii. 2. Vsesoyuznyy nauchnyy institut morskogo rybnogo khozyaystva i okeanografii (for Marti, Fedosov). (Atlantic Ocean--Fisheries--Research)

SMIRNOV, A.N.; NAUMOV, V.M.

Biological basis for efficient fisheries in the Taganrog Gulf
of the Sea of Azov. Vop. ikht. 3 no.3:460-471 '63.

(MIRA 16:10)

1. Azovskiy nauchno-issledovatel'skiy institut rybnogo khozyaystva-
As NIIRKh, Rostov-na-Donu.
(Taganrog Gulf--Fisheries)

GUN'KO, A.F.; NAUMOV, V.M.

Most important problems of the reproduction of sturgeons in the Azov Sea basin. Trudy VNIRO no.54:211-221 '64.

(MIRA 18:2)

1. Azovskiy nauchno-issledovatel'skiy institut rybnogo khozyaystva (for Gun'ko). 2. Vsesoyuznyy nauchno-issledovatel'skiy institut morakogo rybnogo khozyaystva i okeanografi (for Naumov).

PAVLENKO, L.I.; NAUMOV, V.N.

From experience in the automatization of auxiliary
services. Prom.energ. 15 no.5:37-38 My '60.
(Automatic control) (Pumping stations) (MIRA 13:7)

NAUMOV, V.N., aspirant

Temperature field of the press mold of a hot vulcanization press.
Nauch.trudy MTILP no.18:132-146 '60. (MIRA 15:2)

1. Kafedra mashin i apparatov legkoy promyshlennosti Moskovskogo tekhnologicheskogo instituta legkoy promyshlennosti.
(Vulcanization--Equipment and supplies)

NAUMOV, V.N., assistant

Temperature field of the mold of a hot vulcanization press.
Nauch. trudy MTILP no.24:180-185 '62. (MIRA 16:7)

1. Kafedra avtomatiki Moskovskogo tekhnologicheskogo instituta
legkoy promyshlennosti.
(Temperature fields) (Power presses)

... ..

Determining the time constant
the experimental transient
NTIR

... ..
... ..

YANIK V. V., kand. tekhn. nauk, starshiy преподаvatel', IZMIRN. I. I.,
kand. tekhn. nauk, assistent

Determining the constant of the duration of a simple process.
Nauch. trudy MTIL no. 29:278-280 '64. (1964)

1. Kafedra avtomatiki Moskovskogo tekhnologicheskogo instituta
legkoy promyshlennosti.

SOKOLOV, G.V., inzh.; PSHCENITSIN, L.S., inzh.; NAUMOV, V.N., inzh.

Practice in using polystyrene in construction. Prom. stroi. 43
no.9:19-20 '65. (MIRA 18:9)

SOLOV, G.V., Inzh.; RAMON, V.H., Inzh.; ELMSTADT, L. . ., Inzh.;
PISHMAN, Yu.A., Inzh.

Gold waterproofing practice on a base of organotin salts. Diss.
mat. II no. 7:30-31 1965. ONIA 18:8.

CHESUNOV, V.M.; NAUMOV, V.N.; KUZNETSOV, A.R.; ARBUZOV, G.A.

Apparatus for gas chromatography in the artificial leather industry.
Kozh.-obuv.prom. 5 no.10:25-29 0 '63. (MIRA 17:4)

NAUMOV, V.P.

Banded structure of ores in pyrite-complex metal deposits of the
Irtysk shear zone in the Rudnyy Altai. Zap. Vses. min. ob-va 88
no.5:533-546 '59. (MIRA 13:2)
(Altai Mountains--Ore deposits)

NAUMOV, V.P.

Effect of enclosing rocks on the distribution of barium feldspare
and barites in deposits of the Irtysh shear zone. Geol. rud.
vestorosh. no.3:108-113 My-Je '60. (MIRA 13:7)

1. Vsesoyuznyy geologicheskii nauchno-issledovatel'skiy
institut, Leningrad.
(Irtysh Valley--Geology, Economic)

NAUMOV, V.P.

Role of basement rocks in metasomatism as revealed by alkali
metasomatites in the Krivoy Rog Basin and Kursk Magnetic
Anomaly. Zap.Vses.min.ob-va 91 no.6:731-736 '62. (MIRA 16:2)

(Krivoy Rog Basin—Metasomatism)
(Kursk Magnetic Anomaly—Metasomatism)

NAUMOV, V. P.

Technical improvements in a forge shop. Sverdlovsk, Gos. nauchno-tekhn. izd-vo mashinostroit. i sudostroit. lit-ry. Uralo-Sibirskoe otd-nie 1953. 46 p. (Novatory proizvodstva) (54-43421)

TS225.N32

NAUMOV, V.P.

NAUMOV, V.P.; DUGINA, N.A., *tekhnicheskiy redaktor.*

[Efficient use of the equipment of a forge] *Ratsional'noe ispol'sovanie oborudovaniia v kusnechnom tsakhe. Moskva, Gos. nauchno-tekhn. izd-vo mashinostroit. lit-ry, 1954. 21 p. (MLRA 8:1)*
(Forging machinery)

NAUMOV, V.P.

DURAYEV, P.A.; RAYTSKS, V.B.; GUTMAN, I.M., inzhener, retsenzent; GANAGO, O.A., kandidat tekhnicheskikh nauk, retsenzent; NAUMOV, V.P., redaktor; DUGINA, N.A., tekhnicheskij redaktor

[Blacksmithing in a machine-tractor repair shop] Kuznechnoe delo v MFM. Moskva, Gos. nauchno-tekhn. izd-vo mashinostroit. lit-ry, 1954. 125 p. (MLRA 8:7)
(Blacksmithing)

NAUMOV, VASILII PROKHOROVICH

PHASE I BOOK EXPLOITATION

500

Naumov, Vasilii Prokhorovich

Goryachaya shtampovka (Hot Forging) Moscow, Mashgiz, 1956. 56 p.
(Series: Nauchno-populyarnaya biblioteka rabocheho kuznetsa, vyp. 9) 10,000 copies printed.

Ed.: Ganago, O.A., Candidate of Technical Sciences; Reviewers: Tarnovskiy, I.Ya., Doctor of Technical Sciences, Professor, and Raytses, V.I., Engineer; Tech. Ed.: Dugina, N.A.; Managing Ed. of the Ural-Siberian Branch of Mashgiz: Kaletina, A.V., Engineer.

PURPOSE: This pamphlet, issued by the Popular Scientific Worker's Library, is the ninth in a series of pamphlets which aim at improving the theoretical knowledge of workers in forging shops.

