MALYSHEV, V.V., kandidat tekhnicheskikh nauk; VINOGRADOV, V.A., inzhener.

New type of instrument for making frame dowels. Der. prom. 6 no.5:16 My '57. (MIRA 10:6)

1. Leningradskaya ordena Lenina lesotekhnicheskaya akademiya im. S.M. Kirova.

(Woodworking machinery)

MALYSHEV, V.V.

MALYSHEV, V.V., kand.tekhn.nauk

Circular saws with hard-alloy plates. Der.prom. 6 no.8:9-11 Ag '57. (MIRA 10:11)

1. Leningradskaya lesotekhnicheskaya akademiya im. S.M.Kirova.
(Saws)

Malyshev V.V

MALYSHEV, V.V., kand.tekhn.nauk

Graduated straightedge for checking the tensioning of gang and band saws. Der.prom.6 no.12:18 D '57. (MIRA 10:12)

1. Leningradskaya ordena Lenina lesotekhnicheskaya akademiya im. S.M.Kirova.

(Saws)

MALYSHEV, V.V.

MIKHAYLOV, V.N., doktor tekhn. nauk; KULIKOV, V.A., kand. tekhn. nauk; AITUKHOV, V.F., inzh.; MALYSHEV, V.V., inzh.; PUPYREVA, K.G., inzh.

Organizing conveying for assembly work of metal railroad-car windows. Nauch. trudy Len. lesotekh. akad. no.76:77-82 '57. (MIRA 11:4)
(Railroads—Cars—Construction)
(Conveying machinery)

MALYSHEV, V.V., kand.tekhn.nauk

Cutting tools equipped with hard-alloy bits. Der. prom. 7 no.8:7-9 Ag '58. (MIRA 11:9)

1. Leningradskaya lesotekhnicheskaya akademiya im. S.M.Kirova.
(Woodworking machinery)

SIMSON, Ivan Iosifovich; MALYSHEV, V.V., dotsent, kand.tekhn.nauk, retsenzent; MOROZOV, N.A., dotsent, kand.tekhn.nauk, red.; CHFAS, M.A., red.izd-va; SHCHETININA, L.V., tekhn.red.

[Safety engineering in woodworking] Tekhnika bezopasnosti pri mekhanicheskoi obrabotke drevesiny. Izd.2., perer. i dop. Moskva, Gos.nauchno-tekhn.izd-vo mashinostroit.lit-ry, 1960. 166 p. (MIRA 14:1)
(Woodworking machinery—Safety appliances)

BAVEL'SKIY, Mikhail Davydovich; MALYSHEV, V.V., red.; MEL'NIKOVA, M.S., red. izd-va; LOBANKOVA, R.Ye., tekhn. red

[Automatic and semiautomatic machinery for woodworking] Avtomaty i poluavtomaty mekhanicheskoi obrabotki drevesiny. Moskva, Goslesbumizdat, 1961. 422 p. (MIRA 15:2)
(Woodworking machinery) (Automatic control)

KNYAZEV, Sergey Aleksandrovich, kand. tekhn.nauk; MALYSHEV, V.V., dots., kand. tekhn.nauk, retsenzent; KORSHUNOV, A.N., kand. tekhn. nauk, retsenzent; LAUTNER, E.M., dots., kand. tekhn.nauk, otv. red.; BEZGODOVA, L.V., red.; URITSKAYA, A.D., tekhn. red.

[Machines and instruments for mechanical processing of wood; general problems in the theory of cutting] Stanki i instrumenty po mekhanicheskoi obrabotke drevesiny; obshchie voprosy teorii rezaniia. Lektsiia dlia studentov fakul'teta mekhanicheskoi tekhnologii drevesiny. Leningrad, Vses. zaochnyi lesotekhn. in-t, 1963. 37 p. (MIRA 16:7)
(Woodworking machinery)

VASILIEV, Nikolay Vasil'yevich; MALIGHEV, V.V., red.

[Apparatus for adjusting woodworking machinery for size] Pribor dlia nastroiki derevoobrabatyvaiushchikh stankov na razmer. Leningrad, 1964. 13 p. (MIRA 17:7)

MALYSHEV, V. Ya.

Malyshev, V. Ya. -- "Investigation of the Effect of the Parameters of the Pre-Combustion Chambers of the KDM-46 Engine When Operating According to the Gas-Fluid Process." Min Higher Education USSR. Chelyabinsk Inst of the Mechanization and Electrification of Agriculture. Chair of "Tractors and Automobiles." Chelyabinsk, 1956. (Disseration For the Degree of Candidate in Technical Sciences).

So: Knizhnaya Letopis', No. 11, 1956, pp 103-114

RASHKOV, S.Ye.; ISAYEV, A.M.; OSTROVSKIY, A.P.; SHNAPIR, Ya.I.; MALYSHEV, V.Ya.; BORISOV. B.V.

Method of fire drilling. Gor. zhur. no.7:76 Jl '62. (MIRA 15:7)
(Boring machinery)

MALYSHEV, V.Ya., kand. tekhn. nauk

Determining the external forces acting on the moldboard of a bulldozer. Stroi. i dor. mash. 7 no.4:12-14 Ap '62.
(MIRA 16:7)

(Bulldozers)

ACC NR: AR6036307 SOURCE CODE: UR/0273/66/000/009/0024/0025

AUTHOR: Malyshev, V. Ya.

TITLE: Automatic equipment for measuring parameters while testing internal combustion engines of tractors and automobiles

SOURCE: Ref. zh. Dvigateli vnutrennogo sgoraniya, Abs. 9.39.154

REF SOURCE: Tr. Chelyab. in-ta mekhaniz. i elektrifik. s. kh., vyp. 24, 1965, 113-118

TOPIC TAGS: automatic measurement, measuring instrument, internal combustion engine, tractor, time constant, fuel consumption, parameter, engine performance characteristic, performance test

ABSTRACT: Methods are proposed for measuring revolutions, fuel consumption, air, etc., based on setting the time constant for measuring all the parameters specified for tests. Following are the advantages of the methods: the measuring procedure is simplified, especially when dealing with a great number of parameters; the time of measuring remains constant under all operating

Card 1/2 UDC: 621.432:531.76.08

ACC NR: AR6036307

conditions, which eliminates additional errors during accelerated operating conditions; the device scale can be graduated both in absolute values (kg, m^3, and revolutions) and in per-unit values (kg/h, m^3/min, rpm, km/hr, etc.), which facilitates the reading of indexes and their processing. The diagrams of the equipment for measuring fuel consumption per hour, number of revolutions, air consumption, and fuel consumption, which were used during the tests of the DG-108 engine are described. They have shown good indexes and have given highly accurate measurements of the parameters. [Translation of abstract] [NT]

SUB CODE: 21/

Card 2/2

BOGATYREV, I., kand.tekhn.nauk; MALYSHEV, Ye., kand.tekhn.nauk

Methods of aligning and forming horizontal construction joints in large blocks. Gor.i sel.stroi. no.8/9:13-15 Ag-S '57. (MIRA 10:12)

(Concrete blocks)

MALYSHEV, Ye., kand. tekhn. nauk.

New crane for assembly work on one- and two-story buildings. Gor. i sel'. stroi. no.11:16 N '57. (MIRA 11:1)
(Cranes, derricks, etc.)

MALYSHEV, Ye.G., kand.tekhn.nauk; TITORENKO, N.Ye.

Using vibrated brick panels in construction for the transportation industry. Transp.stroi. 10 no.3:34-37 Mr '60. (MIRA 13:6)

(Building blocks)
(Transportation--Buildings and structures)

KIROV, S.A., kand.tekhn.nauk; LISTOV, A.M., kand.tekhn.nauk; KOPYSHTA, I.L., inzh.; DROZDOV, V.A., kand.tekhn.nauk; TITORENKO, N.Ye., kand.tekhn.nauk; BUTOR, A.I., inz.; Prinimali uchastiye: ALEKSEYEV, A.P., kand.tekhn.nauk; MALYSHEV, Ye.G., kand.tekhn. nauk; GAGARIN, Yu.A., inzh.; TITOV, S.A., inzh.; TUMARINSON, N.S. inzh.; KRUTIKOV, V.I., inzh., red.; MEDVEDEVA, M.A., tekhn.red.

[Completely precast buildings with few stories] Polnosbornye maloetazhnye zdaniia. Moskva, Vses. izdatel'sko-poligr. ob"edinenie M-va putei soobshcheniia, 1962. 87 p. (Vsesoiuznyi nauchno-issledov. institut transportnogo stroitel'stva. Trudy no.44). (MIRA 15:8)
(Railroads—Buildings and structures)
(Precast concrete construction)

BOCHKAREV, V.P., kand. geol.-miner. nauk; NIKITINA, L.G., kand. geol.-miner. nauk; SHAPIRO, S.M., kand. geol.-miner. nauk; EYDINOVA, N.M., st. inzh.; GOLOBORODʹKO, G.L., inzh.; PERLIK, G.P., inzh.; BANDALETOV, S.M., kand. geol.-miner. nauk; VLADIMIROV, N.M., kand. geol.-miner. nauk; SADYKOV, A.M., kand. geol.-miner. nauk; MALYSHEV, Ye.G., ml. nauchn. sotr.; BERKALIYEV, N.A., st. inzh.; EYDINOV, Yu.I., st. inzh.; MUKHAMEDZHANOV, S.M., kand. geol.-miner. nauk; ISABAYEV, T.T., st. inzh.; MOTOV, Yu.A., inzh.; KOLOTILIN, N.F., kand. geol.-miner. nauk; LAPIDUS, Zh.D., inzh.; SHOYMANOVA, M.M., inzh.; YAREMCHUK, G.S., inzh.; BARBOT-de-MARNI A.V., kand. miner. nauk [deceased]; MIKHAYLOV, B.P., st. inzh.; SATPAYEV, K.I., akademik, glav. red. [deceased]; MEDOYEV, G.TS., otv. red.; DMITROVSKIY, V.I., red.; SEMENOV, I.S., red.; BRAILOVSKAYA, M.Ya., red.; KORCLEVA, N.N., red.

