KROTOV, Wygenij Galaktionovich. Veneer manufacture; a tectbook Moskva, Gos. lesotekhn. izd-vo, 1947.576 p. (49-203070)

APPROVED FOR RELEASE: 06/19/2000 CIA-RDP86-00513R000826710003-4"

KROTOV, YE. G.
"Variations in Qualitative Charactoristics of Tomatoes During Canning and Storage." Min Higher Education USSR, Koscow Technological Inst of Food Industry, Noscow, 1955. (Dissertation for the Degree of Candidate of Technical Sciences)
SO: M-972, 20 Feb 56

APPROVED FOR RELEASE: 06/19/2000

"APPROVED FOR RELEASE: 06/19/2000 CIA-RDP86-00513R000826710003-4 K early stages of storage.

APPROVED FOR RELEASE: 06/19/2000

. - -

USI TELLISTICIOLATURE FILM ADDITED HID TO GAL

CIA-RDP86-00513R000826710003-4

MARKH, A.T.; FEL'DMAN, A.L.; KROTOV, Ye.G.; KAGAN, I.S.; MARKH, Z.A.

Causes of the darkening of pickled pasteurized cabbage and a method of preserving its natural color. Kons.i ov.prom. 12 no.8:14-16 Ag '57. (MLRA 10:10)

1. Odesskiy tekhnologicheskiy institut pishchevoy i kholodil'noy promyshlennosti (for Markh, Fel'dman, Krotov). 2. Ukrainskiy nauchno-issledovatel'skiy institut konservnoy promyshlennosti (for Kagan; Markh, Z.A.)

(Cabbage--Preservation)

APPROVED FOR RELEASE: 06/19/2000

CIA-RDP86-00513R000826710003-4"

1.1

A SECTION FRANK PERSON PERSON PERSON FRANK

MARKH, A.T., doktor tekhn.nauk, prof.; FEL'DMAN, A.L. kand.tekhn.nauk, dotsent; KAGAN, I.S.; kand.tekhn.nauk; KROTOV, Ye.G., kand.tekhn.nauk; MARKH, Z.A., starshiy nauchnyy sotrudnik; TEXTILOVA, A.G., assistent

> Factors responsible for the darkening of pickled pasteurized cabbage. Trudy OTIPiKhP 9 no.2:3-19 '59. (MIRA 13:9)

1. Kafedra biokhimii i mikrobiologii Odesskogo tekhnologicheskogo instituta pishchevoy i kholodil'noy promyshlennosti i Ukrainskiy nauchno-issledovatel'skiy institut konservoy promyshlennosti. (Cabbage)

APPROVED FOR RELEASE: 06/19/2000

如何的 國際 國際 國際

CIA-RDP86-00513R000826710003-4"

可提得通知

CALLARY STREAM STREAM STREAM STREAM AND STREAM ST

THE REAL PROPERTY AND ADDRESS OF THE PARTY O

KROTOV, Ye.G.; TERTILOVA, A.G.

•

Causes of the deterioration of the color of rose preserves in storage. Izv. vys. ucheb. zav.; pishch. tekh. no.2:61-66 '60. (MIRA 14:7)

1. Odesskiy tekhnologicheskiy institut pishchevoy i kholodil'noy promyshlennosti, kafedra biokhimii i mikrobiologii. (Armenia-Attar of rcses)

APPROVED FOR RELEASE: 06/19/2000 CIA

 $\mathcal{A}_{1}(1, q_{1}, q_{2}) = 0$

CIA-RDP86-00513R000826710003-4"

ليتذفرن

4





1

FISHER, M.N.; BUNTE, A.I.; KROTOV, Yu.A.