COVERAGE: This pamphlet is devoted to the theory and practice of various forging methods in current use. The author discusses the general technological aspects of forging and continues with a description of equipment and methods of operation. The principles

Card 1/4

Hot Forging

500

of smith-, drop-, machine- and press forging are briefly explained. There is a short description of a horizontal press forging machine of 50,000 to 75,000 ton capacity used in the aircraft industry. Some space is devoted to the "interesting process of compression molding of molten metal which combines the advantages of forging and casting". In this method the die is filled with a measured amount of molten metal which is then compressed by a descending plunger filling the cavity of the die. The solidification of metal takes place under pressure which gives it a dense, fine-grained structure free of porosity, with good dimensional accuracy and surface quality. Compression molding is most suitable for copper, aluminum, brass and bronze castings. The author predicts a bright future and numerous applications for this method. Experiments with steel have so far been unsuccessful, as the temperature of molten steel has a destructive effect on the dies. It is further mentioned that within the scope of the Sixth Five Year Plan a new forging plant is to be built in the Ural area with a 120,000 ton annual capacity. In conclusion the author states that the trend should be toward improved methods of forging which would require little or no machining. As an example he mentions the "Krasnogvardeyets" plant in Leningrad, which is said to produce forgings with a grade 4 to 5 surface finish. This pamphlet deals more with the general aspects of forging than with the

Card 2/4

Hot Forging

500

technological details of any one forging method. No personalities are mentioned. There are 7 references all of which are Soviet.

TABLE OF CONTENTS:

Present and future developments of forging	3
What happens to metal during forging?	5
Where forging can be used	13
Brief outline of forging machines	16
Methods of hot forging	24
Analysis and design of forging methods	31
Press and hammer forging	33

Card 3/4

Hot Forging	500	
Horizontal machine forging		35
What are the basic forging operations?		38
Design and manufacture of dies		40
Some aspects of the preparation of flowsheets and drawings		44
Conclusion		48
What to read about forging		50

AVAILABLE: Library of Congress

Card 4/4

GO/ad
8-8-58

NAUMOV, Vasilii Prokhorovich; KOZLOV, Anatolii Grigor'yevich; DUGINA, N.A.,
tekhn.red.

[From the Yekaterinburg factory to the modern plant] Ot Ekaterin-
burgskoi fabriki do sovremennogo zavoda. Moskva, Gos. nauchno-
tekhn.isd-vo mashinostroit. lit-ry, 1957. 98 p. (Iz istorii mashino-
stroeniia na Urale, no.4) (MIRA 11:5)
(Sverdlovsk--Machinery industry)

KAMENSHCHIKOV, Grigoriy Georgiyevich; **KOLTUN**, Sergey Ivanovich, inzh.;
NAUMOV, Vasilii Prokhorovich, inzh.; **CHERNOBROVKIN**, Boris
Sergeyevich, inzh.; **POLYAKOV**, V.P., inzh., retsenzent; **KAZARINOV**,
B.K., inzh., retsenzent; **KON'KOV**, A.S., dotsent, red.; **DUGINA**,
M.A., tekhn.red.

[Forging operations] Kuznechnoe proizvodstvo. Izd.3., ispr. 1
dop. Moskva, Gos.nauchno-tekhn.isd-vo mashinostroit.lit-ry, 1959.
447 p. (MIRA 12:8)

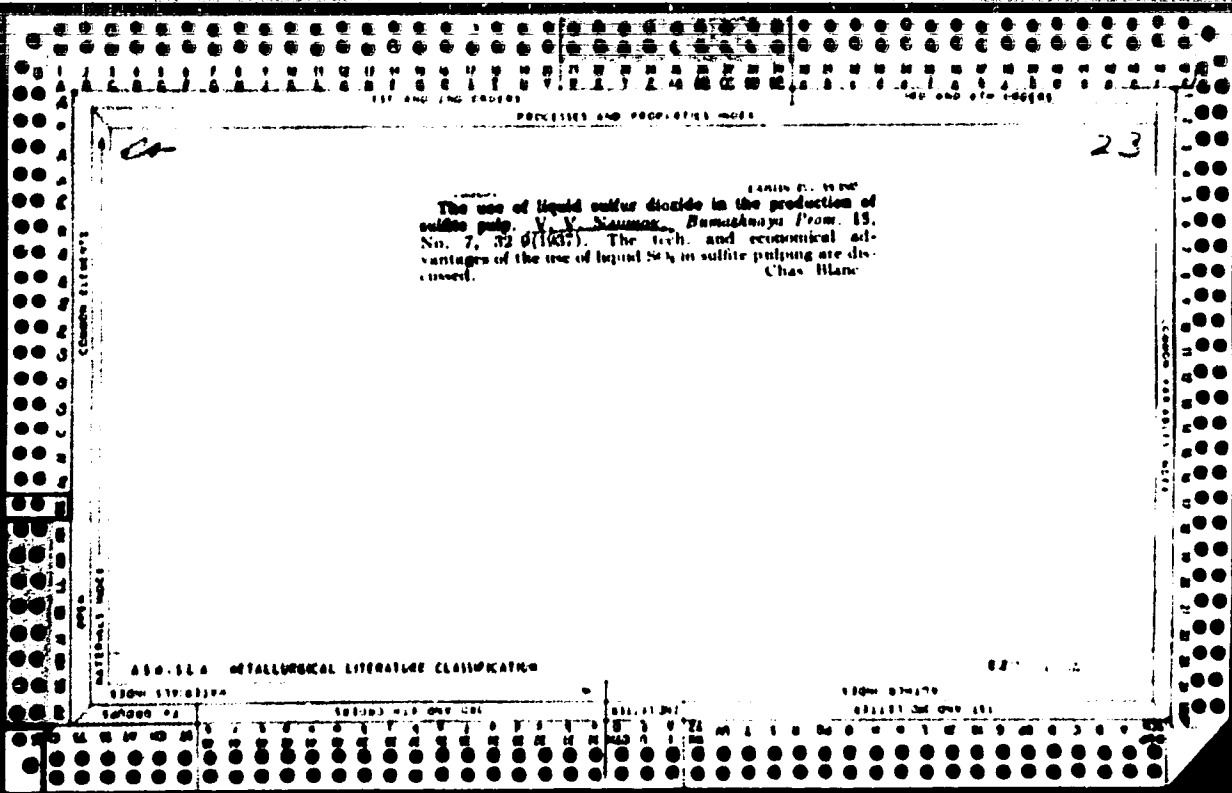
1. Uralmashzavod (for Koltun, Chernobrovkin). 2. Sverdlovskiy
zavod transportnogo mashinostroyeniya (for Naumov).
(Forging)

NAJMOV, Vasilii Prokhorovich; MALYSHEKIN, Konstantin Pavlovich;
KOVALENKO, A.V., inzh., red.; DUGINA, N.A., tekhn.red.

[Efficiency promoters striving for a saving of metal]
Ratsionalizatory v bor'be za ekonomiu metalla. Pod red.
A.V.Kovalenko. Moskva, Mashgis, 1961. 38 p.

(MIRA 15:2)

(Metals) (Machinery--Design)



NAUMOV, V.V., kandidat ekonomicheskikh nauk.

Ways of reducing newsprint costs. Bum. prom. 31 no.11: (MIRA 10:2)
25-27 N '56.