[Irtysh-Karaganda Canal; engineering geological conditions] Kanal Irtysh - Karaganda; inzhenerno-geologicheskie usloviia. Alma-Ata, Nauka, 1965. 169 p. (MIRA 18:5)

(Continued on next card)

MALYSHEV, Ye. I.

YURTAYKIN, N.V., kandidat tekhnicheskikh nauk, dotsent; MALYSHEV, Ye.I., inzhener.

Electric heating of spring blanks for sectional piston rings with the aid of a welding transformer. Trudy GIIVT no.12:68-74 '54. (MLRA 10:2)

(Piston rings)

MALYSHEV, Ye. I.

USSR/Cultivated Plants - Fruits, Berries. II-3

Abs Jour : Ref Zhur - Biol., No 9, 1958, 39501

Author : Malyshev, Ye.I., Zoti, Yu.K.
Inst :
Title : A New and Interesting Variety of Cherry Tree.

Orig Pub : Sadovodstvo, vinogradstvo i vinodeliye Moldavii, 1956, No 5, 11-12

Abstract : A new cherry tree variety, Krasa Moldavii, was grown by Yu.K. Zoti. During his stay in the Rumanian Carpathians, he noticed that the local people had many tree roots grown from kernels which had been scattered on the ground in a casual manner. He selected a powerful cherry tree (maternal) which had very big fruits with fibrous savorless flesh and big kernels. Then he chose a second tree (paternal) which was not fully developed and which had small but sweet, juicy and tender berries, and interbred the 2 trees.

Card 1/2

- 151 -

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USSR/Cultivated Plants. Fruits. Berries.

Abs Jour: Ref Zhur-Biologiya, No 5, 1958, 20497.

Author : Ye. I. Malyshev, Yu. K. Zoti
Inst : Not given
Title : An Interesting New Variety of Cherry. (Novyy interesnyy sort chereshni).

Orig Pub: Sadovodstvo, vinogradarstvo i vinodeliye moldavii, 1956, No 6, 29.

Abstract: No abstract.

Card : 1/1

MALYSHEV, Ye.I., kand. sel'skokhozyaystvennykh nauk; KACHANOVA, N., red.; KAPITSA, V., tekhn. red.

[Principles of vegetable breeding and seed production] Osnovy selektsii i semenovodstva ovoshchnykh kul'tur dlia uslovii Moldavii. Kishinev, Gos. izd-vo Moldavii, 1957. 142 p. (MIRA 11:10)
(Vegetable gardening)

MALYSHEV, YE. I.

M-8

USSR/Cultivated Plants.- Fruits, Berries

Abs Jour : Ref Zhur - Biol., No 1, 1958, No 1723

Author : Ye. I. Malyshev, Iu.K. Zoti
Inst : Not Given
Title : A New Variety of Apple Tree

Orig Pub : Sadovodstvo, vinogradarstvo i vinodeliye Moldavii, 1957, No 1, 16-18

Abstract : A new variety of the apple tree, the Sara naliv, is described (a hybrid of the Sara sinan and Beliy naliv).

Card : 1/1

USSR/Cultivated Plants - Grains. M.

Abs Jour : Ref Zhur - Biol., No 9, 1958, 40047

Author : Malyshev, Ye.

Inst : Kishinev Agricultural Institute.

Title : New Varieties of Sugar Corn.

Orig Pub : Zemledeliye i zhivotnovodstvo Moldavii, 1957, No 4, 20-24

Abstract : The work was carried out by the Kishinev Agricultural Institute. Using the method of sex hybridization of geographically remote forms, two varieties were developed. popushoi auriu (golden corn) was created by means of free pollination (without castration) of the American sugar corn variety Golden Bantam with the local gravelly orange Moldavanka and a subsequent separation of the best plants according to the initial characteristics. Popushoi auriu

Card 1/2

USSR/Cultivated Plants. Potatoes. Vegetables. Melons.

Abs Jour: Ref Zhur-Biol., No 5, 1958, 20353.

Author : ~~Ye. Malyshev,~~ R. Shul'man.
Inst : Kishinev Agricultural Institute.
Title : A New Method of Obtaining Tomato Hybrid Seeds. (Novyy sposob polucheniya gibridnykh semyan pomidorov).

Orig Pub: Agrikultura shi viteritul Moldovey, 1957, No 6, 48-52; Zemledeliye i zhivotnovodstvo Moldavii, 1957, No 6, 47-51.

Abstract: In the Kishinev Agricultural Institute a method of crossing tomatoes was used by means of the transfer of the anthers of one variety to the flowers of the other simultaneously with castration. To do this, the column of anthers was removed together with the blossom's corolla and hafted on the style of the pistil of the other variety's castrated flower. It was established that the

Card : 1/2

USSR/Cultivated Plants. Potatoes. Vegetables. Melons. M

Abs Jour: Ref Zhur-Biol., No 5, 1958, 20353.

pistil begins to take pollen only after the flower blossoms. During large-scale crossings the best results (75 - 100% fruit set) were obtained by pollinating the yellow buds and half opened blossoms, during which, in the latter case, a significantly greater amount of seeds was yielded in comparison with the fruit obtained through self-pollination. When pollinating flowers in later phases of development a portion of the flowers became self-pollinated. If the percent of hybrids in the one-day flowers is 70-80, in the two-day flowers 45-55, then in the three-day ones in all 10-20% is reached. A description is given of the techniques of crossing according to this new method.

Card : 2/2

MALYSHEV, Ye.I., dotsent, kand.sel'skokhozyaystvennykh nauk

Intervarietal crossing of tomatoes for the purpose of obtaining seeds with hybrid vigor. Trudy Kish. sel'khoz. inst. 19:103-123 '60. (MIRA 14:1)

(Tomato breeding)

MALYSHEV, Yu.I.

Quinidine therapy of cardiac fibrillation in mitral stenosis patients following commissurotomy. Terap. arkh. 34 no.10: 90-93 O'62 (MIRA 17:4)

1. Iz otdeleniya grudnoy khirurgii (zav. G.N. Shvind) Chelyabinskoy oblastnoy klinicheskoy bol'nitsy (glavnyy vrach N.S. Klyukov). Nauchnyy rukovoditel' raboty - zav. kafedroy grudnoy khirurgii i anesteziologii Leningradskogo ordena Lenina instituta usovershenstvovaniya vrachey prof. S.A. Gadzhiyev.

USSR/Cultivated Plants - Fruits. Berries. M-6

Abs Jour : Ref Zhur - Biol., No 7, 1958, 30018

Author : Malyshev, Ye.O., Goncharenko, Ye.G.

Inst : The Moldavian Institute for Horticulture, Viticulture and Wine-Making.

Title : The Effect of Pollinators on the Increased Productivity of the Apple.

Orig Pub : Sadovodstvo, vinogradarstvo i vinodeliye Moldavii, 1957, No 2, 21-23.

Abstract : The investigations were made in 1956 at the Moldavian Institute for Horticulture, Vituculture and Wine-Making. Both castrated and non-castrated Paper Rennet apple flowers were pollinated with its own pollen and with that of 6 other varieties. This experiment was furthermore arranged accordingly: in the beginning of the flowering of each

Card 1/2

Abs Jour : Ref Zhur - Biol., No 7, 1958, 30018

pollinating variety three branches of each plus flowers were cut off, placed in cans with water and hung up in the crowns of those trees of the variety to be pollinated. In the presence of full self-sterility of the Paper Rennet the pollen of the foreign varieties raised the formation of the germs by up to 91%; up to 12% of the flowers formed normal fruit. With the flowers of the pollinator suspended in the crowns of the pollinated variety the Paper Rennet tree's productivity increased by 5-14 times. The best pollinators were the Simirenko Rennet and the London Pippin.

AUTHOR: Malyshev, Ye.V., Engineer SOV-117-58-4-7/21

TITLE: Some Problems in the Die-Shearing of Thin Laminated Plastics (Nekotoryye voprosy vyrubki tonkolistovykh sloistykh plastmass)

PERIODICAL: Mashinostroitel', 1958, Nr 4, pp 25-27 (USSR)

ABSTRACT: The article contains general information and technologic recommendations for die-shearing of laminated plastics with fabric, paper, glass fiber fabrics or asbestos used as fillers. The behavior of laminated plastics in the shearing dies is described. Recommendations are made concerning the preheating temperatures for textolite "A", getinax "B", "A_B" and "G_V"; the work clearances and the punch taper angle. A stripper design is also recommended (Figure 6). There are 2 photographs, 3 sets of diagrams and 1 graph.

1. Plastics--Processing 2. Dies--Applications

Card 1/1

MALYSHEV, Yu.F.

Comparative testing of the DSSh-14 tractor chassis and the DT-14 tractor. Avt.i trakt.prom. no.9:22-24 S '57. (MIRA 10:11)

1. TSentral'naya mashinoispytatel'naya stantsiya Ministerstva sel'skogo khozyaystva SSSR.
(Tractors--Testing)

18 8200 2808 26031 S/139/61/000/003/011/013
E073/E335

AUTHORS: Savitskiy, K.V. and Malyshev, Yu.F.