Value of detecting Hofmann's bacillus in the air as a sanitary index in closed quarters. Trudy LSGMI 46:203-212 '59. (MIRA 13:11)

1. Kafedra mikrobiologii Leningradskogo sanitarno-gigiyenicheskogo meditsinskogo instituta (zav. kafedroy - prof. M.N.Fisher) i Kafedra obshchey gigiyeny I Leningradskogo meditsinskogo instituta imeni I.P.Pavlova (zav. kafedroy - prof. I.Ye.Ramm). (AIR-BACTERIOLOGY) (CORYNEBACTERIUM PSEUDODIPHTHERIAE)

CIA-RDP86-00513R000826710003-4"

APPROVED FOR RELEASE: 06/19/2000

CIA-RDP86-00513R000826710003-4



APPROVED FOR RELEASE: 06/19/2000 CIA-RDP86-00513R000826710003-4"

CIA-RDP86-00513R000826710003-4



APPROVED FOR RELEASE: 06/19/2000





APPROVED FOR RELEASE: 06/19/2000 CIA-RDP86-00513R000826710003-4"



"APPROVED FOR RELEASE: 06/19/2000

CIA-RDP86-00513R000826710003-4"

KROTOV, Yu.V. (Stalinsk) Selection of the section of cross bars of coupled arches with a double curvature on the basis of statility calculations. Stroi. mekh. i rasch. soor. 3 no.6:17-22 '61, (MIRA 15:4) (Bridges, Arched)

APPROVED FOR RELEASE: 06/19/2000



APPROVED FOR RELEASE: 06/19/2000

KROTOV, Yu.V.; DEKTYAREV, V.P., red.; MAMULOV, A.S., otv. za vyp.; OGAREV, A.P., tekim. red.

> [Special case of laterial instability of twin arches] Osobyi sluchai bokovoi neustoichivosti sparennykh arok. Novokuznetsk, Sibirskii metallurg. in-t im. Sergo Ordzhonikidze, 1962. 11 p. (MIRA 16:9) (Arches) (Structures, Theory of)

APPROVED FOR RELEASE: 06/19/2000

CIA-RDP86-00513R000826710003-4"

CIA-RDP86-00513R000826710003-4



APPROVED FOR RELEASE: 06/19/2000

R. 855-54012-652-64

"APPROVED FOR RELEASE: 06/19/2000 CIA-RDP86-00513R000826710003-4

	sov/58-59-7-16157
Translation i	from: Referativnyy Zhurnal Fizika, 1959, Nr 7, p 216 (USSR)
AUTHOR:	Krotova, A.A.
TITLE:	Diffraction in a Layer With Random Inhomogeneities
PERIODICAL:	Uch. zap. Chitinsk, gos. ped. in-t, 1958, Nr 2, pp 39 - 52
ABSTRACT:	Using formulae derived by A.M. Obukhova (RZhFiz, 1955, Nr 4, 8126), the author calculates the transverse functions of the correlation between the level and phase of a <u>plane wave</u> /passing through a layer with random in- homogeneities. It is shown that in the case of very small and very large values of the wave parameter, the level-and-phase correlation functions in a plane parallel to an inhomogeneous layer do not depend on the distance of this plane from the scattering layer.
	N.G. Denisov
Card 1/1	
nes constant president descent	

APPROVED FOR RELEASE: 06/19/2000 CIA-RDP86-00513R000826710003-4"



Age characteristics of the organ of vision in dogs. Biul.eksp. biol. i med. 55 no.1:52-55 Ja'63. (MIRA 16:7)

1. Nauchnyy rukovoditel' - chlen-korrespondent AMN SSSR prof. V.A.Sanotskiy. Predstationa deystvitel'nym chlenom AMN SSSR P.D.Gorizontovym. (EYE-AGING) (DOGS-PHYSIOLOGY)

APPROVED FOR RELEASE: 06/19/2000

CIA-RDP86-00513R000826710003-4"

an in the state of the state of the

GRINENKO, N.V.; Prinimala uchastiye: KROTOVA, A.I.

