

KOROLEV, B.A.

Resection of the thoracic segment of the esophagus in cancer with one-stage intrathoracic anastomosis. Khirurgiia 35 no. 11:3-10 N '59.
(MIRA 14:1)

(ESOPHAGUS—SURGERY)

VOGRALIK, V.G., prof., red.; BELOUSOV, S.M., red.; BOL'SHEV, I.N.,
red.; KLIMOVA, N.Ya., red.; KOROLEV, B.A., red.; YASHANIN,
Yu.V., red.

[Problems in the pathology and treatment of blood system
diseases] Voprosy patologii i terapii sistemy krovi. Gor'kii,
1961. 197 p. (MIRA 14:12)

1. Gospi'tal'naya terapevticheskaya klinika Gor'kovskogo medi-
tsinskogo instituta im. S.M.Kirova i Gematologicheskoy kliniki
pri Oblastnoy stantsii perelivaniya krovi (for Vogralik).
 2. Gor'kovskaya oblastnaya stantsiya perelivaniya krovi (for
Bol'shev, Klimova, Yashanin).
 3. Klinika gospi'tal'noy khirurgii
Gor'kovskogo meditsinskogo instituta im. S.M.Kirova (for Korolev).
- (BLOOD--DISEASES)

KOROLEV, B.A., vrach (Moskva)

Home stadium. Zdorov'ie 7 no.7:27 J1 '61.
(EXERCISE THERAPY)

(MIRA 14:6)

KOROLEV, B.A.

Polar night and ultraviolet irradiation. Vop. kur., fizioter. i lech.
fiz. kul't. 27 no.1:68 '62. (MIRA 15:5)

1. Vrach stantsii "Severnnyy polyus - 7".
(ULTRAVIOLET RAYS--THERAPEUTIC USE)

KOROLEV, B. A., prof.; PIKOVSKIY, D. L., kand. med. nauk

Some problems in the surgical treatment of acute cholecystitis.
Khirurgia 37 no.7:15-21 J1 '61. (MIRA 15:4)

1. Iz kafedry gospital'noy khirurgii Gor'kovskogo meditsinskogo
instituta.

(GALL BLADDER—SURGERY)

KOROLEV, B.A., prof.

Complications during mitral commissurotomy. Khirurgia no.1:16-
22 '62. (MIRA 15:11)

1. Iz gospital'noy khirurgicheskoy kliniki (zav. - zasluzhennyy
deyatel nauki prof. B.A. Korolev) Gor'kovskogo meditsinskogo
instituta.

(MITRAL VALVE—SURGERY)

KOROLEV, B.A., professor (Gor'kiy, nab. im. Zhdanova, d.8-a, kv.10);
DYNNIK, I.B.

Diagnosis and surgical treatment of sarcoma of the lung. Vest.
khir. no.5:3-10 '62. (MIRA 15:11)

1. Iz gosptal'noy khirurgicheskoy kliniki (zav. - prof. B.A.
Korolev) Gor'kovskogo meditsinskogo instituta im. S.M. Kirova.
(LUNGS—CANCER)

BLOKHIN, V.N.; GRIGOR'YEV, M.G.; KOZHEVNIKOV, A.I.; KOROLEV, B.A.; MATYUSHIN,
I.F.; PARIN, B.V.; TSIMKHES, I.L.; KALININA, G.V.; FEDOROV, A.M.;
KOLOKOL'TSEV, M.V.; SOKOLOV, V.V.; PRILUCHNAYA, O.A.; SHUMILKINA,
Ye.I.; ABRAMOV, Yu.G.; RYURIKOV, A.Kh.; IKONNIKOV, P.I.; VOZNESENSKIY,
I.Ya.; TEPOV, S.V.; MIZINOV, N.N.; KUKOSH, V.I.

V.M.Durmashkin; obituary. Ortop., travm. i protez. 21 no.8:81 Ag
'60. (MIRA 13:11)

(DURMASHKIN, VIKTOR MARKOVICH, d. 1960)

KOROLEV, B.A., vrach

Physical culture as a curative factor under polar night conditions.
Vop.kur., fizioter.i lech.fiz.kul't. 27 no.2:168-169 Mr-Ap '62.
(MIRA 15:11)

1. Nauchno-issledovatel'skaya stantsiya "Severnnyy polyus-7".
(PHYSICAL EDUCATION AND TRAINING)(ARCTIC REGIONS)
(EXERCISE THERAPY)

KOROLEV, B.A. (Gor'kiy, nab. Zhdanova, d 8-2, kv.10); OKHOTIN, I.K.

Some problems in surgical treatment of aortic coarctation. Grud.
khir 5 no.1:71-77 Ja-F'63. (MIRA 16:7)

1. Iz kliniki gospital'noy khirurgii (zav.-prof. B.A.Korolev)
Gor'kovskogo meditsinskogo instituta.
(AORTA—DISEASES) (AORTA—SURGERY)

KOROLEV, B.A., prof. (Gor'kiy, nab.Zhdanova, d.8-a, kv.10); SHMERELSON,
M.B., kand.med.nauk

Indications and contraindications for surgical treatment of
bronchiectasis. Vest.khir. 90 no.3:19-24 Mr-'63. (MIRA 16:10)

1. Iz gospi'tal'noy khirurgicheskoy kliniki (zav. - prof. B.A.
Korolev) Gor'kovskogo meditsinskogo instituta imeni Kirova
(rektor - dotsent I.F.Matyushin).
(BRONCHIECTASIS) (LUNGS—SURGERY)

KUKOSH, Valentin Ivanovich, prof.; KOROLEV, B.A., prof., zasl. deyatel'
nauki, nauchn. red.; GARANINA, L.F., red.

[Pneumonectomy in chronic suppurative diseases of the lungs]
Pnevmonektomiia pri khronicheskikh nagnoitel'nykh zaboлева-
niakh legkikh. Gor'kii, Volgo-Viatskoe knizhnoe izd-vo,
1964. 482 p. (MIRA 17:8)

1. Chlen-korrespondent AMN SSSR (for Korolev).

KOROLEV, B.A., prof. (Gor'kiy)

Teaching surgery in a medical institute. Khirurgiia 40 no.3:
114-117 Mr '64. (MIRA 17:9)

KOROLEV, B.A., prof.; KAROV, V.V.

Late results of surgical treatment in mitral stenosis.
Khirurgiia 40 no.1:24-31 Ja '64.

(MIRA 17:11)

1. Klinika gospital'noy khirurgii (zav. - prof. B.A. Korolev)
Gor'kovskogo meditsinskogo instituta.

KOROLEV, B.A., prof. (Gor'kiy 5, naberezhnaya Zhdanova, 8-a, kv.20);
GRINVAL'D, I.M., kand. med. nauk (Gor'kiy)

Surgical treatment of coronary insufficiency. Vest. khir. 92 no.3:
119-122 Ja '64. (MIRA 17:11)

KOROLEV, B.A., zasluzhennyy deyatel' nauki, prof.; GRINVAL'D, I.M., kand.med.
nauk (Gor'kiy)

Results of a comparative study of some surgical methods in coronary
insufficiency. Khirurgiia no.10:24-31 '64. (MIRA 18:8)

1. Chlen-korrespondent AMN SSSR (for Korolev).

KOROLEV, B.A.; KAROV, V.V.

Comparative evaluation of methods used in commissurotomy based on the results of 900 operations. Uch. trudy GMI no.19:7-13 '65.
(MIRA 18:8)

1. Iz kliniki gospital'noy khirurgii Gor'kovskogo gosudarstvennogo meditsinskogo instituta imeni S.M.Kirova.

KOROLEV, B.A.; KAROV, V.V.; OBUKHOVA, A.A.; GUTENKO, V.I.

Quinidine and defibrillation of the heart in treating cardiac
fibrillation. Uch. trudy GMI no.19:27-32 '65.

(MIRA 18:8)

1. Iz kliniki gospital'noy khirurgii Gor'kovskogo gosudarstvennogo
meditsinskogo instituta imeni S.M.Kirova.

KOROLEV, B.A.; KAROV, V.V.; KOCHEDYKOVA, L.V.; UTKOV, A.A.; GUGINA, G.G.

Late results of surgical treatment of mitral stenosis. Uch. trudy
CMI no.19245-52 '65. (MIRA 18:8)

1. Iz kliniki gosital'noy khirurgii Gor'kovskogo gosudarstvennogo
meditsinskogo instituta imeni S.M.Kirova.

KOROLEV, B.A.; OKHOTIN, I.K.; SHVARTS, T.F.; DERYABINA, Ye.I.; YEZHOVA, T.N.;
GUTENKO, V.I.

Clinical course of the defects of the interventricular septum
and their surgical treatment under conditions of extracorporeal
blood circulation. Uch. trudy GMI no.19:99-107 '65.

(MIRA 18:8)

1. Iz kliniki gospital'noy khirurgii Gor'kovskogo gosudarstvennogo
meditsinskogo instituta imeni S.M.Kirova.

KOROLEV, B.A.; OKHOTIN, I.K.; SHVARTS, T.F.; GUTENKO, V.I.