1. Tsentral'nyy nauchno-issledovatel'skiy institut teellyulsnoy i bumazhnoy promyshlennosti.
(Newsprint)

NAUMOV, V.V., kand.ekon.nauk; DMITRIYEV, V.A., inzh.-ekonomist; KOZLOV, A.I., kand.ekon.nauk; GORSHKOV, I.I., inzh.-ekonomist

Economic efficiency of the use of ammonia base in the production of sulfite pulp. *Bum.prom.* 33 no.11:25-26 N '58.(MIRA 13:8)

1. Tsentral'nyy nauchno-issledovatel'skiy institut tsellyuloznoy i bumazhnoy promyshlennosti (for Naumov, Dmitriyev). 2. Vsesoyuznyy nauchno-issledovatel'skiy institut gidroliznoy i sul'fitno-spirovoy promyshlennosti (for Kozlov, Gorshkov).
(Woodpulp) (Amونيا)

ROZENBERGER, N.A.; NAUMOV, V.V.

Basic trends in the development of the production of fibrous intermediate products. Bum. prom. 36 no.9:4-7 S '61. (MIRA 15:1)

1. Vsesoyuznyy nauchno-issledovatel'skiy institut tsellyulozno-bumazhnoy promyshlennosti.
(Cellulose) (Paper industry)

NAUMOV, V.V., kand.ekon.nauk

Some economic indices of the use of soluble bases in the
sulfite pulp production. Sum.prom. 37 no.1:11-13 Ja '62.
(MIRA 15:1)

1. Vsesoyuznyy nauchno-issledovatel'skiy institut
tsellyulozno-bumazhnoy promyshlennosti.
(Woodpulp)
(Bases (Chemistry))

ZHUKHOVITSKIY, A.A.; TURKEL'TAUB, N.M.; KANCHYEVA, O.A.; NAUMOV, V.V.;
RYABCHUK, L.M.

Partition step chromatography. Zav.lab. 29 no.1:14-18 '63.
(MIRA 16:2)

1. Institut yaderno, geofiziki i geokhimi.
(Chromatographic analysis)

ALEKSEYEV, A.A., inzh., rec.; V'YUKOV, I.Ye., kand. tekhn. nauk, red.; GRABOVSKIY, V.A., kand. tekhn. nauk, red.; ZHITKOV, A.V., kand. tekhn. nauk, red.; NAUMOV, V.V., kand. ekon. nauk, red.; NEPENIN, Yu.N., kand. tekhn. nauk, red.; PUZYREV, S.A., kand. tekhn. nauk, red.; RYUKHIN, N.V., kand. tekhn. nauk, red.; SHAPIRO, A.D., kand. tekhn. nauk, red.; ELIASHBERG, M.G., doktor tekhn. nauk, red.

[Handbook for the papermaker in three volumes] Spravochnik bumazhnika v trekh tomakh. Moskva, Izd-vo "Lesnaia promyshlennost'." Vol.1. Izd.2., perer. i dop. 1964. 840 p. (MIRA 17:8)

1. Moscow. Vsesoyuznyy nauchno-issledovatel'skiy institut tsellyulozno-bumazhnoy promyshlennosti.

L 41269-65: EWT(d)/EWT(1) Pg-4/Pk-4/Pl-4/Po-4/Pq-4 GH

AGENCY NR: AF5003927

3/0006/65/000/001/0025/0031

AUTHORS: Holovitin, A. G.; Kuzov, Ya. V.

TITLE: A means for determining the lack of perpendicularity between the axis of rotation of a theodolite tube and the vertical axis

SOURCE: Godeziya i kartografiya, no. 1, 1965, 25-31

TOPIC TAGS: surveying instrument/ theodolite OTA

ABSTRACT: A method for determining the degree of non-perpendicularity between the axis of rotation of a theodolite tube and the vertical axis is presented. Three collimators are approximately positioned in a vertical plane so that the middle collimator zenith distance is about 90° (within a few minutes accuracy), and the remaining collimators are positioned symmetrically with the middle collimator. The zenith distances of all three collimators are determined beforehand. For each collimator the value $2\alpha = \alpha_L - \alpha_P$ is determined. The degree of instrument non-perpendicularity is calculated from the above equation and from the equations

$$\left(\frac{2\alpha_D \cos \alpha_D}{\sin \alpha_D} + 2i \cdot \text{ctg} \alpha_D \right) \quad \left(\frac{\alpha_D' - \alpha_D \cos \alpha_D}{\text{ctg} \alpha_D} \right)$$

where α denotes zenith distance and the subscript D refers to the upper collimator.

Card 1/2

L 41261-65

ACCESSION NR: AP5003927

Similar mathematical relationships exist for the lower collimator. Instruments with an autocollimation feature can be calibrated using planar mirrors 100 mm in diameter in place of the three collimators (the mathematical relationships remain the same). The authors gave the following formulae for determining the characteristic error of the calibration process:

$$m_1^2 = \frac{m^2}{\cos^2 \alpha} + \frac{m^2}{\cos^2 \beta} + \frac{(c')^2}{\cos^2 \alpha} m^2 + \frac{c \cdot \sin^2 \alpha}{\cos^2 \alpha} m^2$$

$$m_2^2 = \left(\frac{1}{\cos^2 \alpha} + \frac{1}{\cos^2 \beta} \right) m^2 + \left[\frac{(c')^2}{\cos^2 \alpha} + \frac{c^2 \sin^2 \alpha}{\cos^2 \alpha} \right] m^2$$

The method was tried with 14 theodolites of type OTA, and the results are presented in a table. The effects of tube position upon the value of deviation are discussed. Orig. art. has: 5 equations and 2 tables.

ASSOCIATIONS: none

SUBMITTED: 00

ENCL: 00

SUB CODE: 23

DO NOT COPY: 001

OTHER: 000

Ord. 1/2

IVANOVA, Ye.N.; ROZOV, N.N.; YEROKHINA, A.A.; BOGINA, N.A.; NOSIN, V.A.;
UFIMTSEVA, K.A.; Prinsipalni uchastiye: IVANOVA, Ye.N.; KOLOVYY, N.N.;
BUDINA, I.F.; VISNNEVSKAYA, I.V.; GERASIMOV, I.P.; KARAVAYEVA, K.A.;
KOSHELEVA, I.T.; NAUMOV, Ye.M.; SEMINA, Ye.V.; SOBOLOV, I.A.;
SOKOLOVA, T.A.; TANGUL'YAN, V.O.

New materials on general geography and soil classification of the
polar and boreal belts of Siberia. Pochvovedenie no.11:7-23 N
'61. (MIRA 14:12)

(Siberia, Northern--Soils--Classification)
(Siberia, Northern--Geography)

NAUMOV, Ye.M.; ANDREYEVA, A.A.