Effect of anthelmintics and their combinations on Gestoda in vitro. Med. paraz. i paraz. bol. 33 no.1:87-92 Ja-F *64 (MIRA 18:1)

1. Otdel gel mintologii (zav. - prof. V.P. Pod^myapol^{*}skaya) Instituta meditsinskoy parazitologii i tropicheskoy meditsiny imeni Ye. I. Martsinovskogo (direktor - prof. P.G. Sergiyev) Ministerstva zdravookhraneniya SSSR, Moskva.

APPROVED FOR RELEASE: 06/19/2000

CIA-RDP86-00513R000826710003-4"

CONTRACTOR DATA

CIA-RDP86-00513R000826710003-4



APPROVED FOR RELEASE: 06/19/2000 CIA-RDP86-00513R000826710003-4"

YAKOVLEV, Aleksandr Sergeyevich; KHOTOVA, I.I., otv. red.; TISHINA, Z.V., tekhn.red.

> [Stories of an airplane designer] Rasskazy aviakonstruktora. Moskva, Izd-vo "Detskaia literatura," 1964. 341 p. (MIRA 17:3)

Provide a construction

APPROVED FOR RELEASE: 06/19/2000 CIA-RDP86-00513R000826710003-4"



APPROVED FOR RELEASE: 06/19/2000

KROTOVA, I.K.

Application of the methods of titration of phosphates with the salts of multivalent cations to the objects of the fertilizer industry. [Trudy] NIUIF no.164:50-51 '59. (MIRA 15:5) (Phosphoric acid) (Titration)

APPROVED FOR RELEASE: 06/19/2000

NAV BERINDER AND REAL PROPERTY AND

BENESLAVSKIY, S.I.; KROTOVA, I.Ye., red.izd-va; IYERUSALIMSKAYA,Ye., tekhn. red.

[Mineralogy of bauxites; criteria of quality estimation and technological properties of bauxite ores based on their composition] Mineralogiia boksitov; kriterii otsenki kachestva i tekhnologicheskikh svoistv boksitovykh rud po ikh veshchestvennomu sostavu. Moskva, Gosgeoltekhizdat, 1963. 169 p. (MIRA 17:2)

APPROVED FOR RELEASE: 06/19/2000

把穆教院

ELEVINE DECLEMENT STRATEGICS STRATEGICS

CIA-RDP86-00513R000826710003-4

VASIL'KOVA, Nina Nikitichna; SOLOMKINA, Sof'ya Grigor'vevna; KROTOVA, I.Ye., ved. red.; ROZHKOVA, Ye.V., naucin. red.

 [Typomorphic characteristics of fluorito and quart; on the basis of a study of their physical and physicochemical properties] Tipomorfnye osobennosti fluorita i kvartsa; na osnovanii izucheniia ikh fizicheskikh i fiziko-khimicheskikh svoistv. Moskva, Nedra, 1965. 132 p. (MIRA 18:10)

APPROVED FOR RELEASE: 06/19/2000



APPROVED FOR RELEASE: 06/19/2000 CIA-RDP86-00513R000826710003-4"

2.1 包括包括运行管理

INSE / RUNDA AND AND A REAL PROPERTY (Normal and Party Party and Party and Party Par		
USSR / Human and Animal Physiology (Normal and Fathological). T-3 Notabolism.		
Abs Jour	: Rof Zhur - Biologiya, No 13, 1958, No. 59993	
Author Inst Titlo	: Shvarts, S. S.; Smirnov, V. S.; Krotova, L. C. : AS UBSR floLoGij URAL'S KOGO : The Regularity of Vitamin A Storage in the Muskrat in its Natural Habitat	
Orig Pub	: Izv. AN SSSR, Sor. Biol., 1957, No 3, 343-351	
Abstract	: The storage of vitamin A in the liver of the muskrat (M) in its natural habitat fluctuates within $<1 - 26 \text{ mg.}$. There is no stored A in the newborn. The storage of A begins in the nursing period and increases with the transition to the green feed, not reaching, however, the level peculiar to the adult M. During the summer, the males have a larger reserve of A in the liver than the fomales, which is due to larger expenditure in the females	
Card 1/2		