Results of 205 operations performed on a "dry" heart under conditions of surface hypothermia. Uch. trudy GMI no.19:125-136 '65.

(MIRA 18:8)

1. Iz kliniki gospital'noy khirurgii Gor'kovskogo gosudarstvennogo meditsinskogo instituta imeni S.M.Kirova.

KOROLEV, B.A.; OKHOTIN, I.K.; BELOUSOV, Yu.V.

Surgical treatment of patent ductus arteriosus; results of 320 operations. Uch. trudy GMI no.19:175-184 '65.

(MIRA 18:8)

1. Iz kliniki gospital'noy khirurgii Gor'kovskogo gosudarstvennogo meditsinskogo instituta imeni S.M.Kirova.

KOROLEV, B.A.; KAROV, V.V.

Blood transfusion in surgery for mitral stenosis. Uch. trudy GMI
no.19:79-84 '65. (MIRA 18:8)

1. Iz kliniki gospital'noy khirurgii Gor'kovskogo gosudarstvennogo
meditsinskogo instituta imeni S.M.Kirova.

KOROLEV, E.L.

Intracardiac blood transfusion. Uch. trudy GMI no.19:90-96 '65.
(MIRA 18:8)
1. Iz kliniki gospital'noy khirurgii Gor'kovskogo gosudarstvennogo
meditsinskogo instituta imeni S.M.Kirova.

KOROLEV, B.A.; SHVARTS, T.F.

Complications during the exclusion of the heart from blood circulation under conditions of surface hypothermia during the correction of congenital defects of the heart. Uch. trudy GMI no.19:137-141 '65.
(MIRA 18:8)

1. Iz kliniki gosital'noy khirurgii Gor'kovskogo gosudarstvennogo meditsinskogo instituta imeni S.M.Kirova.

KOROLEV, B.A.; OKHOTIN, I.K.

Coarctation of the aorta; diagnosis, surgical treatment, late results.
Uch. trudy GMI no.19:157-169 '65.

(MIRA 18:8)

1. Iz kliniki gosital'noy khirurgii Gor'kovskogo gosudarstvennogo
meditsinskogo instituta imeni S.M.Kirova.

KOROLEV, B.A.; OKHOTIN, I.K.

Surgery of the heart at the 4th European Cardiological Congress.
Uch. trudy GMI no.19:310-315 '65.

(MIRA 18:8)

KOROLEV, B.A.

Anesthetists and heart surgeons in the United States of America.
Uch. trudy GMI no.19:316-344 '65.

(MIRA 18:8)

L 36496-66 EWI(m)/EWP(1) RM

ACC NR: AP6027088

SOURCE CODE: UR/0079/65/035/010/1879/1880

AUTHOR: Bokanov, A. I.; Korolev, B. A.; Stepanov, B. I.

ORG: Moscow Chemical Engineering Institute im. D. I. Mendeleev (Moskovskiy khimiko-tehnologicheskii institut)

TITLE: Basicity of phosphines and electronic properties of certain organo-phosphorus groups

SOURCE: Zhurnal obshchey khimii, v. 35, no. 10, 1965, 1879-1880

TOPIC TAGS: organic phosphorus compound, electric property, titrimetry, nitromethane, ionization, atom, phenyl compound, electron donor

ABSTRACT: Potentiometric titration in nitromethane at 25°C was used to determine the ionization constants $pK_a(H_2O)$ of a series of tertiary phosphines: $(C_2H_5)_3P$ 8.86, $(C_2H_5)_2PC_6H_5$ 6.41, $n-(C_2H_5)_2PC_6H_4Cl$ 5.68, and $P(C_6H_5)_3$ 2.61. The ionization constants of phosphines with aryl and ethyl substituents on the phosphorus are accurately described by the equation: $pK_a = -4.606 - 4.094 \Sigma \sigma_p$.

where σ_p are the Kabachnik constants. The applicability of the latter to the calculation of ionization constants of aryl-substituted phosphines means that the free electron pair of the

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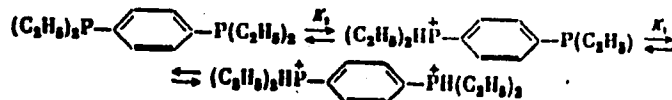
UDC: 543.257.1+547.241+547.558.1

L 36496-66

ACC NR: AP6027088

"APPROVED FOR RELEASE: 06/14/2000 — CIA-RDP86-00513R000824810015-2"

phosphorus atom in the phosphino group in the basic (unexcited) state is not conjugated with the π system of the aryl group. Having determined both ionization constants of p-phenylenebisdiethylphosphine, pK_a^1 3.35, pK_a^2 6.57.



the authors found the values of σ_p for the p-diethylphosphinophenyl and p-diethylphosphonium phenyl groups. The electron-donor property of the diethylphosphino group was found to be weak. The electron-acceptor property of the p-diethylphosphonium phenyl group is approximately the same as that of the p-ammonium phenyl groups.

Orig. art. has: 1 formula. [JPRS: 36,328]

SUB CODE: 07 / SUBM DATE: 03May65 / ORIG REF: 002 / OTH REF: 002

Card 2/2MLP

SUB CODE: 07 / SUBM DATE: 22 Oct 65 / ORIG REF: 003 / OTH REF: 001

Card 1/1

UDC: 542.257.1 + 661.718.1 + 547.583

0923 0788

BOKANOV, A.I.; KOROLEV, B.A.; STEPANOV, B.I.

Basicity of phosphines and the electronic properties of some
organophosphorus groups. Zhur. ob. khim. 35 no.10:1879-
1880 O '65. (MIRA 18:10)

I. Moskovskiy khimiko-tekhnologicheskii institut imeni D.I.
Mendeleeva.

GRIGOR'YEV, V.P.; VISHKAREV, A.F.; KOROLEV, B.G.; ABROSIMOV, Ye.V.;
YAVOYSKIY, V.I.

Effect of phosphorus and manganese on the surface tension
of iron-carbon alloys. Izv.vys.ucheb.zav.; Chern.met. no.4:
55-65 '60. (MIRA 13:4)

1. Moskovskiy institut stali.
(Iron alloys) (Surface tension)

KOROLEV, B. G.

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PHASE I BOOK EXPLOITATION

SOV/5411

Konferentsiya po fiziko-khimicheskim osnovam proizvodstva stali. 5th,
Moscow, 1959.

Fiziko-khimicheskiye osnovy proizvodstva stali; trudy konferentsii
(Physicochemical Bases of Steel Making; Transactions of the
Fifth Conference on the Physicochemical Bases of Steelmaking)
Moscow, Metallurgizdat, 1961. 512 p. Errata slip inserted.
3,700 copies printed.

Sponsoring Agency: Akademiya nauk SSSR. Institut metallurgii imeni
A. A. Baykova.

Responsible Ed.: A. M. Samarin, Corresponding Member, Academy
of Sciences USSR; Ed. of Publishing House: Ya. D. Rozentsveyg.
Tech. Ed.: V. V. Mikhaylova.

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115

Physicochemical Bases of (Cont.)

SOV/5411

PURPOSE: This collection of articles is intended for engineers and technicians of metallurgical and machine-building plants, senior students of schools of higher education, staff members of design bureaus and planning institutes, and scientific research workers.

COVERAGE: The collection contains reports presented at the fifth annual convention devoted to the review of the physicochemical bases of the steelmaking process. These reports deal with problems of the mechanism and kinetics of reactions taking place in the molten metal in steelmaking furnaces. The following are also discussed: problems involved in the production of alloyed steel, the structure of the ingot, the mechanism of solidification, and the converter steelmaking process. The articles contain conclusions drawn from the results of experimental studies, and are accompanied by references of which most are Soviet.

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Physicochemical Bases of (Cont.)

SOV/5411

Bogatenkov, V. F., K. T. Kurochkin, and P. V. Umrikhin. Investigating the Permeability of Basic Open-Hearth Slag to Hydrogen 195

Grigor'yev, V. P., A. F. Vishkarev, B. G. Korolev, Ye. V. Abrosimov, and V. I. Yavoyskiy. Effect of Phosphorus and Manganese on the Surface Tension of Ferrocabon Alloys 204

Khitrik, S. I., and Ye. I. Kadinov. Reducing Chromium Losses in Making Stainless Steel With the Use of Oxygen [Blast] 213
[The following persons participated in the research work: A. V. Rabinovich, Yu. V. Chepelenko, V. P. Frantsov, I. P. Zabaluyev, V. F. Smolyakov, P. V. Demidov, M. M. Dovgiy, T. M. Bobkov, Ye. I. Moshkevich, A. M. Neygovzen, T. F. Olenich, K. P. Gunaza, B. I. Zlatkina, and Yu. A. Nefedov.]

PART II. CONVERTER PROCESSES

Baptizmanskiy, V. I. Certain Problems of the Mechanism and

Card 9/18

PIMENOV, V.M.; BORDINA, G.M.; KOROLEV, B.G.

Effect of conditions of casting magnetic alloys on their
properties. Lit. proizv. no.8:6-8 Ag '61. (MIRA 14:7)
(Alloys—Magnetic properties)
(Founding)

18.1142

30881

S/148/61/000/009/009/012
E193/E383AUTHORS: Korolev, B.G. and Pimenov, V.M.