Soils of slopes with steppe characteristics in the Yana-Indigirka Upland;
taiga-steppe soils in the extracontinental regions of the northeastern
U.S.S.R. Pochvovedenie no.3:62-70 Mr '63. (MIRA 16:3)

1. Pochvennyy institut imeni V.V.Dokuchayeva.
(Yana Valley—Soils) (Indigirka Valley—Soils)

NAUMOV, Ye M ; TSYURUPA, I.G.; ANDREYEVA, N.A.

Effect of volcanic ash on the accumulation and distribution of
available compounds in frozen Podzolic soils of Magadan Province.
Pochvovedenie no.12:71-84, 0 '64. (MIRA 18:2)

1. Pochvennyy institut imeni V.V. Dokuchayeva AN SSSR, Moskva.

NIKOLYUK, F., inzh.; NAUMOV, Yu., inzh.; YANKIV, I., inzh.

Manufacture of standard prestressed beams with an 18
span and electrothermally stressed reinforcement. Prom. stroi.
1 inzh. soor. 5 no.5:41-44 S-0 '63. (MIRA 16:12)

GRANDBERG, I.; NAUMOV, Yu.; KOST, A.

Mechanism of the Fobev amidine rearrangement. Doklady BAN 17 no.11:
1025-1026 '64.

1. The M.V. Lomonosov State University, Moscow. Submitted July
15, 1964.

NAUMOV, Yu.A., inzh.

Guided collapsing of a cooling tower by blasting, Mont. i spets.
rab. v stroi. 24 no.4:16 Ap '62. (MIRA 15:7)

1. Ussuriyskoye spetsializirovannoye upravleniye Vsesoyuznogo tresta
po burovym i vzryvnym robotam.
(Cooling towers) (Blasting)

AL'PEROVICH, M.A.; GRECHKO, M.K.; NAUMOV, Yu.A.

Photographic properties of cis- and trans-isomers of
distyryl thiocarbocyanines. Zhur. nauch. i prikl. fot. i
kin. 8 no.6:410-415 N-D '63. (MIRA 17:1)

1. Filial Vsesoyuznogo nauchno-issledovatel'skogo kinofoto-
instituta, Shostka.

NAUMOV, Yu.A., inzh.

The fifth scientific technical conference on recent technology for machining gear and worm transmissions. Vest. mashinostr. 44 no.5:78-80 My '64. (MIRA 17:6)

AL'PEROVICH, M.A.; NAUMOV, Yu.A.; USHENKO, I.K.

Cyanine dyes with unsaturated substituents. Part 8: Cis-trans isomerism of thiocarbocyanines with styryl substituents in the benzothiazole nuclei. Zhur. ob. khim. 31 no.4:1344-1356 Ap '61.
(MIRA 14:4)

1. Institut organicheskoy khimii Akademii nauk Ukrainskoy SSR.
(Cyanine dyes)

KUSKOV, V.K.; NAUMOV, Yu.A.

Synthesis of hydroxyaryl ketones and hydroxyaryl keto acids by acylation of aluminum phenolates. Zhur. ob. khim. 31 no.1:54-59 (MIRA 14:1)
Ja '61.

1. Moskovskiy gosudarstvennyy universitet.
(Ketones) (Acids) (Aluminum phenoxide)

GRANDBERG, I.I.; KOST, A.N.; NAUMOV, Yu.A.

Common features of rearrangements with N - N and N - O bond
breaking and the formation of the nitrile group. Dokl. AN SSSR
149 no.4:838-841 Ap '63. (MIRA 16:3)

1. Moskovskiy gosudarstvennyy universitet im. M.V.Lomonosova.
Predstavleno akademikom A.N.Mesnyanovym.
(Rearrangements (Chemistry)) (Chemical bonds) (Nitriles)

SHEVLYAKOV, Yu.A. (Dnepropetrovsk); NAUMOV, Yu.A. (Dnepropetrovsk)

Determining the sagging of a multilayer foundation. Prikl.
mekh. 1 no.9:89-97 '65. (MIRA 18:10)

1. Dnepropetrovskiy gosudarstvennyy universitet.

MAKOV, Yu.A.; BOSE, A.N.; GONCHARENKO, I.I.

Factors determining the possibility of nitrite rearrangement of the compounds containing a $>N-NH-$ group. *Izv. Akad. Nauk SSSR Ser. Khim.* 1965, no. 1: 41-50. (U.S.S.R. Chem. Abstr. 1965, 10: 10000)

1. Infrared spectra of nitrites and nitrosamines.

ACC NR: AP6035678 (A,N) SOURCE CODE: UR/0413/66/000/019/0026/0026

INVENTOR: Naumov, Yu. A.; Bazhanova, L. G.; Knyazeva, A. P.

ORG: none

TITLE: Preparation of α -naphthyl N-methylcarbamate. Class 12, No. 186438 [announced by Branch of the All-Union Scientific Research Institute of Chemicals for Plant Protection (Filial Vsesoyuznogo nauchno-issledovatel'skogo instituta khimicheskikh sredstv zashchity rasteniy)]

SOURCE: Izobreteniya, promyshlennyye obraztsy, tovarnyye znaki, no. 19, 1966, 26

TOPIC TAGS: α naphthyl methylcarbamate preparation, naphthol, methylcarbamoyl chloride, sodium acetate, *chloride, carbon compound*

ABSTRACT: To increase the yield of the final product in the preparation of α -naphthyl N-methylcarbamate from α -naphthol and methylcarbamoyl chloride in an inert solvent at elevated temperatures, the process is conducted in the presence of a basic or acid catalyst, e.g., SnCl_4 , MgSO_4 , or CH_3COONa . [W.A. 50]

SUB CODE: 07/ SUBM DATE: 26Jan66

Card 1/1

UDC: 547.495.1.07

NAUMOV, Yu.A.; GRANDBERG, I.I.

Rearrangements occurring with N-N or N-O bond breaking and
the formation of a nitrile group. Usp. khim. 35 no.1:21-42
Ja '66. (MIRA 19:1)

1. Moskovskiy gosudarstvennyy universitet imeni M.V. Lomonosova.

NAUMOV, Yu.G. (Kol'chugino); KORENYUK, Yu.M.

Welding flanges to extruded copper pipes. Avtom. svar. 16
no.7:84-85 JI '63. (MIRA 16:8)

1. Institut elektrosvariki im. Ye.O. Patona AN UkrSSR (for
Korenyuk).

(Pipe, Copper—Welding)

Важнейший

Наусов, Ю. Б.

From the Falls of ¹⁹Castine Production (12 otkhodov izlyvogo proizvodstva)

AVAILABLE: LRU

001 1,1

VV/NC/rfd

April 20, 1966

KURTVELIYEV, Ali Abduramanovich; NAUMOV, Yu.I.; TARASOV, V.. red.;
ABRASOV, T., tekhnred.

[Experience of combined brigades at the Tashkent Textile Machinery Plant] Opyt raboty kompleksnykh brigad zavoda "Tashtekstil'mash." Tashkent, Gos.izd-vo Uzbekskoi SSR, 1960.
36 p. (MIRA 14:3)
(Tashkent--Textile machinery)

NAUMOV, Yul. I., inzh.