TITLE: Resistance to Abrasive Wear and Modulus of Elasticity of Heat-treated Brass

PERIODICAL: Izvestiya vysshikh uchebnykh zavedeniy, Fizika, 1961, No.3, pp.164-166

TEXT: In earlier work of one of the authors it was shown that the increase in Rockwell hardness and other strength characteristics of brass caused by increasing the quantity of the β-phase during quenching from various temperatures had practically no influence on the resistance to abrasive wear and on the hardness determined by stretching. One of the authors (Ref.3: Izvestiya vuzov MVO SSSR, Fizika, No.2, 1958) expressed the view that evaluation of the wear-resistance of metals and alloys purely on the basis of hardness and other mechanical characteristics which were dependent on resistance to deformation did not provide an unequivocal relation between the mechanical properties and the wear resistance, and that the internal bonds between the atoms have to be taken into consideration. F. T. Barwell (Ref.4: Mashinostroyeniye, No.4, 58, 1958),

Card 1/6

M. M. Khrushchov and M. A. Babichev (Ref. 5: DAN SSSR, 131, No. 6, 1960) expressed the view that the resistance to wear showed a better correspondence with the modulus of elasticity than with the hardness measured by indentation. The latter two authors proposed the following relation between the relative resistance to wear ε and the modulus of elasticity E for pure metals:

$$\varepsilon = 0.49 \times 10^{-4} E^{1.3}$$

It is stated that this relation holds for binary alloys with an unlimited series of solid solutions as well as for binary alloys with limited solubility in the eutectic and for a number of minerals. The authors of this paper believe that the correspondence between E and ε is of a more general nature than the correspondence between the relative wear resistance and the hardness measured by indentation. The here described investigations were made in order to

Resistance to Abrasive Wear ....

supplement earlier investigations on the resistance-to-wear of heat-treated brass by determining the modulus of elasticity which is considered as a characteristic of the bond forces between the individual atoms. The investigations were made on Л62 (L62) brass and for obtaining various ratios between the α- and β-phases the following heat-treatments were applied: annealing at 550 °C and quenching from 500, 550, 600, 650, 700, 750 and 800 °C. The quantity of β-phase in these was determined and their hardness was measured. Following that, specimens were produced for determining the modulus of elasticity and for abrasive-wear tests. The modulus of elasticity was determined by means of ultrasonics on specimens 1.4 x 2.9 x 14 mm, taking in each case the mean arithmetical value of 4 specimens. The abrasive-wear tests were carried out according to well-known techniques of M.M. Khrushchov and M.A. Babichev, using electrocorundum paper No. 180 as an abrasive surface. The wear was under a load of 1.2 kg at a relative speed of movement of 1.8 m/min. After covering a distance of 2.1 m, the specimen was weighed with an accuracy of 0.1 mg and each new pass was on

a fresh abrasive surface. The wear was taken as the mean arithmetical value of 6-12 successive measurements. Aluminium was used as a reference standard. The results are plotted in Fig. 1 - H_D kg/mm^2, ε, $E \cdot 10^3$ kg/mm^2 - all as functions of the β-phase quantity in %. It can be seen that the hardness increases with increasing percentage of the β-phase, whilst the relative wear-resistance and the modulus of elasticity remain practically unchanged. The obtained results show that the relative wear-resistance of heat-treated brass is in better qualitative agreement with the modulus of elasticity than with other mechanical characteristics of the resistance of the brass to deformation, particularly hardness. This bears out earlier results in that an increase in wear-resistance can be obtained only if the increase in hardness is combined with an increase in the bond forces of the atoms in the crystal lattice.

Resistance to Abrasive Wear ...

There are 1 figure and 9 Soviet references.

ASSOCIATION: Sibirskiy fiziko-tekhnicheskiy institut pri Tomskom gosuniversitete imeni V.V.Kuybysheva (Siberian Physicotechnical Institute of Tomsk State University imeni V.V. Kuybyshev)

SUBMITTED: October 21, 1960

Card 5/6

MALYSHEV, Yu.F., inzh.

Investigating winter tracks of the DT-54A tractor. Mekh. i elek. sots. sel'khoz. 19 no.6:55-57 '61. (MIRA 14:12)

1. TSentral'naya mashinoispytatel'naya stantsiya.
(Crawler tractors—Cold weather operations)

37724
S/139/62/000/002/023/028
E073/E335

AUTHORS: Savitskiy, K.V. and Malyshev, Yu.F.

TITLE: Influence of the structure of excess cementite on the wear-resistance of high-carbon steels

PERIODICAL: Izvestiya vysshikh uchebnykh zavedeniy, Fizika, no. 2, 1962, 153 - 157 + 2 plates

TEXT: Two batches of specimens of the high-carbon steel У12 (U12) were tested. In the first, the excess carbide was distributed along the grain boundaries, forming a cementite network and in the second it was in the form of isolated grains in a plastic matrix. All the specimens were quenched from 750 °C and tempered at 300, 400, 500 and 660 °C, so that the matrix structure remained the same after the heat-treatment but the structure of the excess carbide differed; this enabled detecting the influence of the of the excess cementite on the wear-resistance. The abrasive wear was tested according to known methods, using electrocorundum paper with a grain [illegible] as an abrasive. The specimens were subjected to [illegible] of 1.2 kg at a velocity of 1.8 m/min. After

S/139/62/000/002/023/028
E073/E535

Influence of the structure ....

travelling 2.1 m, the specimen was again weighed with an accuracy of 0.1 mg. The wear-resistance of steel with a cementite network was higher in every case than that of steel which contained the excess cementite in the form of isolated grains. The wear-resistance for both structures increased in direct ratio with increasing hardness of the matrix. The influence of the structure of the excess cementite did not change with changing hardness of the matrix. According to metallographic investigations, the matrix wears more intensively in both cases. Experiments on the specimens tempered at 660 °C showed that with increasing load up to 1.6 kg the rate of wear of both steels increased linearly. The influence of the shape of the excess carbides on the wear-resistance is only slight at light loads but, with increasing load, the steel with isolated cementite grains wears more rapidly than the steel with the cementite network. With equal [illegible] than that of steel in which the excess

Influence of the structure ....

cementite is in the form of isolated grains. Metallographic investigation of the structure in the neighbourhood of an indentation with a diamond pyramid showed that the deformed volume was appreciably lower for steel with a cementite network than for steel with isolated cementite grains. Estimation of the abrasive wear from the modulus of elasticity, without taking into consideration the structural distribution of the phases in the alloy, will yield results which may not agree with experiment. Differences in the structural distribution of the carbides also affect the wear during purely metallic friction; specimens with cementite networks showed slightly higher wear than specimens with excess cementite in the form of isolated grains. Deformation of the surface layers increased with increasing tempering temperature, whereby the surface layers deformed more intensively and more deeply in steels with granular distribution of the excess cementite. The rubbing surfaces of quenched specimens showed small islands of oxide films. However, the number of oxide-film spots in tempered specimens was considerably higher and the thickness

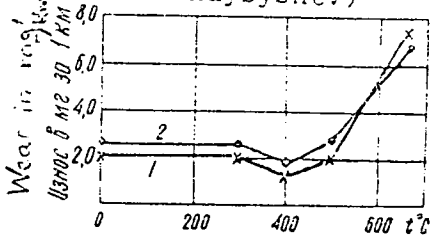
Card 3/4

of these films increased with increasing tempering temperatures. Breaking-up of the oxide films and more intensive seizing was observed at tempering temperatures of 660 °C. Fig. 7 shows the dependence of the rate of wear (mg per 1 km) as a function of the tempering temperature for steel with the excess cementite in the form of isolated grains (curve 1) and for steel with the excess cementite in the form of a network. There are 7 figures.

ASSOCIATION: Sibirskiy fiziko-tekhnicheskiy institut pri Tomskom gosuniversitet imeni V.V. Kuybysheva (Siberian Physicotechnical Institute of Tomsk State University imeni V.V. Kuybyshev)

SUBMITTED: November 17, 1961

Fig. 7:



Card 4/4

S/139/62/000/003/020/021
E039/E435

AUTHORS: Savitskiy, K.V., Malyshev, Yu.F.

TITLE: Investigation of the influence of the mechanical properties of heat treated brass in a strongly hardened condition on metallic wear

PERIODICAL: Izvestiya vysshikh uchebnykh zavedeniy. Fizika no.3, 1962, 173-174

TEXT: The ratio of the α and β phases in Л62 (L62) brass was changed by the following heat treatment: annealing at 550°C followed by tempering at 500, 550, 600, 650, 700, 750 and 800°C and measuring the hardness. Samples (1.4 x 2.9 x 14 mm) were cut from the billet and the modulus of elasticity measured by an ultrasonic method. Wear measurements were made on cylindrical (diameter 2 mm) specimens and wear was produced by hardened discs of У8 (U8) steel moving with a velocity of 0.56 m/sec relative to the sample under a load of 2.475 kg. Before the test the discs and samples were carefully polished and degreased with acetone. After the passage of the sample through a distance of 16.92 m the linear wear was measured with an accuracy of 0.005 mm, the mean of wear

Card 1/2

Investigation of the influence ...

on three samples being used to obtain a single point. The results, presented graphically, show that hardness increases with increase in the β phase while the metallic wear and modulus of elasticity remain unchanged. There is 1 figure.

ASSOCIATION: Sibirskiy fiziko-tekhnicheskiy institut pri Tomskom gosuniversitete imeni V.V.Kuybysheva
(Siberian Physicotechnical Institute at Tomsk State University imeni V.V.Kuybyshev)

SUBMITTED: December 25, 1961

Card 2/2

MALYSHEV, Yu.F., inzh.

Automatic system for filling tractor fuel tanks. Trakt.i sel'khozmash. no.8:15-17 Ag '62. (MIRA 15:8)

1. TSentral'naya mashinoispytatel'naya stantsiya.
(Tractors--Fuel systems)

MALYSHEV, Yu.F.