TITLE: Preparation of high-energy permanent magnets

PERIODICAL: Izvestiya vysshikh uchebnykh zavedeniy, Chernaya metallurgiya //no. 9, 1961, 124 - 128

TEXT: The object of the present investigation was to explore the possibility of using vacuum-melting as a means of increasing the effectiveness of 24.5% Co-14% Ni-3.5% Cu-8.5% Al - remainder Fe alloy as a permanent-magnet material. The results of the first series of experiments show that whereas for alloys melted in vacuum (2 - 3 mm Hg) or in argon, the product $(B \times H)_{\max}$, where B is the residual induction and H the coercive force, was equal to approximately 5.3×10^6 gauss.Oe, the corresponding figure for alloys melted in air was only about 4.5×10^6 . In the second series of experiments, the effect of directional solidification of the alloy on its magnetic properties was studied, the material used for this purpose containing 1% Nb. The following procedure was used.

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E193/E383

Preparation of

A 3-kg charge was melted in vacuum. After de-gassing, argon was introduced in the vacuum chamber to bring up the pressure to the atmospheric level. The temperature of the melt was then increased to 1650°C and the molten alloy was transferred to a ladle pre-heated to $500 - 600^{\circ}\text{C}$, from which it was then poured in air into a specially designed, heated mould with a water-cooled bottom. This is illustrated schematically in Fig. 2, showing: 1 - quartz tube; 2 - fire-resistant brick lid; 3 - asbestos gasket; 4 - cement seal; 5 - inductor; 6 - support; 7 - insulating cement; 8 - quartz furnace-packing powder; 9 - graphite heater; 10 - asbestos cement plate; 11 - heat-resistant ring; 12 - copper cooler; 13 - ingot (the inductor with a wall thickness of 50 mm could withstand 30 - 35 casting operations). The temperature of the mould before pouring was brought up to $1450 - 1500^{\circ}\text{C}$. An electron-tube generator was switched-on immediately after pouring to compensate for the heat losses and the alloy was allowed to solidify for 25 min. The ingot was held in the mould until a temperature of $900 - 1000^{\circ}\text{C}$ was reached and then

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E193/E383

Preparation of

cooled to room temperature, buried in sand. Ingots obtained in this manner consisted entirely of vertically orientated columnar crystals. The complete operation lasted 60 - 70 min. The magnets obtained from these ingots were heat-treated in the following manner: after heating to 1 300 °C and holding at that temperature for 15 min, the specimen was placed in a magnetic field (4 500 Oe) and cooled to 800 - 1 000 °C at a rate no slower than 2 °C/sec. The rate of cooling was then slowed down by placing the magnet in an asbestos thermostat. The magnetic treatment was ceased at 600 °C, after which the magnet was transferred to a muffle furnace and held for 24 hours at 600 °C, cooled to 560 °C and held at that temperature for 24 hours. A typical demagnetization (B_r versus H_c) curve

for a magnet obtained in this manner is reproduced in Fig. 3. The $(B \times H)_{max}$ product for material obtained in this manner

was $(8 \text{ to } 8.36) \times 10^6$ gauss Oe.

There are 3 figures, 1 table and 3 references: 2 Soviet-bloc and 1 English - Ref. 2 - D.G.Ebeling, A.A. Burr, Journal of Metals, v. 5, no. 4, 537.

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30881

S/148/61/000/009/009/012
E193/E383

Preparation of

ASSOCIATION: SKB Mosgorsovnarkhoz

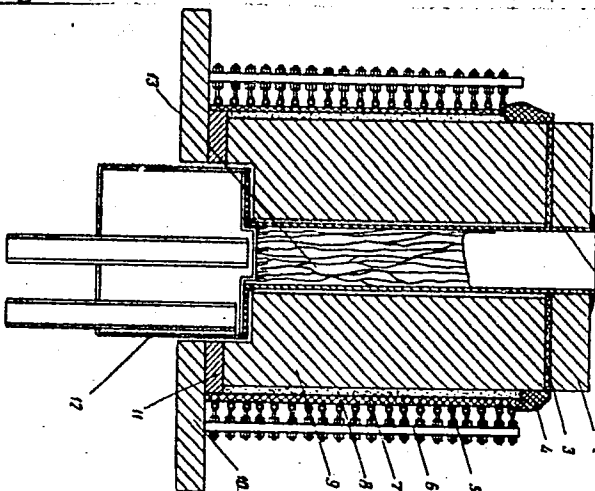
SUBMITTED: February 16. 1961

Fig. 3:
(1 graph)



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Fig. 2:



KOROLEV, B.I.

AID 397 - I

PHASE I

TREASURE ISLAND BIBLIOGRAPHICAL REPORT

Call No.: TK7872.V3K6

BOOK

Author: KOROLEV, B. I.

Full Title: FUNDAMENTALS OF VACUUM ENGINEERING

Transliterated Title: Osnovy vakuumnoy tekhniki

Publishing Data

Originating Agency: None

Publishing House: State Publishing House for Energetics

Date: 1950

No. pp.: 240

No. of copies: 6,000

Editorial Staff

Editor: None

Tech. Ed.: None

Appraiser: None

Editor-in-Chief: None

Others: The following Soviet scientists have been mentioned as having written papers on vacuum problems: Prof. N. A. Kaptsov ("Physical Phenomena in Vacuum and Rarefied Gases"), A. A. Ivanov ("Electrovacuum Technology"), Prof. G. A. Tyagunov ("Fundamentals of Vacuum System Design")

The following individuals are mentioned as actively participating in research and development of electrovacuum devices at the Moscow Electric Lamp Plant: A. P. Ivanov, N. A. Kaptsov, R. A. Nilender, A. M. Kogan, V. N. Fomin, G. M. Yudovskiy, V. F. Soustin, D. P. Troshenskiy, Z. S. Voznesenskaya, S. V. Borisov, B. M. Tsarev, A. A. Sorokin, etc.

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KOPPEV, B. I.

H/5
612.331
.K2
1953.

Osnovy vakuumnoy tekhniki (Principles Of Vacuum Technology) izd. 2.,
perer. Moskva, Gosnauchoizdat, 1953.

328 p. illus., tables.

Bibliography: p. 319-320.

Card 1/12

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Call Nr: QC166.K6

Principles of Vacuum Technology (Cont.)

Included are Soviet contributions. The following persons participated in this study: Prof. R. A. Nilender, Docent B.S. Danilin and co-workers of the Scientific Research Vacuum Institute (H/B/A), M. I. Men'shikov, K. A. Savinskiy, V. I. Kuznetsov. There are 14 general references, 6 of which are USSR. For other references see Table of Contents.

Card 2/12

KOROLEV, Boris Ivanovich; SHAMSHUR, V.I., red.; BORUNOV, N.I., tekhn. red.

[Principles of vacuum technique] Osnovy vakuumnoi tekhniki. Izd 4.
Moskva, Gos. energ. izd-vo, 1958. 407 p. (MIRA 11:12)
(Vacuum)

32-1-45/55

AUTHORS: Korolev, B.I., Bystrov, A.A.

TITLE: The Luminescence Method for the Location of Leaks
in Electrovacuum Apparatus and Their Details (Lyuminesstsentnyy
metod obnaruzheniya mesta techi v elektrovakuumnykh priborakh
i ikh detalyakh).

PERIODICAL: Zavodskaya Laboratoriya, 1958, Vol. 24, Nr 1, pp. 109-109 (USSR)

ABSTRACT: The method recommended consists in applying a coating of the luminescence solution onto the apparatus to be investigated. When the vacuum pump (suction of air) is connected the luminescence solution penetrates into the interior of the vessel, where these places may be determined by means of a quartz lamp or an ultraviolet radiator. Coating with the luminescent solution can be carried out on endangered points or also in parts. In order to avoid possible "wrong signals" caused by an unforeseen deposit on the interior walls of the vessel to be investigated, the application of "lumogen-orange" is recommended which radiates a particular color, so that mistakes are excluded. Before coating the vessel to be investigated with a luminescent solution its respective surface must first be thoroughly cleaned. For this purpose

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The Luminescence Method for the Location of Leaks
in Electrovacuum Apparatus and Their
Details

32-1-45/55

the application of a trichloroethylene solution is recommended.
There are 2 Slavic references.

AVAILABLE: Library of Congress

Card 2/2

1. Luminescent solutions-Test methods 2. Leaks-Determination

KOROLEV, Boris Ivanovich; YENIN, A.A., red.

[Principles of vacuum techniques] Osnovy vakuumnoi
tekhniki. Izd.5., perer. Moskva, Energiia, 1964. 463 p.
(MIRA 17:12)

LEBEDEV, A.A.; KOROLEV, B.K.; RATNIKOV, V.I.

Changes in the blood protein fractions in dogs following autotransplantation of kidneys and spleen. Biul. eksp. biol. i med. 60 no.11:42-44 N '65.