Manufacturing plastic parts at the Tashkent Textile Machinery
Plant. Mashinostroitel' no.3:26-27 Mr '60.

(MIRA 13:6)

(Tashkent--Textile machinery)

NAUMOV, Yu.I.

Modernization and automation of the IA62 lathe. Stan. 1
instr. 34 no.10:21-23 0 '63. (MIRA 16:11)

NAUMOV, Yu.I.; IZMAIL'KIN, V.A.

Microstructure and electron-acceptor properties of the sulfonfluoride group. Dokl. AN SSSR 163 no.6:1404-1407 Ag '65.

(MIRA 18:8)

1. Laboratoriy krasitel'nykh i problemy tsvetnosti pri Moskovskom pedagogicheskom institute im. V.I.Lenina. Submitted January 30, 1965.

НАУМОВ, Ю.И., инж.

Continuous production of electrodes. Mashinostroitel' no.1:14-16
Ja '59. (MIRA 12:2)

(Electrodes)

NAUMOV, Yu.I., insh.

Continuous production line for manufacturing the working parts
of cultivators. Mashinostroitel' no.1:3-5 Ja '60.

(MIRA 13:4)

(Chirchik--Agricultural machinery industry)
(Assembly-line methods)

NAUMOV, Yu.I.; BAKHTIYEROV, Sh., red.; ZUBOVSKAYA, V., tekhn. red.

[Mechanization and automation of labor consuming processes in the manufacture of machinery] Mashinasozlikda ish protsesslarini mexanizatsionalashtirish va avtomatlashtirish. Toshkent, "Kizil Uzbekiston," "Pravda Vostoka" va "Uzbekistoni surkh" birlashgan nashrieti, 1961. 45 p. [In Uzbek] (MIRA 15:1)
(Machinery industry--Technological innovations)
(Automation)

KARIMOV, Alim Aminovich, kand. tekhn. nauk; NAUMOV, Yuriy Ivanovich,
st. nauchn. sotr. TROFIMOV, F.D., red.

[New machines for overall mechanization of cotton growing]
Novye mashiny dlia kompleksnoi mekhanizatsii khlopkevod-
stva. Tashkent, Gos. izd-vo Uzbek SSR, 1961. 71 p.

(MIRA 17:5)

1. Zamestitel' direktora po nauchnoy chasti Instituta mekha-
niki AN Uzbek.SSR (for Karimov). 2. Institut mekhaniki
AN Uzbek SSR (for Naumov).

NAUMOV, Yu.I.

Universal reading device. Mashinostroitel' no.4:9 Ap '63.
(Reading machines) (MIRA 16:5)

NAUMOV, Yu.I.

New SKT-10 oil-free core binder. Lit.proizv. no.4:38-39 Ap '63.
(Coremaking) (Binding materials) (MIRA 16:4)

NAUMOV, Yu.I.

Automatic press for the manufacture of punched and drawn
screens from sheet metal. Kus.-shtam.proisv. 5 no.4140-41
Ap '63. (MIRA 16:4)

(Power presser)

(Sheet-metal work)

NAUMOV, Yu.V.; ISMAIL'BERID, I.I.

Synthesis of diazo constituents containing a sulfofluoride group. Zhur.prikl.khim. 28 no.11:2562-2566 H '66.

(MIRA 18:10)

1. Moskovskiy gosudarstvennyy pedagogicheskiy institut imeni V.I.Lenina. Submitted June 19, 1966.

L 65134-69 EWT(m)/EPF(c)/ENP(j)/T RM

ACCESSION NR: AP5021595

UR/0286/65/000/013/0069/0069

AUTHORS: Bardenshteyn, I. B.; Gutarts, F. M.; Dymshits, E. L.; Naumov, Yu. I.; Vayner, L. V.

TITLE: A method for obtaining plastic made of lignite-furfurol resin. Class 39, No. 172484

SOURCE: Byulleten' izobreteniy i tovarnykh znakov, no. 13, 1965, 69

TOPIC TAGS: plastic, resin, lignite, furfurol, urotropine, epoxy, methaphenylene diamine

ABSTRACT: This Author Certificate presents a method for obtaining plastic made of lignite-furfurol resin, a filler, and urotropine. To improve its physico-chemical properties, melted epoxy resin and methaphenylene diamine are added to the composition as a hardener.

ASSOCIATION: none

SUBMITTED: 26Aug63

ENCL: 00

SUB CODE: 00

NO REF SOV: 000

OTHER: 000

Card 1/1

S/076/60/034/007/018/042/XX
B004/B068

AUTHORS: Stepukhovich, A. D. and Naumov, Yu. P.

TITLE: Kinetics and Mechanism of Cracking of Paraffin Hydrocarbons. Effect of the Heterogeneity Factor on Kinetics and Mechanism of Cracking of Ethane and Propane

PERIODICAL: Zhurnal fizicheskoy khimii, 1960, Vol. 34, No. 7, pp. 1488-1494

TEXT: The aim of this work was to investigate the effect of the heterogeneity factor S/V on the inhibition coefficient β . S is the internal surface of the reaction vessel, and V is its volume; both β and k are empirical values of the equation for the kinetics of cracking developed by

A. I. Dintses and A. V. Frost: $dx/dt = k(1 - x)/[1 - \beta(1 - x)]$ (1). The following relations were derived by Stepukhovich in Ref. 2: $k = 2w_0 k_3 V / \alpha k_4$, and $\beta = k_4 / (k_5 V + \alpha k_4)$ (2). The inhibition coefficient β is thus given by the rate constant k_4 of chain inhibition in the volume for the collision

Card 1/4

Kinetics and Mechanism of Cracking of
Paraffin Hydrocarbons. Effect of the Hetero-
geneity Factor on Kinetics and Mechanism of
Cracking of Ethane and Propane

S/076/60/034/007/018/042/XX
B004/B068

✓
-

of active radicals with inhibiting molecular reaction products, and the rate constant k_5 of radical absorption by the wall of the vessel; rate k_3 is valid for the development of chains in the volume; w_0 is a constant; α is the portion of the forming inhibiting product in the volume V . Ethane was cracked at 600°C and propane at 580°C and 10, 20, and 40 mm Hg. A spherical and a cylindrical reaction vessel with equal volume were used, and an effect of the geometrical shape was established. The cracking rate in the spherical vessel was only one-sixth to one-third of that found in the cylindrical vessel. This is explained on the basis of the chain theory which says that chains form on the wall, but are ruptured both on the wall and in the volume of the vessel. For the chain length ν , the relation $\nu = \nu_s \left\{ 1 - 0.1gd^2/D + 0.01(gd^2/D^2) \right\}$ (5) is derived. ν_s depends on the geometrical shape of the vessel; g is the chain-rupture coefficient in the volume; D is the diffusion coefficient; and d is the diameter of the vessel. The calculated value of g is between 0.063 and 0.25 sec^{-1} . The linear