Universal T-40 tractor. Trakt. i selkhozmash. 32 no.3:7-10 Mr '62. (MIRA 15:2)

1. TSentral'naya mashinoispytatel'naya stantsiya.
(Tractors)

MALYSHEV, YU. I.

MALYSHEV, YU. I. -- "Materials on the Surgical Treatment of a Rectal Prolapse." Kuibyshev State Med Inst, Chair of Hospital Surgery, Kaibyshev, 1955. (Dissertation for the Degree of Candidate of Medical Sciences)

SO: Knizhnaya Letopis' No 44, October 1956

MALYSHEV, Yu.I., kand.med.nauk (Kuybyshev, Kuybyshevskaya ul., d. 32 kv. 15)

Clinical evaluation of A.G. Radzievskii's operation for rectal prolapse [with summary in English]. Vest.khir. 82 no.2 F '59. (MIRA 12:2)

1. Iz gospital'noy khirurgicheskoy kliniki (zav. - prof. A.M. Aminev) Kuybyshevskogo meditsinskogo instituta.
(RECTUM, dis.
prolapse, surg., technic (Rus))

MALYSHEV, Yu.I., assistent, kand.med.nauk

Is weakening of the external sphincter the cause or consequence of rectal prolapse? Elem.prokt. no.2:92-95 '60. (MIRA 14:11)

(RECTUM--ABNORMITIES AND DEFORMITIES)
(SPHINCTER ANI)

MALYSHEV, Yu.I., assistent, kand.med.nauk

New operation for rectal prolapse. Elem.prokt. no.2:98-99 '60.
(MIRA 14:11)

(RECTUM--SURGERY)

MALYSHEV, Yu.I., assistent, kand.med.nauk

Operative treatment of rectal prolapse by means of stenosis of the anus. Elem.prokt. no.2:99-103 '60. (MIRA 14:11)
(RECTUM--ABNORMITIES AND DEFORMITIES) (ANUS--SURGERY)

MALYSHEV, Yu.I., assistent, kand.med.nauk

Evaluation of Délorme's operation for rectal prolapse according to materials from Soviet surgeons. Elem.prokt. no.2:103-104 '60. (MIRA 14:11)

(RECTUM—SURGERY)

AMINEV, A.M.; MALYSHEV, Yu.I.

Treatment of rectal prolapse by the Zerenin-Kümmell method.
Khirurgiia 36 no.2:56-59 F '60.
(RECTUM—DISEASES) (MIRA 13:12)

MALYSHEV, Yu.I., kand.med.nauk

Operative treatment of atresia of the anal orifice in adults.
Kaz. med. zhur. no.6:64-65 N-D '61. (MIRA 15:2)

1. Klinika gospital'noy khirurgii (zav. - prof. A.M.Aminev) Kuybyshevskogo meditsinskogo instituta.
(ANUS--ABNORMITIES AND DEFORMITIES)

TETENEVA, V.F. (Murmansk); MALYSHEV, Yu.I. (Leningrad); GREBENNIKOVA, A.T. (Leningrad); BAZHENOV, V.S.; IVASHKEVICH, E.I.; SAFRONOVA, A.I. (Vitebsk); NOVIK, M.G.; OKUNEVA, G.N. (Novosibirsk); NEDVETSKAYA, L.M. (Moskva); SENT-UMEROV, S.M. (Vladivostok); PELYAVSKIY, I.P. (Odessa); LIPSKIY, L.I.; NUTRIKHIN, N.A. (Arkhangel'sk); KERIMOV, G.M. (Baku); BARAKOV, V.Ya. (Samarkand)

Abstracts. Grud. khir. 6 no.1:118-126 Ja-F '64.

(MIRA 18:11)

MAL'KHAREV, Yu.I., kand. med. nauk

Lokhart-Mummery's operation in prolapse of the rectum. Khirurgiia 40 no.9:142-146 S '64 (MIRA 18:1)

1. Kafedra gospital'noy khirurgii (zav. - prof. A.N. Arinchev) Kuybyshevskogo meditsinskogo instituta.

GADZHIYEV. S.A.; [illegible]

Carciac in[illegible] [illegible] [illegible]
no.3:61-66 '65. [illegible] [illegible])

1. Klinika [illegible] khir[illegible] (zav. - [illegible] [illegible]
skogo instituta [illegible] vrachey [illegible]
otdeleniye [illegible] (zav. [illegible]) [illegible]
klinicheskoy [illegible] (glavnyy vrach [illegible]).

MALYSHEV, Yu.I. (Chelyabinsk, 11, Raketnaya ul.39)

Resection of the esophagus in a patient having undergone gastrectomy. Vest. khir. no.7:111-112 Jl '64. (MIRA 18:4)

1. Iz otdeleniya grudnoy khirurgii (zav. - G.N.Shvind) Chelyabinskoy oblastnoy klinicheskoy bol'nitsy (glavnyy vrach - N.S.Klyukov).

8(6), 14(6)

Translation from: Referativnyy zhurnal. Elektrotekhnika, 1959, Nr 4, p 52 (USSR) SOV/112-59-4-6766

AUTHOR: Malyshev, Yu. M.

TITLE: Problems of Overall Electrification of an Administrative "Rayon"

PERIODICAL: Uch. zap. Saratovsk. ekon. in-t, 1958, Nr 3(7), pp 148-196

ABSTRACT: Economy of electrification of principal local industries in an administrative "rayon" and the efficiency of constructing small and medium-size hydroelectric and local-fuel stations are considered. By using concrete examples, technical and economic characteristics of energy consumption by agricultural and local industrial processes are analyzed; the industries are governmental or cooperatively owned. Capital investment per 1 kw of installed capacity and the cost of 1 kwh from hydro, diesel, or peat-fired stations depending on their capacities are examined. The importance and advantages of complex electrification of an administrative "rayon" are emphasized; the electrification is intended to ensure a wide usage of electric energy in agriculture at kolkhozes and sovkhozes, in accordance with the directives of the 20th Congress of CPSU.

Card 1/1

B.I.B.

MALYSHEV, Yu.M., kand. ekonom. nauk, otv. red.; SHMATOV, V.F., kand. ekonom. nauk, otv. red.; POROYKOV, Yu.D., red.; SHAFIN, I.G., tekhn. red.

[Effectiveness of capital investments in petroleum production of the Bashkir A.S.S.R.] Effektivnost' kapital'nykh vlozhenii v neftedobyvaiushchei promyshlennosti Bashkirskoi ASSR. Ufa, 1960. 105 p. (MIRA 14:9)

1. Akademiya nauk SSSR. Bashkirskiy filial, Ufa. Otdel ekonomiki promyshlennosti.
(Bashkiria—Petroleum industry—Finance)

MALYSHEV, Yu.M.

Economic evaluation of well spacing. Neft. khoz. 38 no.6: 27-30 Je '60. (MIRA 13:7)
(Oil fields--Production methods)

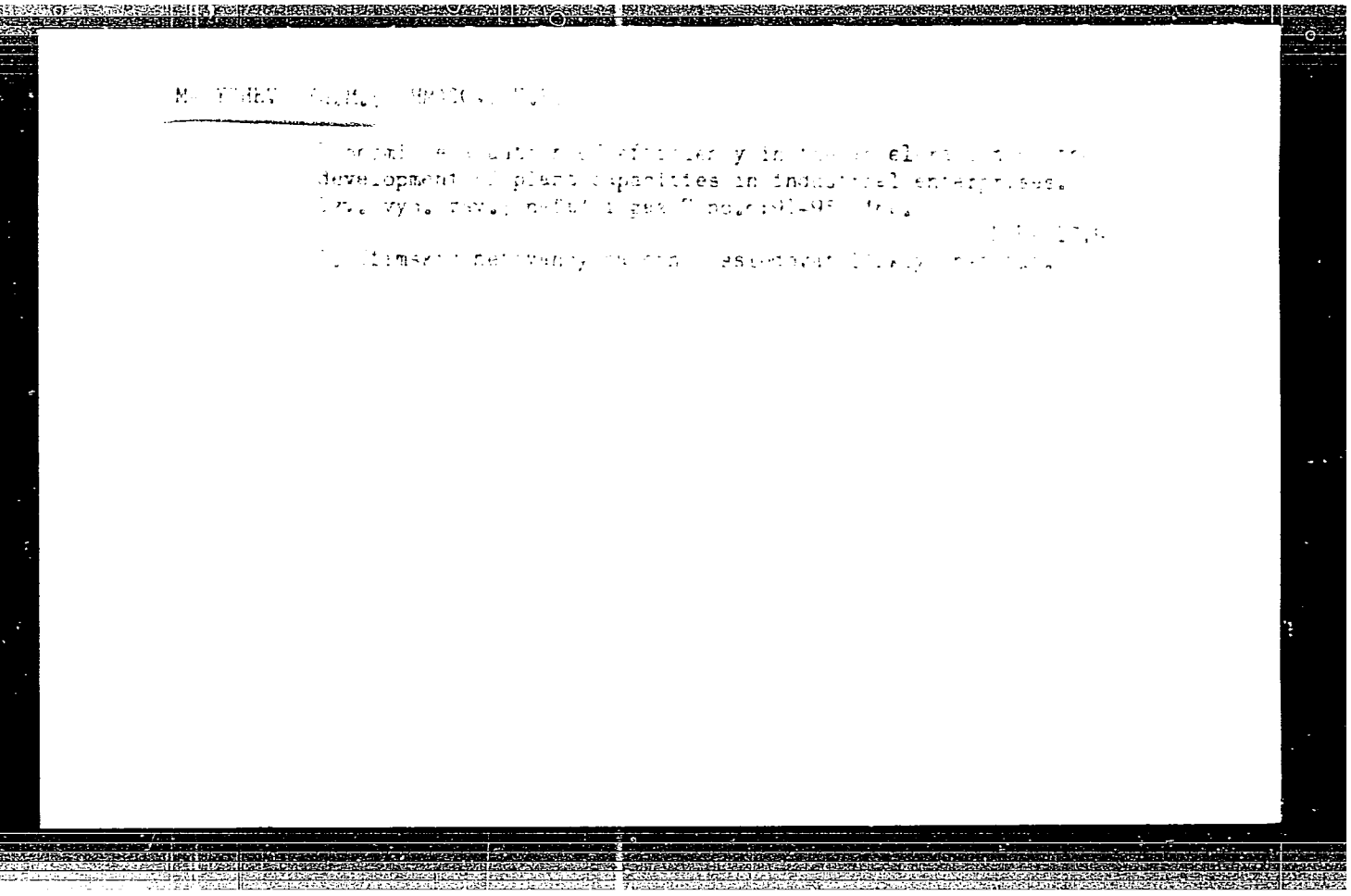
BUGROV, V.A.; MALYSHEV, Yu.M.