(MIRA 19:1)

1. Kafedra farmakologii (ispolnyayushchiy obyazannosti zav. - prof. N.A. Myasoyedova) i kafedra obshchey khimii (zav. - dotsent N.M. Chistyakov) Ivanovskogo meditsinskogo instituta. Submitted June 8, 1964.

DZHAGATSPANYAN, R.V.; KOLBASOV, V.I.; BARDENSHTEYN, S.B.; KOPOLEV, B.M.;
ROMANSKIY, I.A.; ZETKIN, V.I.

Structure of radiation chlorinated and sulfochlorinated polyethylene.
Vysokom. soed. 7 no.11:1959-1963 N '65. (MIRA 19:1)

1. Submitted December 26, 1964.

L 27304-66 EWT(m)/EPF(n)-2/EWP(j)/T/EWA(h)/EWA(l) IJP(c) GG/RM

ACC NR: AP6008980

(A)

SOURCE CODE: UR/0190/65/007/011/1959/1963

AUTHORS: Dzhagatspanyan, R. V.; Koibasov, V. I.; Bardenshteyn, S. B.; Korolev, B. M.; Romanskiy, I. A.; Zetkin, V. I.

47
B

ORG: none

TITLE: The structure of radiation chlorinated and sulfochlorinated polyethylene

SOURCE: Vysokomolekulyarnyye soyedineniya, v. 7, no. 11, 1965, 1959-1963

TOPIC TAGS: polymer, polyethylene, chlorination, aliphatic compound, chlorine

ABSTRACT: The structure of radiation chlorinated and sulfochlorinated polyethylene in the solid state and in solution was studied by IR spectroscopy. The polyethylene specimens were prepared after the method of R. V. Dzhagatspanyan, I. M. Yakimenko, A. I. Gershenovich, and V. I. Zetkin (Avt. svid. No. 150625, 1961; Byull. izobreteniy, 1963, No. 20, 93). The IR spectra of the investigated compounds are presented. It was found that the IR spectra of bulk radiation sulfochlorinated polyethylene were identical to those sulfochlorinated in bulk by chlorine. It is concluded that chlorination of the polymer occurs more readily in the amorphous phase than in the crystalline phase. Orig. art. has: 2 graphs.

SUB CODE: 11/ SUBM DATE: 26Dec64/ ORIG REF: 003/ OTH REF: 005

UDC: 678.01:53+678.743

Card 1/1

L 24493-66 EWT(m)/EPF(n)-2/EPF(j)/EWA(h)/EWA(i) IJF(c) GG/EM
ACC NR: AP6006971 (A) SOURCE CODE: UR/0190/66/008/002/0193/0197

AUTHORS: Dzhagatpanyan, R. V.; Sokolov, V. A.; Khromenkov, L. G.; Korolev, B. M.

ORG: none

TITLE: On x-ray determination of crystallinity in polyethylene, chlorinated and sulfochlorinated by radiation ¹⁶

SOURCE: ¹⁹ Vysokomolekulyarnyye soyedineniya, v. 8, no. 2, 1966, 193-197

TOPIC TAGS: polyvinyl chloride, chlorination, polyethylene plastic, x ray analysis, radiation polymerization

ABSTRACT: The degree of crystallinity of polyethylene (I) samples chlorinated and sulfochlorinated in solid phase by penetrating radiation from a Co⁶⁰ source was investigated. The method, involving x-ray study, consists of determining the ratio of the intensities of chlorinated and nonchlorinated samples. This ratio, in turn, gives the ratio of crystalline phases in the samples because only I is in the crystalline phase during the solid phase chlorination. The noninterfering chlorinated products are considered as the amorphous phase. Spectra of chlorinated and nonchlorinated I are shown in Fig. 1. The decrease in peak intensity is a measure

UDC: 678.01:53+678.743+678.745

Card 1/3

L 24493-66
ACC NR: AP6006971

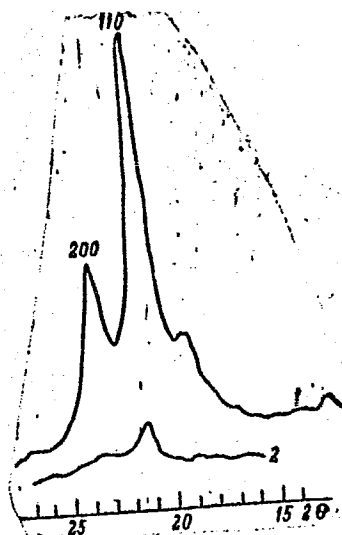


Fig. 1. Spectra of untreated (1) and chlorinated (2) polyethylene.

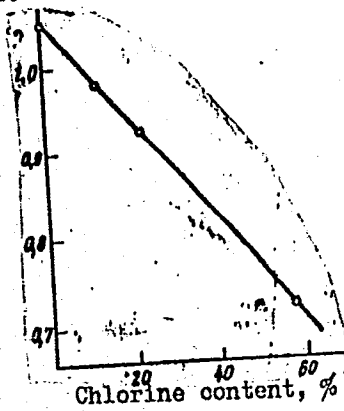
of the decrease of crystalline phase and of the increase of x-ray absorption coefficient in the chlorinated sample. Measurements of the densities of chlorinated samples indicate that each sample consists of a mixture of I and of the final

Card 2/3

L 24493-66
ACC NR: AP6006971

chlorination product, polyvinyl chloride. ¹⁵ The relationship between the density and chlorine content is illustrated in Fig. 2.

Fig. 2. Specific volume of chlorinated samples as a function of chlorine content.



Sulfochlorination in the solid phase has a similar effect. Chlorination of I in a CCl_4 suspension leads to retention of crystallinity to a greater degree. Orig. art. has 1 table, 4 figures, and 3 equations.

SUB CODE: 07/ SUBM DATE: 04Jan65/ ORIG REF: 003/ OTH REF: 007
Card 3/3 *LC*

L 18417-66 EWT(m)/EWP(j)/I/EWA(h)/EWA(1) RM

ACC NR: AP6003424

SOURCE CODE: UR/0190/66/008/001/0125/0130

AUTHORS: Dzhagatspanyan, R. V.; Bardenshteyn, S. B.; Kolbasov, V. I.; Korolev, B. M.

ORG: none

58
B

TITLE: Study of the structure of radiation chlorinated and sulfochlorinated polypropylene

11.44.55

19

SOURCE: Vysokomolekulyarnyye soyedineniya, v. 8, no. 1, 1966, 125-130

TOPIC TAGS: polymer, polypropylene plastic, polymerization kinetics, IR spectroscopy, spectroscopy, chlorination, organic compound

ABSTRACT: The structure of sulfochlorinated polypropylene, sulfochlorinated by means of radiation in the solid phase, was investigated by IR spectroscopy to extend the work of R. V. Dzhagatspanyan, L. M. Yakimenko, V. I. Zetkin, A. I. Gershenovich, and V. S. Pospelov (Avt. svid. 149773, 1961 g.; RZhkhim, 1963 9T50). A comparison of IR spectra of a specimen chlorinated in solution and in the solid phase is presented. The experimental results are presented graphically (see Fig. 1). It was found that the crystallinity of polypropylene decreases

Card 1/2

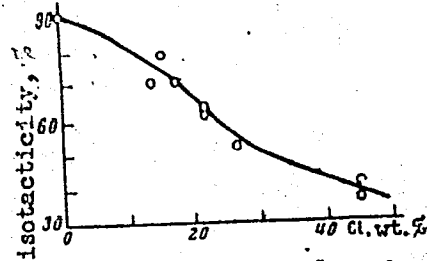
UDC: 678.01:53+678.745

2

L 18417-66

ACC NR: AP6003424

Fig. 1. Dependence of optical density, measured at the maximum absorption for the band 973 cm^{-1} (measure of isotacticity), on the chlorine content, %.



with increase in the degree of sulfochlorination. The crystallinity of specimens sulfochlorinated in the solid phase is 3.5 times smaller than that of pure polypropylene, and the specimens chlorinated in solution are amorphous. It is concluded that for both types of specimens, i.e., chlorinated in solution and in solid phase, displacement of hydrogen by chlorine takes place more rapidly for CH_2 groups than for CH_3 group hydrogens. Orig. art. has: 8 graphs.

SUB CODE: 11/ SUBM DATE: 26Feb65/ ORIG REF: 003/ OTH REF: 007

Card 2/2 *ps*

NESMEYANOV, An.N.; KOROLEV, B.M.; SAZONOV, L.A.