Card 2/4

Kinetics and Mechanism of Cracking of
Paraffin Hydrocarbons. Effect of the Hetero-
geneity Factor on Kinetics and Mechanism of
Cracking of Ethane and Propane

S/076/60/034/007/018/042/XX
B004/B068

relation between the cracking rate and d bears evidence to the heterogeneous character of chain formation. Moreover, the effect of S/V was examined by packing the cylindrical vessel with quartz tubes up to different levels. With increasing degree of packing with fresh quartz tubes, i.e., the extension of the wall surface, the cracking rate decreased rapidly. From this, it is concluded that cracking has a chain-like character. On repeated cracking, aging took place when the same packing was used. The packing lost its ability to rupture chains. This is ascribed to a stable chemisorption of radicals on the packing. The inhibition coefficient β in equation (1) depends on S/V and decreases with increasing packing degree. According to Stepukhovich's theory, this indicates the heterogeneous character of the effect of inhibitors and inhibiting products. The assumption that β depends on pressure for ethane but not for propane, was experimentally confirmed. V. V. Voyevodskiy and V. A. Poltorak are mentioned. There are 5 tables and 8 Soviet references.

Card 3/4

Kinetics and Mechanism of Cracking of
Paraffin Hydrocarbons. Effect of the Hetero-
genity Factor on Kinetics and Mechanism of
Cracking of Ethane and Propane

S/076/60/034/007/018/042/XX
B004/B068



ASSOCIATION: Saratovskiy gosudarstvennyy universitet
(Saratov State University)

SUBMITTED: September 22, 1958

Card 4/4

DZHELEPOV, B.S.; KAUFMAN, V.Z.; KRAFT, O.Ye.; NAUMOV, Yu.V.

Measurement of $\beta^+ \gamma$ -coincidences in Tu^{166} $\alpha, \beta \rightarrow Er^{166}$ decay. Izv.
AN SSSR. Ser. fiz. 29 no.7:1079-1082 J1 '65. (MIRA 18:7)

NAUMOV, Yu.V.; MITROFANOV, V.P.

Frankfurt Automobile Exhibition of 1963. Avt. prom. 30

no.9:43-44 S '64.

(MIRA 17: C)

L 1387-66 EWT(m)/EWP(j) DIAAP WW/RM

ACC NR: AP6002677

SOURCE CODE: UR/0048/65/029/012/2141/2146

AUTHOR: Kraft, O.Ye.; Naumov, Yu.V.

24
B

ORG: none

19,44,55
TITLE: A beta-gamma coincidence scintillation spectrometer with a low gamma-gamma coincidence background/Transactions of the Fifteenth Annual Conference on Nuclear Spectroscopy and Nuclear Structure held at Minsk 23 January to 2 February 1965/

SOURCE: AN SSSR, Investiya. Seriya fizicheskaya, v. 29, no. 12, 1965, 2141-2146

TOPIC TAGS: beta decay, beta spectroscopy, gamma spectroscopy, gamma background, scintillation spectrometer.

ABSTRACT: A beta-gamma coincidence scintillation spectrometer is described in which special means are employed to reduce the gamma-gamma coincidence background. Such means are particularly desirable when investigating complex decay schemes where there are many gamma cascades. In this spectrometer the gamma rays are detected with an NaI crystal and the beta particles with an anthracene crystal or a plastic scintillator. Between the source and the beta detector is mounted a thin (~0.3 mm) film of plastic scintillating material in a highly reflecting housing of ~1 μ aluminum foil. The photomultipliers associated with the beta detector and the film scintillator are connected to a coincidence circuit, and only coincidences are recorded as beta particles. Gamma rays that enter the beta detector cannot produce a flash in the thin film scintillator and thus are not recorded. The energy lost by a beta particle traversing
Card 1/2

2

L 13874-66

ACC NR: AP8002677

the film scintillator and its housing was found to be 80-100 keV; this energy loss makes the instrument unsuitable for investigation of soft beta spectra. The behavior of the instrument is discussed in some detail, and it is concluded that in cases favorable to its use the gamma-gamma coincidence background can be reduced by a factor of 10 to 20 without serious reduction in the true beta-gamma coincidence counting rate. The instrument was employed to record the spectrum of gamma rays in coincidence with positrons of the 1500 keV end-point component of the beta spectrum of Eu^{146} . The source was the gadolinium fraction separated chromatographically from a tantalum target bombarded with 600 MeV protons and aged for two or three months. After aging the material consisted almost entirely of Gd^{146} and the Eu^{146} in equilibrium with it. In the gamma ray spectrum there were found two approximately equal peaks corresponding to gamma-ray energies of 635 and 745 keV. It is concluded that the 1500 keV end-point beta decay goes to the 1380 keV level in Sm^{146} . In these measurements the gamma-gamma coincidence background did not exceed 10% of the true beta-gamma coincidence counting rate. When the film scintillator was removed the gamma-gamma coincidence counting rate was approximately equal to the true beta-gamma coincidence rate. It is concluded that the use of the film scintillator in coincidence with the beta detector reduced the gamma-gamma coincidence background by a factor between 10 and 20. Orig. art. has: 7 formulas and 8 figures.

SUB CODE: 18

SUBM DATE: none

ORIG. REF: 001

OTH REF: 001

PC
Card 2/2

DZHELEPOV, B.S.; KRAFT, O.Ye.; NAUMOV, Yu.V.

Magnetic β -spectrometer of coincidences. Izv. AN SSSR. Ser.
fiz. 29 no.12:2163-2167 D '65. (MIRA 19:1)

E 25743-66 EWT(m) DIAAP JD/JG

ACC NR: AP6016389

SOURCE CODE: UR/0048/65/029/007/1079/1082

AUTHOR: Dzhelepov, B. S.; Kaufman, V. Z.; Kraft, O. Ye.; Naumov, Yu. V.

ORG: none

TITLE: Measurement of beta sup plus gamma-coincidences during the decay of

Tl¹⁶⁶, ¹⁶⁶ErSOURCE: AN SSSR. Izvestiya. Seriya fizicheskaya, v. 29, no.7, 1965, 1079-1082

TOPIC TAGS: radioactive decay, spectrometer, positron, gamma radiation, ytterbium, tantalum, proton, beta spectrum, thulium, erbium, coincidence counting

ABSTRACT: The article is a description of an experiment in which a $\beta\gamma$ -spectrometer was used to measure the coincidences of positrons of the hard component of the β^+ -spectrum of Tl^{166} with γ -radiation. The source of Tl^{166} was Yb^{166} contained in an ytterbium fraction. The latter was emitted from a tantalum target irradiated with 660 Mev protons. An analysis of the results is carried out to determine the decay and coincidences at various quantum levels. The authors thank Ye. P. Grigor'yev and V. M. Mikhaylov for valuable discussions, and also Zh. Zhelev, A. V. Kudryavtseva, and G. A. Mironov for assistance in receipt of the sources. Orig. art. has: 3 figures and 3 formulas. [JPRS]

SUB CODE: 20 / SUBM DATE: none / ORIG REF: 003 / OTH REF: 001

Card 1/10K

E 26657-66 EWT(m) DIAAF

ACC NR: AP601711G

SOURCE CODE: UR/0048/65/029/012/2163/2167

AUTHOR: Dobelapov, B. S.; Kraft, O. Ya.; Naumov, Yu. V.