Determining the economic effectiveness of hydraulic fracturing.
Neft. khoz. 38 no.9:18-21 S '60. (MIRA 13:9)
(Bashkiria--Oil wells--Hydraulic fracturing)

MALYSHEV, Yu.M.; SHIKHOV, V.V.; SHMATOV, V.F.

Problems of economics in the use of sulfur-bearing oils.
Khim. i tekh. topl. i masel. 8 no.3:37-43 Mr '63.
(MIRA 16:4)

1. Bashkirskiy filial AN SSSR.
(Petroleum industry) (Petroleum—Refining)
(Sulfur compounds)



MALYSHEV, Yu.M.; TISHCHENKO, V.Ye.; SHMATOV, V.F.

Applicability of the normative cost index for processing in the calculation of labor productivity in petroleum refining. Izv. vys. uchseb. zav.; neft' i gaz 7 no.9:116-120 '64. (MIRA 17:12)

1. Ufimskiy neftyanoy institut.

MALYSHEV, Yu.M.; TISHCHENKO, V.Ye.

Methodology for the analysis of the utilization of capital assets in petroleum processing enterprises. Khim. i tekh. topl. i masel 10 no.8:34-40 Ag '65. (MIRA 18:9)

1. Ufimskiy neftyanoy nauchno-issledovatel'skiy institut.

SALIKHOV, V.V.; MALYSHEV, Yu. N.

Experience in the organization of the operation of telegraph communications in Vladimir Province to a system of direct connections. Vest. sviazi 21.no.4:21-24 Ap '61. (MIRA 14:6)

1. Nachal'nik Vladimirskogo oblastnogo telegrafa (for Salikhov).
2. Starshiy inzhener Vladimirskogo oblastnogo telegrafa (for Malyshev).

(Vladimir Province--Telegraph)

RATNER, F.Z., inzh., MALYSHEV, Yu.N.

Calculation of complex hydraulic networks. Izv. vys. ucheb. zav.; energ. 7 no.10:64-71 O '64. (MIRA 17:12)

1. TSentral'nyy nauchno-issledovatel'skiy kotloturbinnyy institut imeni I.I. Polzunova.

SOV/155-58-3-1

16(1)
AUTHOR: Malyshev, Yu.V.

TITLE: Generalization of the Method of Isoclinics for the Construction of the Direction Field of a First Order Differential Equation (Obobshcheniye metoda izoklin postroyeniya polya napravleniy differentsial'nogo uravneniya pervogo poryadka)

PERIODICAL: Nauchnyye doklady vysshey shkoly. Fiziko-matematicheskiye nauki, 1958, Nr 3, pp 88-90 (USSR)

ABSTRACT: Along with

(1) $y' = f(x,y)$

the author considers

(2) $\frac{Y-\bar{y}}{X-\bar{x}} = f(x,y)$.

The curve (2) along which the directions of the integral curves of (1) run together in the fixed point $M(\bar{x},\bar{y})$ is denoted as the line of converging directions. It is shown that this line represents a generalization of the isoclines of (1). To every $M(\bar{x},\bar{y})$ there corresponds its line of converging directions. If M is shifted along a curve, then one obtains several lines of

Card 1/2

L 56465-65 EWT(d)/ Pg-4 IJP(c)
ACCESSION NR: AP5015051

UR/0140/65/000/003/0133/0145
517.919

AUTHORS: Wentsekiy, V. V. (Moscow); Malyshev, Yu. V. (Moscow)

TITLE: Weak structural stability of homogeneous systems

SOURCE: IVUZ. Matematika, no. 3, 1965, 133-145

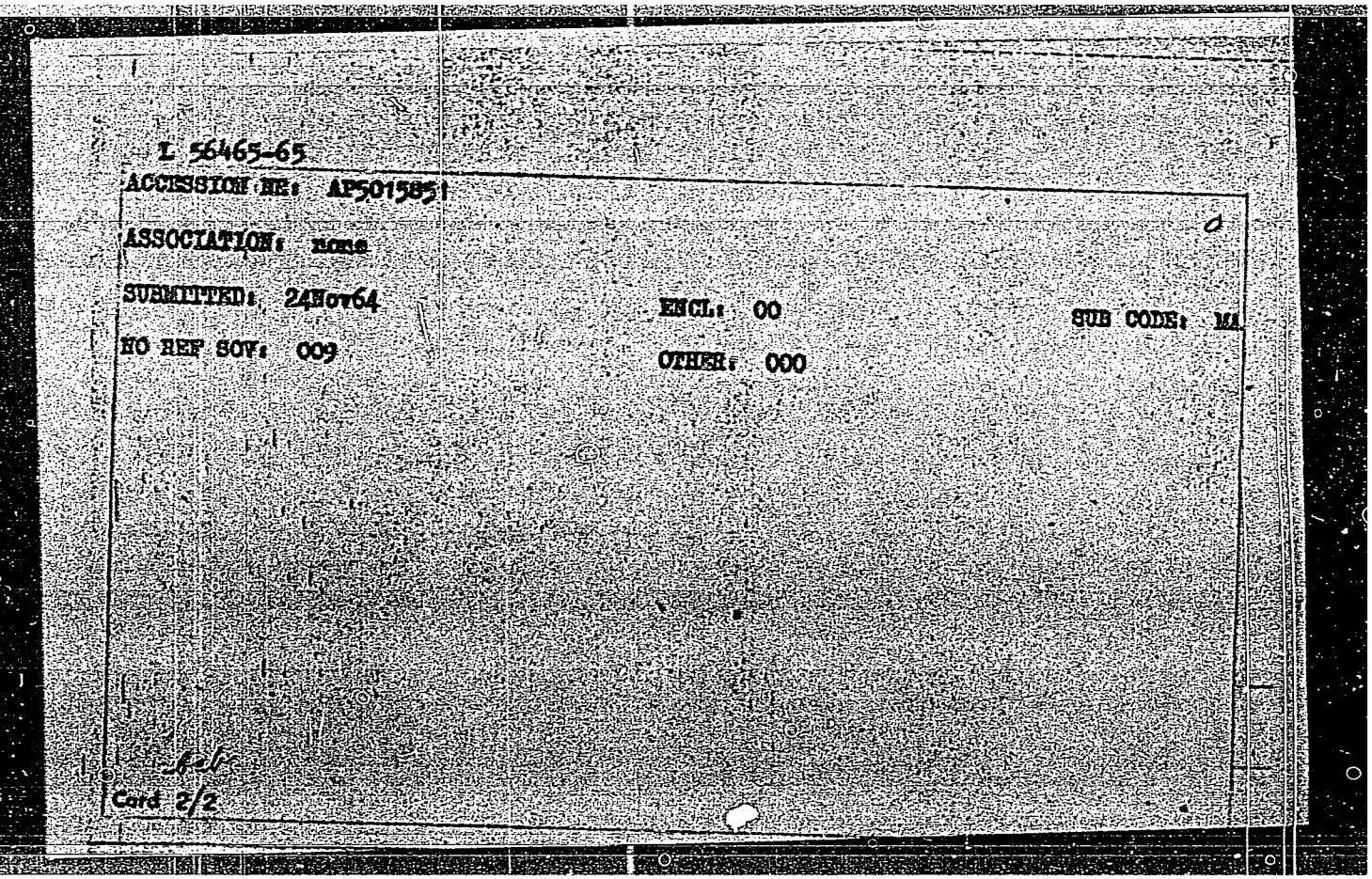
TOPIC TAGS: differential equation, stability

ABSTRACT: Consider the system

$$\frac{dx}{dt} = P_n(x,y), \quad \frac{dy}{dt} = Q_n(x,y) \qquad (1)$$

where P_n and Q_n are homogeneous polynomials of degree n. The authors apply the method of generalized functions of Lyapunov for systems close to homogeneous. They characterize the behavior of integral curves in the whole plane, with appropriate modification of the definition of closeness. They give two theorems which yield conditions for weak structural stability of (1), based on behavior of the roots of the characteristic equation. Orig. art. has: 16 formulas.