Separation of radioactive isotopes during irradiation of
MnO₂ colloids. Radiokhimiia 1 no.6:694-699 '59.
(MIRA 13:4)

(Manganese--Isotopes)

S/844/62/000/000/069/129
D204/D307

AUTHORS: Yakimenko, L. M., Dzhagatspanyan, R. V., Zetkin, V. I.,
Korolev, B. M. and Maksimov, M. P. (deceased)

TITLE: Chlorine exchange between hexachlorocyclohexane (I) and
carbon tetrachloride, under the action of γ radiation

SOURCE: Trudy II Vsesoyuznogo soveshchaniya po radiatsionnoy khi-
mii. Ed. by L. S. Polak. Moscow, Izd-vo AN SSSR, 1962,
398-402

TEXT: The behavior was studied of purified α -, β -, γ -, and δ -iso-
mers of I, with CCl_4 labelled with Cl^{36} , under the action of γ ir-
radiation at 120 r/sec over 1 - 15 hours, at $\sim 30^\circ\text{C}$. The mixtures
consisted of 250 mg of I, 8 ml of CCl_4 , and 1 ml of labelled CCl_4 ,
and the chlorine exchange was assessed by the change in the acti-
vity of I (dissolved in 2.5 ml of benzene). No transfer of Cl^{36}
took place in the absence of irradiation. The activity of α -I and
 β -I rose to a constant value of $\sim 1\%$ (arbitrary units) after 5 - 6

Card 1/2

ARISTOV, V.V.; LYAKHOV, L.L.; KADYROV, I.N.; GRACHEVA, N.P.; PETROVA, M.G.;
KOROLEV, B.N.

Predicting the structure of some Mesozoic depressions in Trans-
baikalia and problems relative to methods of prospecting for hidden
deposits. *Izv.vys.nucheb.zav.; geol.i razv.* 4 no.2:76-90 F '61.
(MIRA 14:6)

1. Moskovskiy geologorazvedochnyy institut imeni S.Ordzhonikidze.
(Transbaikalia—Geology, Structural) (Prospecting)

ARISTOV, V.V.; LYAKHOV, L.L.; KOROLEV, B.N.; KADYROV, I.N.; KREYTER,
V.M., nauchnyy red.; SERGEYEVA, M.A., red.izd-va; IYERUSALIMSKAYA,
Ye.S., tekhn.red.

[Combining geological and geophysical methods for studying proved
ore-bearing areas; work of the Scientific-Research Sector of the
Moscow Geological Prospecting Institute] Sochetanie geologicheskikh
i geofizicheskikh metodov pri izuchenii izvestnykh rudnykh raionov;
iz opyta raboty Zabaikal'skoi ekspeditsii NIS MAGRI. Moskva, Gos.
nauchno-tekhn.izd-vo lit-ry po geol. i okhrane nedr, 1960. 41 p.
(MIRA 14:1)

(Transbaikalia--Ore deposits)
(Transbaikalia--Prospecting--Geophysical methods)

MIKOYAN, A; PODGORNYY, N.; ZOTOV, V.; PAVLOV, D.; DUDIN, Yu.; KOROLEV, D.;
MASTEROV, N.; NEVSKIY, Ye.; KLEMENCHUK, A.; ARSENT'YEV, V.; GAVRILOV, A.;
PARSHIKOV, M.; ZHARSKIY, A.; SOKOLOVSKIY, V.

Vladimir Evdokimovich Chalyi; obituary. Kons.i ov.prom. 17 no.12:
48 D '62. (MIRA 15:12)

(Chalyi, Vladimir Evdokimovich, 1905-1962)

KOROLEV, Dimitriy Amonovich; BULGAKOV, N.I., kand. tekhn. nauk, spetsred.,
retsensent; MASLOVA, Ye.P., red.; KISINA, Ye.I., tekhn. red.

[Carbonation of water and cold beverages] Gazirovanie vody i
prokhladitel'nykh napitkov. Moskva, Pishchepromizdat, 1958.
103 p. (MIRA 11:9)

(Carbonated beverages)

KOROLEV, Dmitriy Amosovich; CHEKAN, Lev Ivanovich; DENSHCHIKOV,
Mikhail Tikhonovich; ZAZHIGAYA, M.V., retsenzent; URUSHADZE,
M.G., retsenzent; MALCHENKO, A.L., prof., spetsred.;
KOVALEVSKAYA, A.I., red.; SOKOLOVA, I.A., tekhn. red.

[Technology of the production of soft drinks] Tekhnologiya bez-
alkogol'nykh napitkov. Moskva, Pishchepromizdat, 1962. 514 p.
(MIRA 15:11)

(Soft drinks)

KOROLEV, D.D.; VOLKOV, Ye.N.; SPIRIDONOV, D.I., spets. red.;
SIDEL'NIKOVA, L.A., red.; SOKOLOVA, I.A., tekhn. red.

[Manufacture of potato chips] Proizvodstvo zharenogo khru-
stiashchego kartofelia. Moskva, Pishchepromizdat, 1961. 43 p.
(MIRA 15:7)

(Potato chips)

KOSTERIN, A.V.; KOROLEV, D.F.; KIZYURA, V.Ye.

Rare earths in the Chekhezskoye brown coal deposit. *Geokhimiya*
no.7:694-695 J1 '63. (MIRA 16:9)

1. Dal'nevostochnyy geologicheskii institut Dal'nevostochnogo filiala
Sibirskogo otdeleniya AN SSSR, Vladivostok.
(Ussuriysk region--Rare earths)

KOROLEV, D.F.

Some characteristics of the distribution of molybdenum in rocks of
the Bylym coal deposit (Northern Caucasus). Geokhimiia no.5:420-424
' 57. (MIRA 12:3)

I. V.I. Vernadsky Institute of Geochemistry and Analytical Chemistry,
Academy of Sciences, USSR, Moscow.
(Tyrry-Aus region--Coal) (Molybdenum)

KOROLEV, D.F., Cand Geol-Min Sci--(disc) "Geochemical ^{particularities} characteristics
of molybdenum concentration in the ^{sedimentary} ~~metamorphic~~ rocks of the ^{metamorphic} ~~granitoid~~
~~zone~~ zone. On the example of the Bylymsk coal deposit." Mos, 1958. 17 pp
(Acad Sci USSR. Inst of Geochemistry and Analytical Chemistry in
V.I. Vernadskiy), 120 copies (ML,25-58,109)

-49-

AUTHOR: Korolev, D. F.

SOV/7-58-4-7/13

TITLE: The Part Played by Iron Sulfides in the Process of Molybdenum Accumulation in Sedimentary Rocks of the Reduction Zone
(Rol' sul'fidov zheleza v protsessе nakopleniya molibdena v osadochnykh porodakh vosstanovitel'noy zony)

PERIODICAL: Geokhimiya, 1958, Nr 4, pp. 359 - 367 (USSR)

ABSTRACT: It was the object of this paper to prove experimentally the joint precipitation of iron- and molybdenum sulfide. For this purpose a 1 l solution with ammonium molybdate and iron (II) sulfate was mixed with soda lye, sulfuric acid or other reagents until a pH of 7 - 8 was obtained (potentiometer LP -5). Hydrogen sulfide was made to pass through this solution, filtered off after 2 - 3 days, and molybdenum was determined colorimetrically in the filtrate. The results obtained by these series of experiments are shown by tables. Another table compares the debye grams of synthetic Melnikovite according to Lepp (Ref 22) and the author, of natural Melnikovite, pyrite, and marcasite are compared.

Card 1/3

The following final conclusions may be drawn from this paper:

SOV/ 7-58-4-7/13

The Part Played by Iron Sulfides in the Process of Molybdenum Accumulation in Sedimentary Rocks of the Reduction Zone

- 1) By means of experiments it was found that molybdenum sulfide precipitates according to conditions with iron sulfide at a rate of 70 - 96 % from solutions with a salt content similar to that of natural solutions.
- 2) Molybdenum is concentrated as adsorbed sulfide in the finely distributed iron sulfides (Melnikovite). The coarse crystalline pyrites are free from molybdenum, which may be explained by the fact that the iron sulfides are cleansed from molybdenum during the aging process.
- 3) It is wrong to conclude that molybdenum is connected with organic substances in charcoal and bituminous shale. This error is due to the fact that the finely distributed pyrite cannot be accurately separated from the organic substances.
- 4) The connection between molybdenum and iron sulfide in sedimentary rocks applies to a certain degree also to elements accompanying molybdenum: Ni, Co, V. There are 4 tables and 28 references, 14 of which are Soviet.

Card 2/3

01/7-58-4-7/13

The Part Played by Iron Sulfides in the Process of Molybdenum Accumulation
in Sedimentary Rocks of the Reduction Zone

ASSOCIATION: Institut geokhimii i analiticheskoy khimii im. V. I. Ver-
nadskogo AN SSSR, Moskva
(Moscow Institute of Geochemistry and Analytical Chemistry
imeni V. I. Vernadskiy, AS USSR)

SUBMITTED: March 5, 1958

1. Molybdenum sulfides--Precipitation 2. Molybdenum sulfides
--Properties 3. Iron sulfides--Chemical reactions 4. Hydrogen
sulfide--Applications 5. Colorimetry--Applications

Card 3/3

KOROLEV, D.F.; MIGUTA, A.K.

Distribution of uranium in sandstones. Geol.rud.mestorozh.
no.6:72-78 N-D '61. (MIRA 14:12)
(Uranium)
(Sandstone)

KOROLEV, D.F.

Genesis of metacolloid minerals. Geol. i geofiz. no.8:82-88 '63.
(MIRA 16:10)

1. Dal'nevostochnyy geologicheskii institut Sibirskogo otdeleniya
AN SSSR, Vladivostok.
(Mineralogy)

KOROLEV, D.F.; POGORELOVA, M.G.