ORG: none

TITLE: Magnetic coincidence beta gamma spectrometer ¹⁹ This paper was presented at the 15th Annual Conference on Nuclear Spectroscopy and the Structure of the Atomic Nucleus, held in Minsk from 25 January to 2 February 1965.

SOURCE: AN SSSR. Izvestiya. Seriya fizicheskaya, v. 29, no. 12, 1965, 2163-2167

TOPIC TAGS: spectrometer, coincidence counting, beta spectrum, electronic circuit, gamma ray, electron beam, positron

ABSTRACT: To overcome some of the difficulties involved in using ordinary spectrometers for the study of gamma-ray coincidence with low intensity hard components of beta spectra, a special magnetic $\beta\gamma$ -spectrometer was designed and built at the Leningrad University. The schematic diagram of the instrument is shown in the enclosure. An 8-bladed fan-shaped diaphragm is used to separate the electron and positron beams. The electronic circuit, the operation of the instrument, and its capabilities are described, as are a number of experiments conducted. Results are plotted in curves and analyzed. The authors thank Yu. G. Zhukovskiy for participating in the early design of the instrument and to V. Z. Kaufman, student at the Leningrad State University, for assisting in its construction.

Card 1/2

L 26657-66

ACC NR: AP6017116

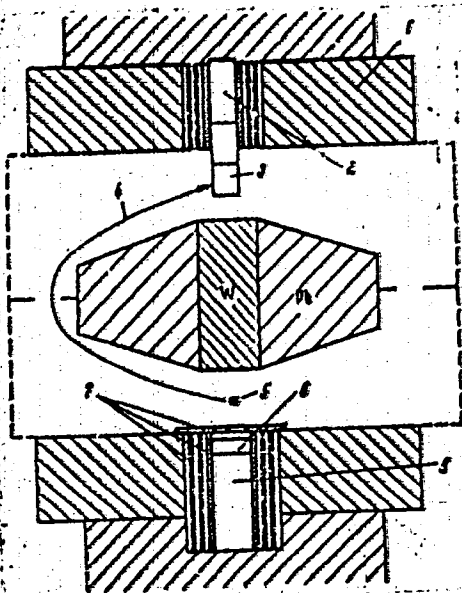


Diagram of the spectrometer: 1) magnet poles, 2) FEU-31 photomultiplier, 3) β crystal, (stilbene) 4) typical electron trajectory, 5) source, 6) γ -crystal (NaI) 7) magnetic shielding for photomultiplier, 8) FEU-35 photomultiplier, dashed lines-vacuum chamber

Orig. art. has: 7 figures. [JPRS]

SUB CODE: 20 / SUM DATE: none / ORIG REF: 003

Card 2/2

L 31403-66 EnI(m)

ACC NR: AP6022577

SOURCE CODE: UR/0048/66/030/003/0554/0559

AUTHOR: Dzheleпов, B. G.; Zaytsova, H. G.; Kraft, O. Ye.; Naumov, Yu. V.;

Sigalov, V. M.

ORG: none 19

TITLE: Spin of sub 71 Lu sup 170 sub 99 [This paper was presented at the 16th Annual Conference on Nuclear Spectroscopy and Nuclear Structure held in Moscow 26 Jan-3 Feb 1966]

SOURCE: AN SSSR. Izvestiya. Seriya fizicheskaya, v. 30, no. 3, 1966, 554-559

TOPIC TAGS: nuclear physics conference, nuclear spin, lutetium, beta decay, proton bombardment

ABSTRACT: The beta+ gamma coincidence method is used to determine the spin of Lu¹⁷⁰ which has a beta+ decay to the lower rotational band of Yb¹⁷⁰. The Lu¹⁷⁰ sample was obtained from Hf¹⁷⁰, with the usual bombardment of a tantalum target with 660 mev protons. The coincidences of ~1660 kev positrons and gamma radiation was studied in the range of 10 to ~250 kev. Coincidences were not observed at energies of 193 and 84 kev, nor were beta+ transitions from the Lu¹⁷⁰ ground state to the 2+ and 4+ levels of Yb¹⁷⁰. It is shown that the ground state spin of Lu¹⁷⁰ is zero - a conclusion that is supported by theoretical arguments. Finally, the purity of the isotopic spin in the ground state of Lu¹⁷⁰ is determined. The coefficient of impurity isospin (5 X 10⁻³) determined theoretically is 20 times greater than the experimental value, which fact needs theoretical explanation. The authors thank L. A. Slyv. and Yu. I. Kharitonov for valuable discussions.

Orig. art. has: 2 figures and 7 formulas. JPRS: 39,040
Card 1/1 SUB CODE: 20 / SUBM DATE: none / ORIG REF: 009 / OTH REF: 008

and Yu. V. Narseyev for isolating cerium from dysprosium, and B. G. Zhelev and K. Ya. Gromov for cooperation in procuring the sources." Orig. art.

has: 4 figures and 1 table. JPRS: 39,040
Card 1/1 SUB CODE: 20 / SUBM DATE: none / ORIG REF: 010 / OTH REF: 004

ACC NR: AM5012954

Monograph

UR/

Kolosov, Andrey Aleksandrovich (Professor); Gorbunov, Yuriy Ivanovich;
Naumov, Yuriy Yevgen'yevich

Semiconductor solid-state circuits^{nf} (Poluprovodnikovyye tverdyye skhemy) Moscow, Izd-vo "Sovetskoye radio," 1965. 0503 p. illus., biblio. Errata slip inserted. 13,600 copies printed

TOPIC TAGS: solid state physics, semiconductor theory, semiconducting material, PN junction, integrated circuit, circuit design, electronic engineering, solid state, solid state device

PURPOSE AND COVERAGE: This book presents systematized data on solid state circuits based on semiconductors. The text describes the electronic principles of solids, the physical processes taking place in semiconductor materials, the application of these processes in designing integrated and functional solid state circuits, and the technology of constructing such circuits. The book is intended for engineers working in the field of radio electronics and electronic engineering, as well as for students at radio engineering institutes. The material used in chapters XIV and XVIII was prepared with the aid of V.N. Kono-
nov and N.A. Avayev. The authors thank F.V. Lukin, Dr. of Technical Sciences, and B.N. Mozzevloy, Candidate of Technical Sciences, for their valuable comments on the manuscript.