Card 1/2



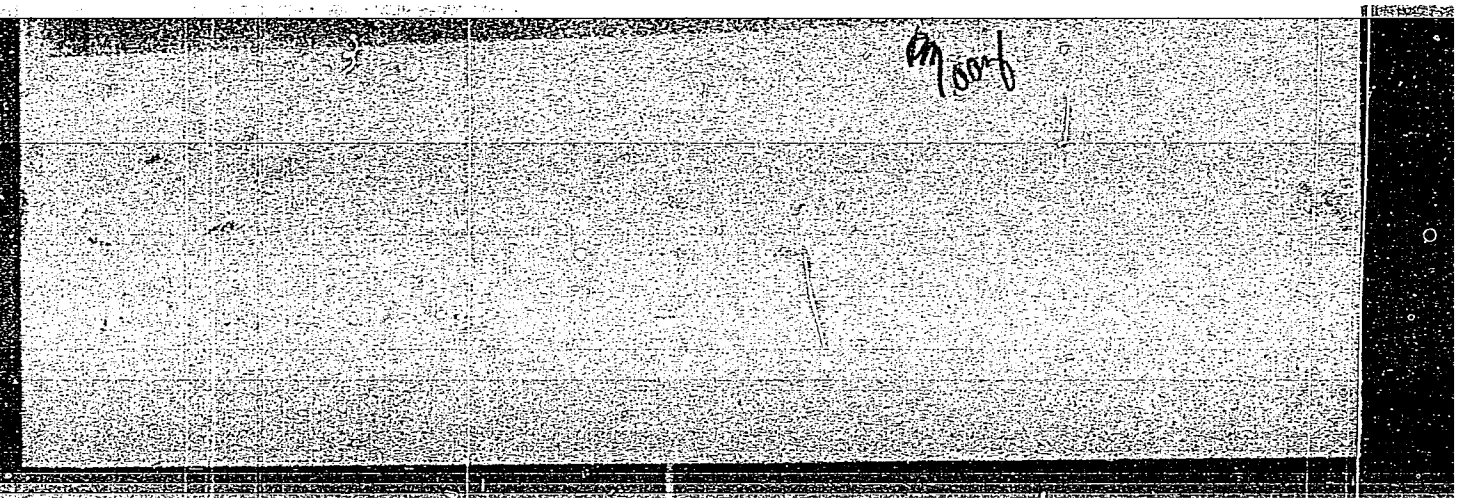
L 56465-65
ACCESSION NR: AP5015851
ASSOCIATION: none
SUBMITTED: 24Nov64 ENCL: 00 SUB CODE: MA
NO REF SOV: 009 OTHER: 000

Card 2/2

MALYSHEV, Yu.V.

Numerical method for integrating a differential equation of the first order. Dif. urav. 1 no.5:692-697 My '65.
(MIRA 18:7)

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



APPROVED FOR RELEASE: 06/20/2000 CIA-RDP86-00513R001032010004-0"

MALYSHEV, Yu.V.

Study on nearly homogeneous differential equations. Vest.Mosk.un. Ser.1: Mat., mekh. 20 no.6:15-27 N-D '65.

(MIRA 18:12)

1. Kafedra differentsial'nykh uravneniy Moskovskogo universiteta.
Submitted Feb. 24, 1964.

MALYSHEVA, A.D.; LOGINOVA, Ye.A. (Moskva)

General P.I.Bagration's fatal wound. Sov.med. 18 no.6:41-43 Je '54. (MLRA 7:6)

(BAGRATION, PETR IVANOVICH, KNIAZ', 1765-1812)

Malysheva, A.E.

7A-312 551.586:612.5:551.521.2

Malysheva, A. E., Primenenie radiatsionnogo okhlazhdeniia dlia profilaktiki peregrevaniia. [Use of radiational cooling in the prevention of overheating.] *Gigiena i Sanitariia*, Moscow, 0(2):37–43, Feb. 1950. 4 tables. DLC—In order to determine the effectiveness of radiation cooling from the body surface at high air temperature and radiation from heated walls two series of experiments were carried out on subjects at rest or engaged in physical work in a climatic chamber having a volume of 5.3m³ with six walls each of which could be either heated or cooled from −3° to +50°C. Evaporational water temperature, skin temperatures, gas exchange, etc. were measured for various combinations of air and wall temperatures. Data are presented in tables. Considerable effectiveness of radiation cooling is established. *Subject Headings*: 1. Cooling power 2. Radiational cooling.—*I.L.D.*

MAL'YSHEVA, A.F.

USSR/Physics - Spectral analysis

Card 1/1 Pub. 43 - 25/62

Authors : Malysheva, A. F.

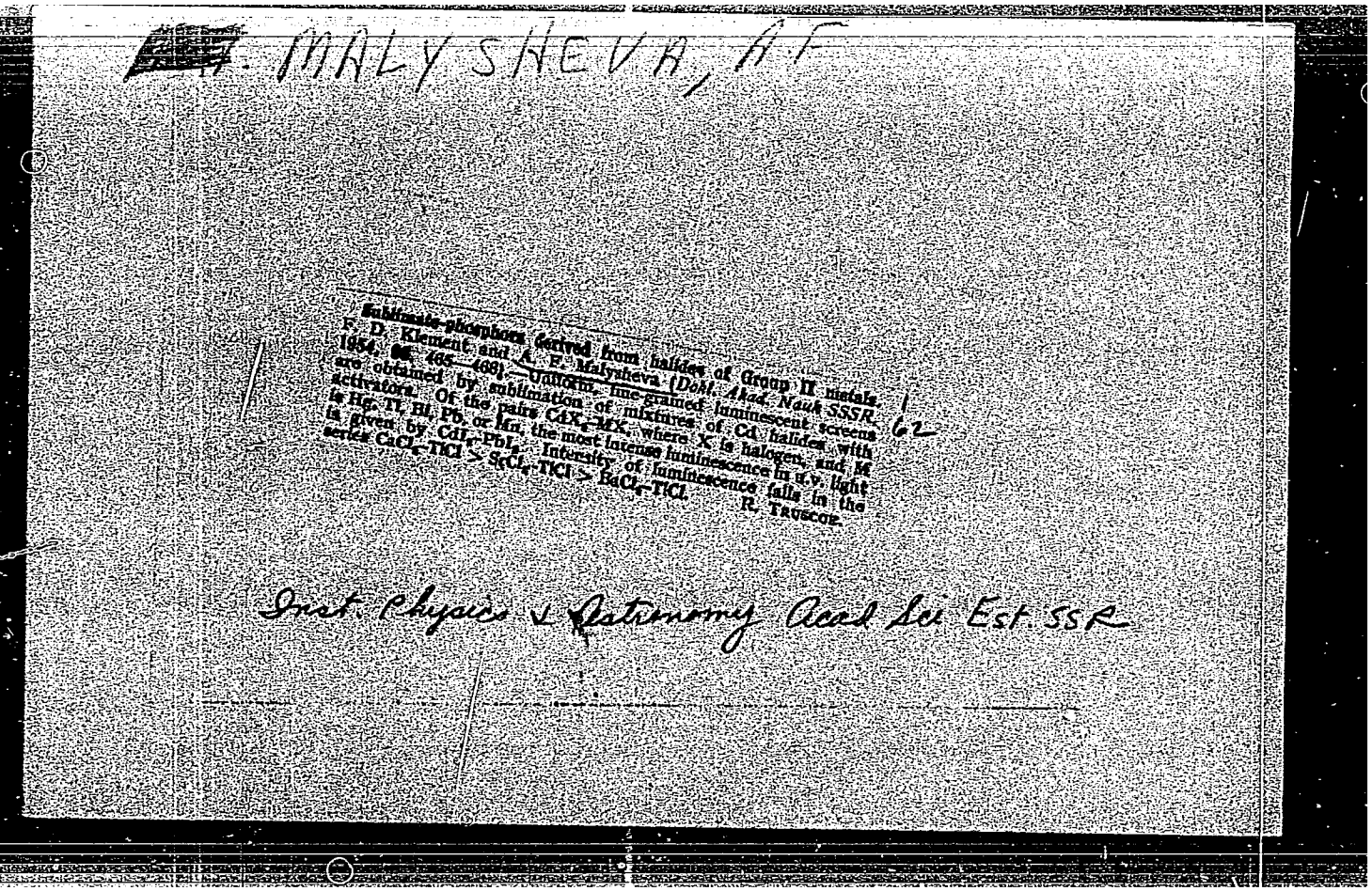
Title : Absorption spectra of solid Pb-solutions in cadmium halides

Periodical : Izv. AN SSSR. Ser. fiz. 18/6, 685-686, Nov-Dec 1954

Abstract : Study was made to establish the absorption spectra for cadmium halide base phosphor-sublimates with lead halide in the role of activator. The measurement of the absorption spectra was accomplished by means of a SF-4 spectrophotometer and it comprised a region of from 220-450 mu. The results obtained are evaluated. Three references: 2 USSR and 1 German (1930-1954).

Institution : Acad. of Sc., Est. SSR, Inst. of Phys. and Astronomy

Submitted : ....



MALYSHEV, A F

Sublimate-phosphors derived from halides of Group II metals. I
F. D. Klement, and A. F. Malysheva (*Dokl. Akad. Nauk SSSR*, 62
1954, 96, 485–488).—Uniform fine-grained luminescent screens
are obtained by sublimation of mixtures of Cd halides with
activators. Of the pairs CdX_2–MX_2, where X is halogen, and M
is Hg, Tl, Bi, Pb, or Mn, the most intense luminescence in u.v. light
is given by CdI_2–PbI_2. Intensity of luminescence falls in the
series $CaCl_2$–TlCl > $ScCl_3$–TlCl > $BaCl_2$–TlCl. R. Truscott

Inst. Physics & Astronomy Acad Sci Est. SSR

Malysheva, A.F.

USSR/Optics - Physical Optics K-5

Abs Jour : Referat Zhur - Fizika, No 5, 1957, 12921

Author : Klement, F.D., Malysheva, A.F.

Inst : -

Title : Nature of Excitation Spectra of Certain Crystal Phosphors.