Mechanism of the accumulation of uranium in sandstones as revealed
by a study made of one of the sedimentary deposits. Geol. rud.
mestorozh. 6 no.3:82-89 My-Je '64 (MIRA 18:1)

KOROLEV, D.P. (Leningrad).

On certain concepts in chemistry. Khim.v shkole no.4:63-67 J1-Ag '53.
(MLRA 6:8)
(Chemistry--Study and teaching)

KOROLEV, D.P. (Leningrad)

Determination of acids containing sulfur in solutions.
Khim.v shkole 11 no.2:46-48 Mr-Ap '56. (MIRA 9:7)
(Chemistry, Analytical--Qualitative) (Acids)

KOROLEV, D.P.

Qualitative analysis of an anion mixture of hydrochloric, sulfuric, nitric, phosphoric, and carbonic acids in a solution. *Khim.v shkole* 11 no.2:48-51 Mr-Apr '56. (MLRA 9:7)
(Chemistry, Analytical--Qualitative) (Acids)

KOROLEV, D.P.
KOROLEV, D.P. (Leningrad)

Laboratory procedure for determining the amount of oxygen in air.
Khim. v shkole 13 no.1:36-37 Ja-F '58. (MIRA 10:12)
(Air--Analysis)

KOROLEV, D.S., gornyy inzh.; PYSHKIN, B.M., gornyy inzh.; TRUKILOV, A.F.,
glavnyy mekhanik

Using a drainage pump. Gor. zhur. no.3:12-15 Mr '62. (MIRA 15:7)
(Mirgalimsay region--Mine pumps) (Automatic control)

KOROLEV, D.V.

Duty of fulfillment. Neftianik 1 no.1:12-13 Ja '56. (MLRA 9:7)

1. Burovay master kontory bureniya No.1 tresta Tamburneft'.
(Oil well drilling)

1ST AND 2ND ORDERS
PROCESSES AND PROPERTIES INDEX

a-1

BC

Application of Toeppler's method to the determination of the absorption of supersonic waves in liquids. F. A. KOROLY (Compt. rend. Acad. Sci. U.R.S.S., 1957, 45, 35-36).—The optical method of Toeppler can be applied. Results are given for the absorption of supersonic waves in C_6H_6 .
A. J. M.

ASS-51A METALLURGICAL LITERATURE CLASSIFICATION

NATIONALS INDEX

TECHNICAL INDEX

CROSS-REFERENTIAL INDEX

A-1

BC

Application of Taylor's method to the measurement of superplastic elongation in air. F. A. Konovaly, Metall. Trans. A, 1978, 9, p. 1151-1155. 7 refs. See also ABSTRACT 78-0136, giving a table of $\epsilon_p \times 10^{-2}$ cm (a = absorption coeff. in cm⁻¹).

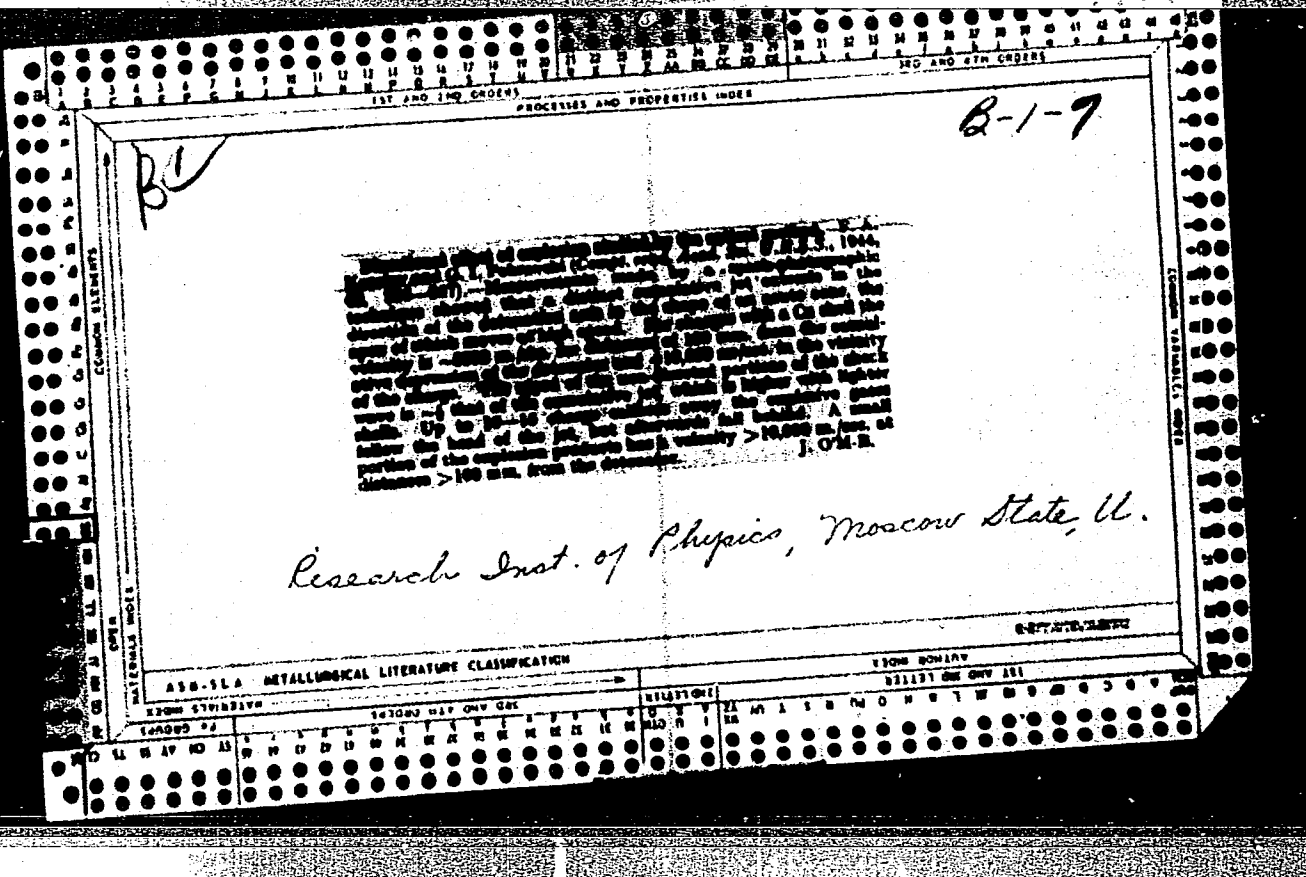
ASM-A-1. A METALLURGICAL LITERATURE CLASSIFICATION

GROUP	SECTION	SUBSECTION	TERMINAL DIGIT
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KOROLEV, F. A.

"The Measuring of Ultra-Sound Absorption in Gases by the Optical Method,"
Zhur. Eksper. i Teoret. Fiz., 11, No. 1, 1941

Physics Inst., Acad. Sci. USSR, Moscow.



KOROLOV, F. A., and PORROVSKIY, G.I.

"Directional Effect of Explosion Studied by the Optical Methods," Comptes Rendus of AS USSR, 1944, Vol. 42, No. 6, pp 256-257; also in Doklady Akademii Nauk SSSR, 1944, Vol. 42, pp 266-267, (Research Institute of Physics, Moscow, State University). In English; available at the Battelle Memorial Institute.

"Measurements made by the spark-photographic technique showed that a distinct cumulative jet extends in the direction of the detonation axis in the shape of an acute cone, the apex of which moves at high speed. For charges with a Cu shell the velocity is ~ 5000 m/sec. for distances of 120 mm. from the cumulative depression of the detonator and $\sim 10,000$ m/sec. in the vicinity of the charge. The speed of the non-directed portions of the shock wave is $\sim 1/2$ that of the cumulative jet, which is higher with lighter shells. Up to 10-15 charge calibres away the explosive gases follow the head of the jet, but afterwards fall behind. A small portion of the explosion products has a velocity $> 10,000$ m/sec. at distances > 100 mm from the detonator."

532. DIELECTRIC STRENGTH OF SUPERHEATED STEAM. Korolev, F. A. (J. Tech. Phys. (U.S.S.R.) 1945, 15, 23278) The potential gradient at which a discharge takes place between a sphere and a plate in H₂O vapour at 280° increases linearly with the steam pressure up to 50 kg./sq.cm. (no higher pressure has been tested) when it reaches 10⁶ v./cm. It is independent of the length (at the temp. of the expt.) of the spark gap (0.2-0.5 mm.)

Inst. Energetics, AS USSR, Moscow

ASME-532 METALLURGICAL LITERATURE CLASSIFICATION

11

**A Spark Generator with Forced Ignition for Spectroscopic Analysis. V. A. Kuroby (Soviet Acad. Sci. U.R.S.S., 1945, 62, (9) 646-647). [In English]. Details are given of the essential features of a new type of spark generator, designed to give steady sparking conditions and max. reproducibility of the electrical arrangements. In principle, the method consists of the use of an auxiliary low-power circuit which can be accurately controlled. - G. V. R.*

Optical Lab, Moscow State Univ.