Card 1/3

UDC: 621.382.8

ACC NR: AM5012954

TABLE OF CONTENTS (abridged):

Foreword - - 3

Introduction. Main trends in the microminiaturization of radio electronic equipment - - 6

Part 1. Elements of the theory of solids

Ch. I. Crystalline solids - - 23

Ch. II. Energy levels of atoms - - 34

Ch. III. Chemical bonds - - 61

Ch. IV. Band theory of solids - - 77

Part 2. Physical processes in semiconductor solid circuits

Ch. V. Electrical conductivity of semiconductors - - 118

Ch. VI. Statistics of mobile carriers - - 138

Ch. VII. Current in semiconductors at nonuniform carrier distribution - - 158

Ch. VIII. Physical processes in the p-n junction - - 178

Ch. IX. Physical phenomena in semiconductors of interest for the development of solid-state circuits - - 201

Card 2/3

ACC NR: AM5012954

Part 3. Semiconductor solid-state circuits and their elements

- Ch. X. Resistances and capacitances of solid-state circuits -- 217
- Ch. XI. Solid-state circuits with distributed parameters - - 263
- Ch. XII. Transistors in solid-state circuits - - 285
- Ch. XIII. Devices with negative resistance, or active elements of solid-state circuits - - 336
- Ch. XIV. Inductive elements of solid-state circuits - - 361
- Ch. XV. Technology of constructing solid-state circuits - - 388
- Ch. XVI. Integrated circuits - - 413
- Ch. XVII. Semiconductor functional solid-state circuits - - 444
- Ch. XVIII. Factors determining the minimum sizes of solid-state circuits - - 463

SUB CODE: 20 SUBM DATE: 04Jan65 ORIG REF: 053 OTH REF: 125

Card: 3/3

19032-65 EWT(1)/EWA(h) Pm-4/Peb RAEM(a)/SSD/ASD(a)-5/AFWL/AFETR/ESD(c)/
ESD(ja)

ACCESSION NR: AF5000450

S/0109/64/009/012/2105/2112

AUTHOR: Moskvitin, L. L.; Naumov, Yu. Ye. B

TITLE: Saturation of quantum paramagnetic amplifiers with high input signals

SOURCE: Radiotekhnika i elektronika, v. 9, no. 12, 1964, 2105-2112

TOPIC TAGS: quantum paramagnetic amplifier, microwave amplifier

ABSTRACT: An error is admitted in formulas 8, 10, and 12 in N. V. Karlov's, et al., article (Rad. i elektronika, 1961, 6, 3, 410). The saturation of various quantum paramagnetic amplifiers (QPA) excited by a continuous signal is theoretically investigated; formulas are developed for the saturation power of TW QPA and of reflex-type regenerative amplifiers. The concept of "saturation power" is not entirely adequate for describing the behavior of QPA excited by strong signals; this concept does not define the upper limit of the QPA dynamic range. Hence, to assess linearity of QPA, a demodulation ratio of the input

Card 1/2

L 19032-65

ACCESSION NR: AP5000450

signal which characterizes information distortion is suggested. Relations between the saturation and demodulation for the TW and reflex QPA types are presented (Fig 3) and discussed. Orig. art. has: 3 figures and 33 formulas.

ASSOCIATION: none

SUBMITTED: 20Jun63

ENCL: 00

SUB CODE: EC

NO REF SOV: 001

OTHER: 005

Card 2/2

I 21147-66 EWT(1)/EWA(H)

ACC NR: AT6008788

SOURCE CODE: UR/2657/65/000/014/0170/0184

AUTHOR: Luk'yanuk, I. Ye.; Naumov, Yu. Ye.

35
B41

ORG: none

TITLE: Examination of transient conditions in a semiconductor delay line

SOURCE: Poluprovodnikovyye pribory i ikh primeneniye; sbornik statey, no. 14, 1965, 170-184

TOPIC TAGS: circuit delay line, carrier lifetime

ABSTRACT: On the basis of the solution of the continuity equation, an analysis of the basic characteristics of a semiconductor delay line was made. The study covered the transfer constant of the circuit, the magnitude of the delay, and pulse widening at the output. Graphs of the basic characteristics of the delay circuit, and its dependences on the mode, geometrical dimensions, length of the diffusion path, and the lifetime of minority carriers are presented. The results of experimental measurements are also given. Orig. art. has: 6 figures, 1 table, and 24 formulas. [Based on authors' abstract] [JKP]

SUB CODE: 09/ SUBM DATE: none/ ORIG REF: 001/ OTH REF: 002

Card 1/1 VLR

UDC: 621.382.001.24

ACC NR: AP5022429 SOURCE CODE: UR/0109/65/010/009/1653/1659

I 8889-66 BEC(k)-2/EWA(h)/EWT(1)/ T IJP(c)

AUTHOR: Naumov, Yu. Ye.; Shaykin, N. N.

14
B

ORG: none

TITLE: Investigation of ^{25,44} dinistor turn-on transient

SOURCE: Radiotekhnika i elektronika, v. 10, no. 9, 1965, 1653-1659

TOPIC TAGS: dinistor, four region diode, npnp diode

ABSTRACT: A theoretical and experimental investigation of the turn-on process in a four-region diode (dinistor) is presented. As the turn-on time is determined by accumulation of an excess charge in the dinistor structure, a charge method is used in the theoretical analysis. Approximate formulas for delay and turn-on times are developed. The experimental verification was performed on two-transistor simulators (not on an actual 4-region structure); curves of the dinistor gain, delay, and turn-on time plotted against current are presented. It is found that the middle-junction capacitance tends to increase the dinistor turn-on time. Orig. art. has: 10 figures, 26 formulas, and 1 table.

SUB CODE: 09 / SUBM DATE: 16Jul64 / ORIG REF: 007 / OTH REF: 003

card 1/1 ad

UDC: 621.382.233.001,5

L 8545-66 REC(k)-2/EWT(d)/EWT(1)/T/EWA(h) IJP(c)

ACC NR: AP5022430 SOURCE CODE: UR/0109/65/010/009/1660/1662

AUTHOR: Naumov, Yu. Ye.; Shuykin, N. N.

ORG: none 44, 55 44, 55

TITLE: Problem of the inductive impedance of a dinistor 05, 44

SOURCE: Radiotekhnika i elektronika, v. 10, no. 9, 1965, 1660-1662

TOPIC TAGS: dinistor, semiconductor diode

ABSTRACT: Connected with the work of J. Nishizava et al. (Solid State Circuits Confer., Phila., 1960), the nature of dinistor impedance is theoretically explored. By using well-known transient-process equations and the Laplace's transform, a formula for the dinistor impedance is developed. The dinistor impedance is found to be inductive not only within the negative-differential-resistance segment but also within a portion of the positive-differential-resistance segment of the dinistor I-V curve. The capacitance of the middle junction tends to decrease the dinistor inductance and the boundary frequencies of the negative-resistance segment. Orig. art. has: 1 figure and 15 formulas.

SUB CODE: 09 / SUBM DATE: 16Jun64 / ORIG REF: 004 / OTH REF: 002

jw
Card 1/1

UDC: 621.382.233.001.24

50
B