Orig Pub : Tr. In-ta fiz. i astronom. AN EstSSR, 1955, No 1, 44-46

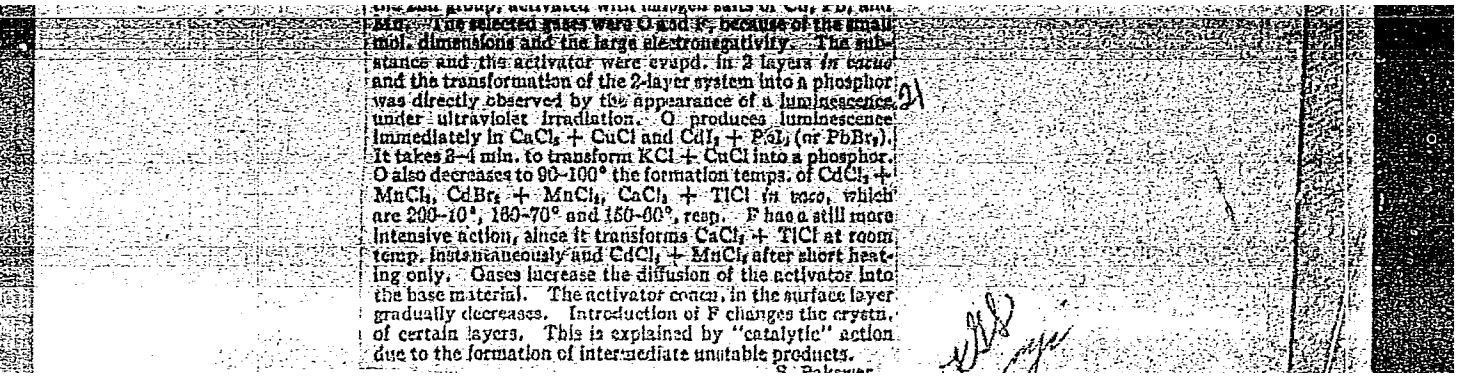
Abstract : An investigation was made of the absorption and excitation spectra in a series of sublimate phosphors. A double-layer comprising a "base plus activator" CdI_2 -- PbI_2, luminesces only after being sufficiantly heated to diffuse the activator into the lattice of the base and to form a solid solution. As a result, a new narrow absorption band appears at 390 millimicrons, ascribed to the ions Pb^{2+} in the CdI_2 lattice. Unlike the CdI_2 -- PbI_2, the activator bands of the activator inserted in the base of a sublimate phosphor $CdBr_2$ -- $PbBr_2$ or $CdCl_2$ -- $PbCl_2$, retain the same position as in the pure activator. The excitation spectra

Card 1/2

Malysheva, A.F.

4

The effect of gases on the formation processes of some crystal phosphors. F. D. Kleinen, A. F. Malysheva, I. S. Nilova, and A. A. Solov'eva. Trudy Inst. Fiz. i Astron. Akad. Nauk Eston. S.S.R. 1956, No. 4, 86-41.—The investigated phosphors were halogen salts of some metals of the 2nd group, activated with halogen salts of Cu, Pb, and Mn. The selected gases were O and F, because of the small mol. dimensions and the large electronegativity. The sub-



the zinc group, activated with nitrogen salts of Cu, Pb, and Mn. The selected gases were O and F, because of the small mol. dimensions and the large electronegativity. The substance and the activator were evapd. in 2 layers *in vacuo* and the transformation of the 2-layer system into a phosphor was directly observed by the appearance of a luminescence under ultraviolet irradiation. O produces luminescence immediately in $CaCl_2$ + CuCl and CdI_2 + PbI_2 (or $PbBr_2$). It takes 2–4 min. to transform KCl + CuCl into a phosphor. O also decreases to 90–100° the formation temps. of $CdCl_2$ + $MnCl_2$, $CdBr_2$ + $MnCl_2$, $CaCl_2$ + TlCl *in vacuo*, which are 200–10°, 180–70° and 150–60°, resp. F has a still more intensive action, since it transforms $CaCl_2$ + TlCl at room temp. instantaneously and $CdCl_2$ + $MnCl_2$ after short heating only. Gases increase the diffusion of the activator into the base material. The activator concn. in the surface layer gradually decreases. Introduction of F changes the crystn. of certain layers. This is explained by "catalytic" action due to the formation of intermediate unstable products.

S. Rakovnik

48-5-45/56

SUBJECT: USSR/Luminescence

AUTHOR: Malysheva A.F.

TITLE: On Spectral Properties of Some Sublimate-Phosphors (O spektral'-nykh svoystvakh nekotorykh sublimat-fosforov)

PERIODICAL: Izvestiya Akademii Nauk SSSR, Seriya Fizicheskaya, 1957, Vol 21, #5, p 753 (USSR)

ABSTRACT: Excitation and absorption spectra of sublimate-phosphors based on cesium haloids a..d using tallium as an activator were investigated.

An absorption spectrum of a two-layer system "base + activator" before heating is a superposition of the absorption spectra of the components. After heating, which ensures a possibly complete diffusion of the activator into the lattice of the base, the spectrum changes considerably. At the same time luminescence arises. In the absorption spectrum of the CsCl.TlCl system appear two bands with maxima at 245 to 248 mμ and 210 mμ. In the CsBr.TlBr after heating appear two bands with maxima at 215 and 263 mμ. The CsJ.Tl phosphor shows after heating 3 new

Card 1/2

MALYSHEVA, A. F., Candidate Phys-Math Sci (diss) -- "The spectral properties of certain halides of the sublimate phosphors". Tartu, 1959. 10 pp (Tartu State U), 225 copies (KL, No 25, 1959, 126)

21016

S/058/61/000/005/024/050
A001/A101

24.3500 (1137, 1138, 1140, 1147)

AUTHOR: Malysheva, A.F.

TITLE: Crystallophosphors based on halides of metals of the second group

PERIODICAL: Referativnyy zhurnal. Fizika, no 5, 1961, 181, abstract 5V384 ("Tr. In-ta fiz. i astron. AN EstSSR", 1960, no 12, 111-124, Engl. summary)

TEXT: The author investigated spectra of absorption, excitation and emission of phosphors based on halides of some metals of the second group activated by Pb and Tl. She compares the maxima of absorption (excitation) bands of these phosphors with electron transitions in free ions of Pb and Tl. The small difference is noted in the structure of absorption spectra of the phosphor group under consideration and alkali halide phosphors with the same activators, in particular, the absence of splitting (or the presence of very weak splitting) of $^1P_1$ levels in ions of Tl^+ and Pb^{2+}, being in the lattices of halides of metals of the second group, in spite of the low symmetry of the latter. From the comparison of emission spectra of tallium phosphors based on halides of alkali and alkali

Card 1/2

Crystallophosphors based on halides ... S/058/61/000/005/024/050
A001/A101

earth metals, the conclusion is drawn that in the second group of phosphors there are luminescence centers of one type, whereas in the first group the existence of centers of two types is possible. This difference is connected with the fact that cations of the main lattice in these two groups of phosphors have different charges. The author considers also absorption spectra of pure halides of metals of the first and second groups. There are 27 references.

[Abstracter's note: Complete translation.]

24662
S/081/61/000/009/002/015
B101/B205

94.3500

AUTHOR: Malysheva, A. F.

TITLE: Crystal phosphors on the basis of alkaline-earth halides

PERIODICAL: Referativnyy zhurnal. Khimiya, no. 9, 1961, 29, abstract 9B202 (9B202) ("Tr. In-ta fiz. i astron. AN EstSSR", 1960, no. 12, 111 - 124)

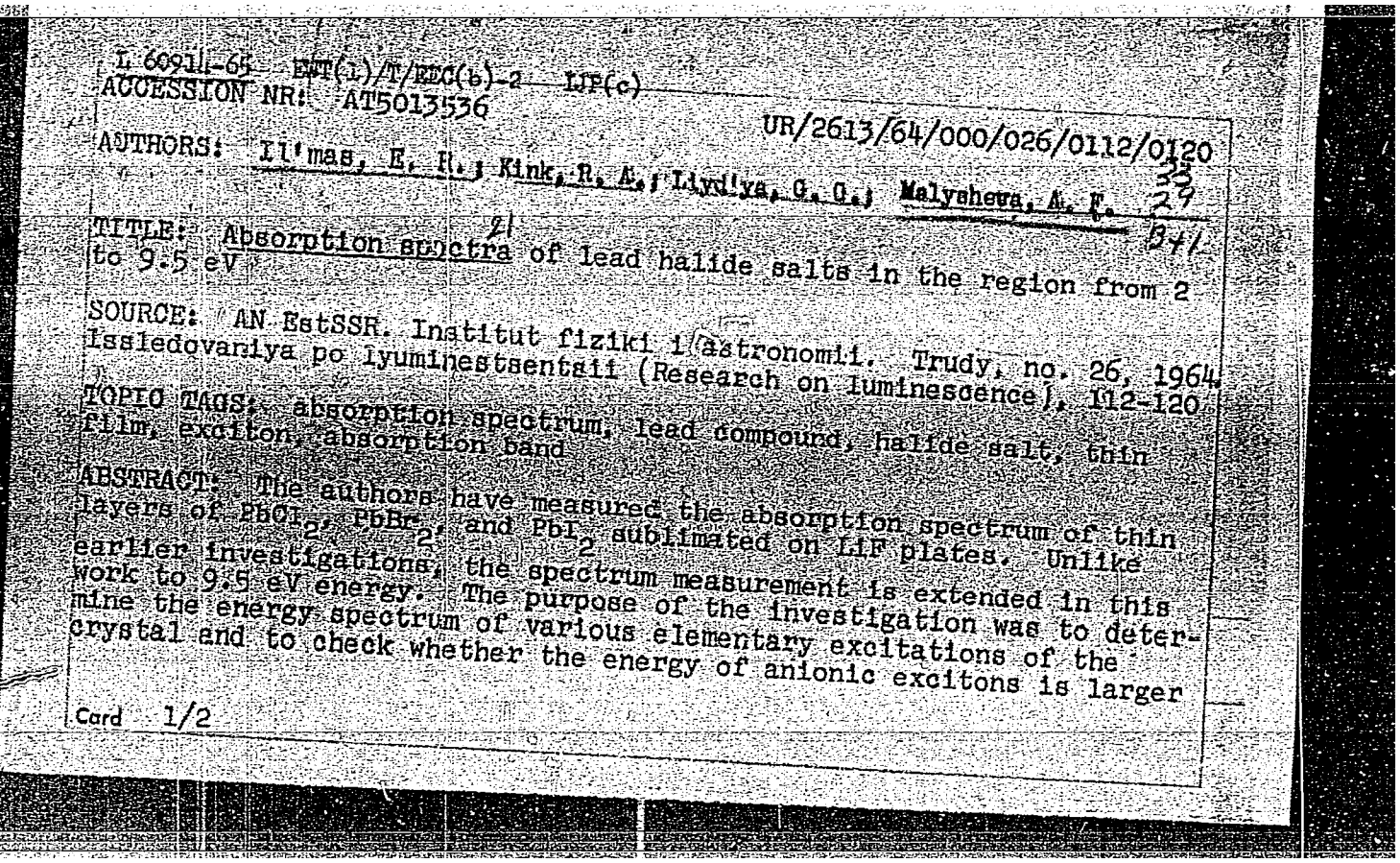
TEXT: The author analyzed the absorption, excitation, and emission spectra of phosphors based on halogen salts of some metals of the second group of the Periodic Table, which were activated with Pb and Tl. The maxima of the absorption (excitation) bands of these phosphors are compared with electron transitions in free Pb and Tl ions. A slight difference between the structure of the absorption spectra of the phosphors studied and that of alkali-halide phosphors with the same activators is noted. From a comparison of the emission spectra of Tl phosphors based on halogen salts of metals of groups I and II of the Periodic Table, the conclusion is drawn that luminescence centers of one type exist in the phosphors of group II, whereas two types of centers may exist in the phosphors of group I. This divergence is related to the varying charge of the lattice