ABSTRACT METALLURGICAL LITERATURE CLASSIFICATION

11

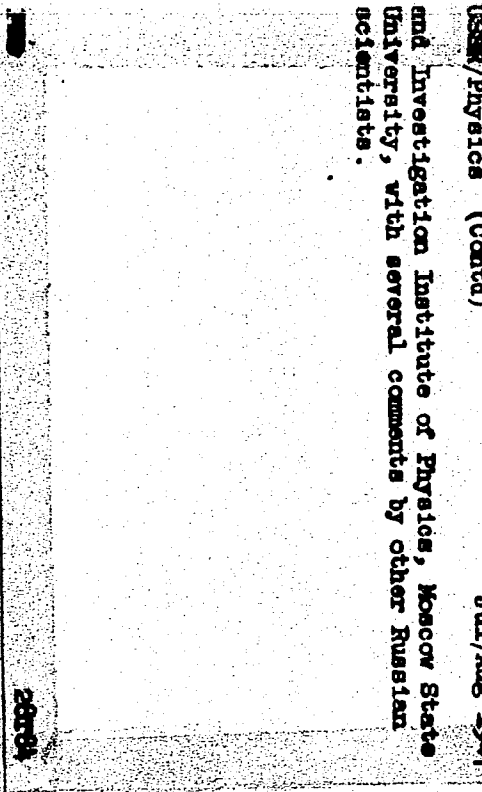
KOROIEV, F. A.

USSR/Physics
Light - Interference
Jul/Aug 1947

28787
"Interference Theory of Monochromatic Light Filters,"
F. A. Korolev, 4 pp
"Iz Ak Nauk, Ser Fiz" Vol II, No 4, 448-451

Discusses a new monochromatic light principle constructed on the principles of the Fabry-Perot plane-parallel plates. Discusses the width of the spectral lines conducted through an interference monochromatic light filter, distance between the spectral components of the conducted light, and the angular distance of the light cone passing through the light filter (appearance of the light filter). Submitted at the Research

USSR/Physics (Contd) Jul/Aug 1947



28787

KOROLEV, F. A.

"The Methodical Errors in the Second Edition of Prof. S. E. Khaykin's Book
'Mechanics'." Uspekhi Fiz. Nauk, 37, No. 3. 1949

KOROLEV, F.A.

On the theory of a multiple etalon (multiplex). Dokl. Akad. Nauk SSSR 88,
No. 4, 651-2 '52. (MLRA 6:2)
(PA 56 no. 671:7607 '53)

026397

KOROLEV, F. A.

PHASE I

TREASURE ISLAND BIBLIOGRAPHICAL REPORT

AID 246 - I

Call No.: QC454.K76

BOOK

Author: KOROLEV, F. A.

Full Title: SPECTROSCOPY OF HIGH RESOLVING POWER

Transliterated Title: Spektroskopiya vysokoy razreshayushchey sily

Publishing Data

Originating Agency: Physics Dept., Moscow State University
M. V. Lomonosov

Publishing House: State Publishing House of Technical and Theoretical Literature

Date: 1953

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Appraiser: None

Text Data

Coverage: The author introduces a theory for the spectroscope with high resolving power based on the Fraunhofer diffraction phenomena in the interferential instruments. This theory primarily concerns the dispersion and region of dispersion of echelette gratings and flat parallel plates, the effect of which the author formulates analytically, particularly as regards the distribution of the intensity of light. Fundamental works of other scientists (Vlasov, Fursev, Weisskopf, Godmark, Doppe et al.) on the width of the spectral lines of a

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Spektroskopiya vysokoy razreshayushchey sily

homogenous gas are discussed, and their conclusions compared with the results of the author's investigations. The discussion also extends to the theory of the isotopic displacements of the energy level, the theory of disassociation of neutrons to protons and to π -mesons, and the application of spectroscopy in high vacuum research.

The book seems to be of interest from the viewpoint of the analysis of existing theories and the analytical formulation of the effects of the phenomena studied.

Purpose: The book is intended for scientific workers, aspirants and students of post graduate courses of the physics dept. of the university.

Facilities: The work of these Russian physicists in the field of spectroscopy is mentioned: D. S. Rozhdestvensky, L. N. Dobretsov, A. N. Terenin, A. A. Vlasov, V. S. Fursov, I. Ye. Tamm, D. D. Ivanenko, among many others.

No. of Russian and Slavic References: 36 of 54 (1924-52)

Available: Library of Congress

2/2

KOROLEV, F.A.

2

New type of mercury lamp for the purpose of spectroscopy with high resolving power. F. A. Korolev, *Vestnik Akad. Nauk SSSR, Ser. Fiz.-Mat. Nauki*, No. 2, 101-3 (1953).—The construction of a new Hg lamp is described and a diagram of it is provided. Some of its advantages are: (1) It does not require a supply of high voltage, (2) it permits the use of a current strength ranging from several ma. to several amp., (3) it gives intense, sharp spectral lines permitting resolution of the intricate components of the spectrum, and (4) the lamp can be made in any lab. where the services of a skilled glass worker can be obtained.

Gladys K.

Chair of Optics, Moscow U.

KOROLEV, F. A.

"Method of Realizing a Complex Standard (Multiplex) with nonmultiple Ratio of Thicknesses of Standards," Vest. Mosk. Univ., Ser. Fizikomat. i Yest Nauk. No. 2, pp 105-109, 1953.

Chair of Optics, Moscow State Univ.

Concludes that there is no necessity for the precise gauging of thicknesses of standards comprising the multiplex and that the required accuracy of gauging can be attained even without the use of highly accurate measuring devices. Describes a method for effecting standards without the need for regulating the thickness of standards to the variation in air pressure.

KOROLEV, F.A.

Nuclear Lin. Abs.
V-8 Jan 15, 1954
Physics

**ON THE THEORY OF THE COMPOUND ETALON
(MULTIPLY). F. A. Korolev. Translated from Doklady
Akad. Nauk S.S.S.R. 88(6): 965-966, 1953. 2p. (NSF-tr-49)**
In order to study the hyperfine structure of a spectral
line, a compound etalon-multiplex, made of two etalons
placed one behind the other, is often used. The dispersal
power of such an etalon is calculated. (J.S.R.)

Moscow State Univ.

KOROLEV

*RT-30 (On the hyperfine structure of the green line of mercury)
sverkhtonkoi strukture selenoi linii rtuti.
Doklady Akademii Nauk SSSR, 88(6): 965-966, 1953.

Korolev, F.A.

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 3146. DISPERSED LIGHT FILTERS OF HIGH MONOCHROMATICITY. F.A. Korolev and A. Yu. Klement'eva.
 Dokl. Akad. Nauk SSSR, Vol. 94, No. 6, 1035-7 (1954). In Russian.
 For many applications where a monochromator is not convenient these filters may prove useful. The principle of action is that explained by Christlansen (1884). For the visible region a compact powder of optical glass (dimensions 0.1 to 0.2 mm dia.) in a glass container, the intermediate space being filled by an organic fluid. Such filters are examined both experimentally and theoretically. The variation in the wavelength transmitted with temperature is shown. An improvement in both monochromaticity and contrast may be obtained by combining filters. Figures are quoted for two single filters and for both together in series. With a diameter of 0.4mm and a thickness of 13mm, the halfwidth at 5104 Å was 38 Å for one and 46 Å for the other. When combined the halfwidth was reduced to 22 Å.
 W. Bardsey

Comments B-83973, 23 Mar 55

KOROLEV, FA

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5242. A FABRY-PEROT ETALON WITH DIELECTRIC MIRRORS. F.A. Korolev and V.V. Sukhanovskii. Dokl. Akad. Nauk SSSR, Vol. 15, No. 1, 23-5 (1954). In Russian. These mirrors consist of multilayer coatings of ZnS and Na₂AlF₆ and are produced by evaporation in a high vacuum. It is possible to produce them with a reflection coefficient R ~ 95% and an absorption coefficient A ~ 0 in the visible and infrared parts of the spectrum. The quarter-wave multilayer coating appears to be the most suitable for the Fabry-Perot etalon. Because of the somewhat higher values of R, higher resolution is obtained. A microphotograph is shown of the green line of Hg ($\lambda = 5461 \text{ \AA}$) as

resolved by such an etalon. For this a seven-layer coating was used (R = 94%, A = 0 as compared with R = 92%, A = 4% for metallic mirrors under similar conditions). The improvement in resolution can be clearly seen in the photograph.

S. Chomet

USSR/Physics - Optics

Card 1/1

Pub. 129-3/20

Author : Korolev. F. A.

Title :
New type of Fabry-Perot etalon with variable optical thickness

Periodical : Vest. Mosk. un., Ser, fizikomat. i yest. nauk, 10, No 2, 23-26, Mar 1955

Abstract : The author describes a new type of etalon with regulation of the optical thickness by means of air pressure; here the regulation does not require supplementary hermetic chambers and vacuum installations, and also any setting of the mirrors on to the optical contact with distance ring. He discusses the installation, operating principle, and theory of the etalon and the experimental results. Two references (same author and journal).

Institution : -

Submitted : August 11, 1954

USSR/Physics - Spectral Lines

KOROLEV F. A.
Card 1/1 : Pub. 129-7/25

Author : Korolev, F. A.

Title : Automatic (photoelectric) recording of the components of the superfine structure of spectral lines

Periodical : Vest. Mosk. un., Ser. fizikom. i yest. nauk, Vol 10, 61-68, Feb 1955

Abstract : The author discusses the methods for recording the components of the superfine structure which are based upon the mechanical or optical transposition of the spectrum. He will give the experimental results obtained by his described method in a succeeding report. Two references (F. A. Korolev, Spektroskopiya vysokoy razreshayushehey sily [Spectroscopy of High Resolving Power], GITTL, Moscow, 1953; H. Kuhn, Reports on Progress in Physics, XIV, 64, 1951).

Institution : -

Submitted : July 22, 1954

KOROLEV, F.A.

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KOROLEV, F.A.

K-7

Category : USSR/Optics - Optical methods of analysis. Instruments

Abs Jour : Ref Zhur - Fizika, No 1, 1957 No 2543

Author : Korolev, F.A., Sukhanovskiy, V.V.

Inst : Moscow State University, USSR *Physics Faculty*

Title : Dielectric Mirrors and their Use for Fabry-Perot Standards (Interferometers)

Orig Pub : Izv. AN SSSR, ser. fiz., 1955, 19, No 1, 79-80

Abstract : A general equation is derived for the transmittivity of multilayer two-component dielectric coatings comprising $2m + 1$ non-absorbing isotropic layers having arbitrary indices of refraction, but equal optical thicknesses. An analysis of this equation led the authors to the conclusion that multilayered coatings in which the optical length of the layer equals a quarter of the wavelength are most suitable for the Fabry-Perot standards. Data are given on the comparison of Fabry-Perot standards with silver and with seven-layer dielectric mirrors. The latter consisted of zinc sulfide ZnS ($n_1 = 2.3$) and cryolite $\text{AlF}_3 \cdot 3\text{NaF}$ ($n_2 = 1.35$), coated by evaporation in vacuum on a glass base. The optical thickness of the layers is 1450 \AA . The reflection coefficient of such mirrors is $R = 0.94$, the transmission coefficient is $T = 0.06$ (for $\lambda = 5461 \text{ \AA}$). Standards with such mirrors have four times the luminosity of standards with silver mirrors ($R = 0.92$ and $T = 0.04$ for the same wavelength) and have almost twice the contrast and 35% more resolving power.

Card : 1/1

KOROLEV, F.A.
 APPROVED FOR RELEASE: 06/14/2000 CIA-RDP86-00513R000824810015-2
 USSR/Physics - Dielectric mirrors

Card 1/1 Pub. 22 - 15/54

Authors : Korolev, F. A. and Klement'ieva, A. Yu.

Title : Optical properties of "dielectric mirrors" at an acute angle of light

Periodical : Dok. AN SSSR 100/3, 459-460, Jan. 21, 1955

Abstract : Experiments with the so-called "dielectric mirrors" are described. The experiments were intended to prove the fact that these mirrors can be successfully used for refraction and reflection of not only normally falling light, but also for light falling at an acute angle. Four references: 3 USSR and 1 French (1946-1954). Graphs.

Institution : Moscow M. V. Lomonosov State University

Presented by: Academician A. A. Lebedev, June 22, 1954

KOROLEV, F.A.

K-6

USSR/Optics Spectroscopy.

Abs Jour : Referat Zhur - Fizika, No 3, 1957, 7803

Author : Korolev, F.A., Odintsov, V.I.
Title : Measurements of the Hyperfine Structure and of the Isotopic Shift of the Mercury Lines with a Complex Fabry-Perot Interferometer.

Orig Pub : Optika i spektroskopiya, 1956, 1, No 1, 17-21

Abstract : The hyperfine structure and the isotopic shift of four mercury lines were investigated with the aid of a complex Fabry-Perot interferometer. A detailed description is given for the adjustment of the complex interferometer. The light source was a mercury low pressure tube, previously described by the author (Referat Zhur Fizika, 1954, 4438). Comparison of the results obtained with the data of other investigators show a certain discrepancy in the work of Schuler (Schuler H., Jones E.C., Z. Phys., 1932, 74, 631; Schuler H., Schmidt Th., Z. Phys., 1935, 98, 239).

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Korolev, F.A.

APPROVED FOR RELEASE: 06/14/2000

CIA-RDP86-00513R000824810015-2

KOROLEV, F.A.

A multiplex etalon with random correlation of thicknesses of its component etalons and accomplished by the crossing method. Vest.Mosk.un. Ser.mat.,mekh.,astron.,fiz.,khim.11 no.1:89-94 '56. (MIRA 10:12)

1. Kafedra optiki Moskovskogo universiteta. (Interferometer)

KOROLEV, F.A.
KOROLEV, F.A.; KULIKOV, O.F.

Detecting the isotope He^3 in a natural mixture of helium isotopes
by optical means. Vest. Mosk. un. Ser. mat., mekh., astron., fiz., khim.
11 no. 1:95-101 '56. (MIRA 10:12)

1. Kafedra optiki Moskovskogo universiteta.
(Helium--Isotopes) (Spectrum analysis)

Korotkov, F.A.

19 7
 ✓ Results of the study of the isotopic shift in the neodymium spectrum. F. A. Korotkov and Yu. I. Dolgov. ~~Moscow State Univ. Moscow~~ Doklady Akad. Nauk SSSR 116: 685-7(1958).—The isotopic shift was studied by using a natural mixt. of Nd in the spectral range 4450-6500 Å. The lines were resolved into 6 components, 5 of which are attributed to the 5 even isotopes of Nd. The 6th is attributed to the hyperfine structure of Nd¹⁴⁹.
 J. Rovtar Leach

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Distr: 4E1j/4E3d

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SUBJECT USSR / PHYSICS CARD 1 / 2 PA - 1645
 AUTHOR KOROLEV, F.A., MARKOV, V.S., AKIMOV, E.M., KULIKOV, O.F.
 TITLE The Experimental Investigation of the angular Distribution and Polarization of the Optic Radiation of Electrons in a Synchrotron.
 PERIODICAL Dokl. Akad. Nauk, 110, fasc. 4, 542-544 (1956)
 Issued: 12 / 1956

This work aims at the experimental verification of the conclusions drawn by D.D. IVANENKO and A.A. SOKOLOV (Klassiceskaja teorija polja, 1949) from the theory of the "luminescent electron". The work was carried out in 1955 by means of the electron synchrotron of the laboratory of V.I. VEKSLER. Various theoretical works are cited.

The optic device developed by the authors permits the study of the angular distribution of the radiation of electrons in a synchrotron. It is suited for the investigation of components the electric vector of which is parallel or vertical to the orbital plane (σ -component and π -component respectively). The apparatus contains the necessary polarization devices. Radiation was photographically recorded and pictures were utilized by photographic photometry. Radiation is emitted through a special window from the chamber of the synchrocyclotron. Investigation was carried out in the visible domain of the spectrum by the elimination of certain regions by means of an interference light filter the transmissivity band of which has a width of $\sim 100 \text{ \AA}$. Numerous photographs of the angular distribution of the radiation intensity were

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 Dokl. Akad. Nauk, 110, fasc. 4, 542-544 (1956) PA - 1645

obtained for the various components of polarization on the occasion of the acceleration of the electrons to various energies. Photographs of the σ - and π -components and microphotographs of the former are attached. A further diagram illustrates the intensity distribution of the π - and σ -components. The wavelength $\lambda = 4080 \text{ \AA}$ denotes the maximum of the transmissivity band of the interference light filter. The theoretical curves were plotted on the basis of the aforementioned book for 250 MeV and $\lambda = 4000 \text{ \AA}$, and the experimental curves were plotted in accordance with the results of photometrization. Experimental and theoretical data show satisfactory agreement. The intensity among the maxima of π -component, which differs from zero, can be explained by betatron oscillations and by the inaccurate setting-up of the optic system. The intensity of the π -component is several times weaker than that of the σ -component, which is in agreement with theory. The dependence of the angular distribution of intensity on the energy of the electrons is confirmed in agreement with the theory by photographic recordings. Furthermore, also an elliptical polarization was qualitatively determined. More accurate investigations of these effects within a wide spectral range are being carried out.

INSTITUTION: Moscow State University.

~~KOROLEV, F.A.; KLEMENT'YEVA, A.Yu.~~

Preparing dielectric mirrors and interference light filters
and studying their optical properties. Vest.Mosk.un.Ser.mat.,
mekh., astron., fis., khim. 12 no.3:65-73 '57. (MIRA 11:3)

1.Kafedra optiki Moskovskogo gosudarstvennogo universiteta.
(Dielectrics) (Light filters)

KOROLEV, P.A.; GRIDNEV, V.I.

High quality interference light filters. Vest. Mosk. un. Ser. mat.,
mekh. astron., fiz. khim. 12 no.5:67-71 '57. (MIRA 11:9)

1. Kafedra optiki Moskovskogo gosudarstvennogo universiteta.
(Interference (Light)) (Light filters)