Card 1/2

Crystal phosphors on the basis of...

cations in these phosphors. The author analyzed the absorption spectra of pure halogen salts of metals of groups I and II. [Abstracter's note: Complete translation.]

Card 2/2



L 6091l-65 EWT(l)/T/EEC(b)-2 IJP(c)
ACCESSION NR: AT5013536 UR/2613/64/000/026/0112/0120

AUTHORS: Il'mas, E. H.; Kink, R. A.; Lyydya, G. G.; Malysheva, A. F. 33 27 B+1

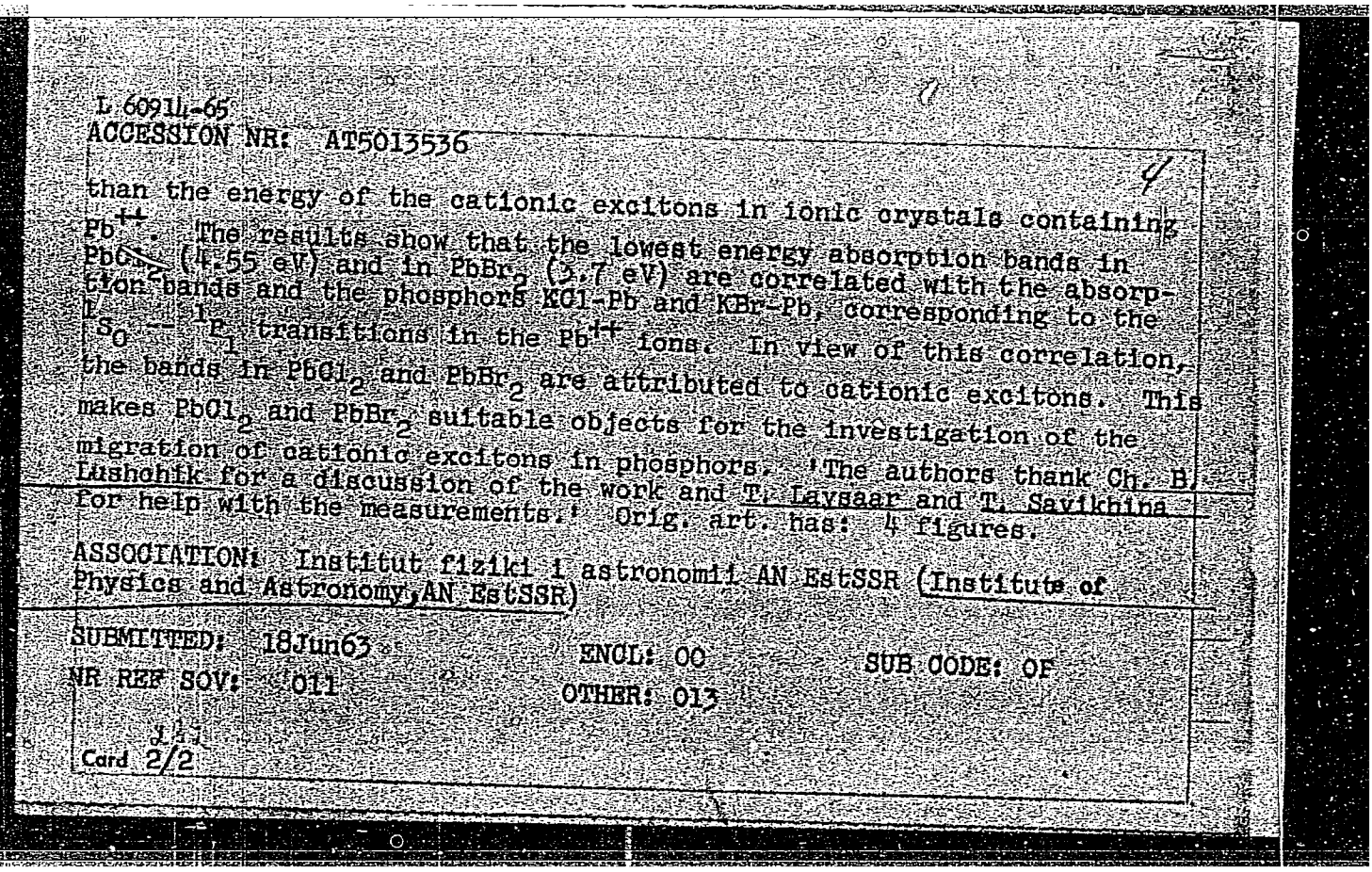
TITLE: Absorption spectra of lead halide salts in the region from 2 to 9.5 eV 21

SOURCE: AN EstSSR. Institut fiziki i astronomii. Trudy, no. 26, 1964, Issledovaniya po lyuminestsentsii (Research on luminescence), 112-120

TOPIC TAGS: absorption spectrum, lead compound, halide salt, thin film, exciton, absorption band

ABSTRACT: The authors have measured the absorption spectrum of thin layers of $PbCl_2$, $PbBr_2$, and PbI_2 sublimated on LiF plates. Unlike earlier investigations, the spectrum measurement is extended in this work to 9.5 eV energy. The purpose of the investigation was to determine the energy spectrum of various elementary excitations of the crystal and to check whether the energy of anionic excitons is larger

Card 1/2



L 6091L-65
ACCESSION NR: AT5013536

than the energy of the cationic excitons in ionic crystals containing Pb^{++}. The results show that the lowest energy absorption bands in $PbCl_2$ (4.55 eV) and in $PbBr_2$ (3.7 eV) are correlated with the absorption bands and the phosphors KCl-Pb and KBr-Pb, corresponding to the $^1S_0 \rightarrow {}^3P_1$ transitions in the Pb^{++} ions. In view of this correlation, the bands in $PbCl_2$ and $PbBr_2$ are attributed to cationic excitons. This makes $PbCl_2$ and $PbBr_2$ suitable objects for the investigation of the migration of cationic excitons in phosphors. 'The authors thank Ch. B. Lushchik for a discussion of the work and T. Laysaar and T. Savikhina for help with the measurements.' Orig. art. has: 4 figures.

ASSOCIATION: Institut fiziki i astronomii AN EstSSR (Institute of Physics and Astronomy, AN EstSSR)

SUBMITTED: 18Jun63 ENCL: 00 SUB CODE: OP

NR REF SOV: 011 OTHER: 013

Card 2/2

L 011560-66 EWT(1)/EWT(m)/EWP(t)/EWP(b) IJP(c) JD

ACCESSION NR: AT5013691 UR/2613/64/000/030/0063/0077

AUTHOR: Kalder, K. A.; Malysheva, A. F.

TITLE: Photoluminescence of sublimated ZnS and SnS-Cu phosphors

SOURCE: AN EstSSR. Institut fiziki i astronomii. Trudy, no. 30, 1964. Issledovaniya po lyuminestsentsii (Research on luminescence), 68-77

TOPIC TAGS: photoluminescence, absorption spectrum, sublimated phosphor, zinc sulfide optic material, excitation spectrum, emission spectrum, thin film

ABSTRACT: Inasmuch as earlier measurements of the excitation spectra of ZnS and ZnS-Cu phosphors were measured in the past only for powdered samples and single crystals, and furthermore in the limited range of 280--450 nm, the authors produced by various methods sublimated phosphors ZnS, SnS-Cu and SnS-Cu,Cl and measured their exitation and emission spectra. The preparation and test procedures are described briefly. Differences were observed in the maxima of the bands in the excitation spectra and in the variation of the short-wave parts of these spectra. These differences are attributed to differences in the sublimation conditions and in the conditions of crystallization of the initial material, and also to the different thicknesses of the films. It is assumed that the additional impurities in the form of

Card 1/2