12



early spring in the period of preparation for reproduct In connection with this fact, there is a discussion of the problem of the advisability of vitamin supplementation of M in the early spring until its transition to green feed. -- A. O. Natanson

Card 2/2

KROTOVA, L. G., Cand Biol Sci (diss) -- "A study of the cardiac activity of cattle, using the EKG method". Leningred, 1960. 17 pp (Leningred Order of Lenin State U im A. A. Zhdanov), 225 copies (KL, No 11, 1960, 130)

APPROVED FOR RELEASE: 06/19/2000 CIA-RDP86-00513R000826710003-4"

TA BEFORE STREET, ST

CIA-RDP86-00513R000826710003-4

TAR ETTY REPORT OF A DATE REPORT OF A DATE

SHVARTS, S.S.; SMIRBOV, V.S.; KROTOVA, L.G.

Charadteristics of exerophthol accumulation in Ondetra mibethica under natural conditions. Dokl. AN SSSR 109 no.1:236-237 J1-Ag '56. (MIRA 9:10) 1. Institut biologii Ural'skogo filiala Akademii nauk SSSR. Predstavleno akademikom Ye.W. Pavlovskim. (VITAMINS - A) (MUSERATS)

APPROVED FOR RELEASE: 06/19/2000

CIA-RDP86-00513R000826710003-4"

ાં કુંત્રું પ્ર વૃત્તે ભુષ્ટું નિર્વે વૃત્તું ભુષ્ટું નિર્વે AREAL PROPERTY AND A DESCRIPTION OF A DE

TELEVISION

IN THE REPORT OF THE REPORT

KROTOVA, L.G. Changes in suprarenal glands and carbohydrate metabolism of water voles (Arvicola terrestris) in spring and summer. Trudy Inst. jol. URAN SSSR no.291129-140 '62. (MIRA 16:2) (Water voles) (Adrenal glands) (Carbohydrate metabolism) (Water voles) (Adrenal glands) (Carbohydrate metabolism)

APPROVED FOR RELEASE: 06/19/2000

CIA-RDP86-00513R000826710003-4

*** 小学生行**行生产的特定的新学生作的的新生产的学生



APPROVED FOR RELEASE: 06/19/2000



APPROVED FOR RELEASE: 06/19/2000



APPROVED FOR RELEASE: 06/19/2000

CIA-RDP86-00513R000826710003-4

85996 s/141/60/003/003/015/021/XX E192/E382

Analysis of the Electromagnetic Processes in the Core of a Pulse Transformer Which Takes Into Account the Nonlinearity of the Magnetisation and the Magnetic After-effects

where f(H, t) and F(H, t) are functions which can be derived from Eq. (3) (defined on p. 444). Under the assumption that the investigated time interval can be split into i segments, each of length Δ , Eq. (7) can be replaced by a system of two equations of the first order; these are represented by Eqs. (8). A number of experimental samples made of soft magnetic alloys, having highly-nonlinear magnetisation curves, were chosen for the purpose of investigation. The samples were made primarily of FeNi alloys or silicon steel. The curves B = B(H) of the samples were measured by the ballistic method. These curves were also measured by the pulse method (Refs. 3, 7), rectangular pulses repeated at the rate of 1 000 per sec were employed for this purpose. From curves B = B(H) it was possible to determine coefficients α and B, On the other hand, from the similar curves obtained by the pulse method, it was

新闻的常常的问题

Card 4/6

APPROVED FOR RELEASE: 06/19/2000

CIA-RDP86-00513R000826710003-4"
CIA-RDP86-00513R000826710003-4

5/131/00/003/0001010/021/XA E192/E382 Analysis of the Electromagnetic Processes in the Core of a Pulse Transformer Which Take Into Account the Nonline sity of the Magnetisation and the Magnetic After-effects possible to compare the value of B with the results obtained by integrating Eqs. (8). The calculated and experimental results are illustrated in Figs. 2-7. Fig. 2 shows the calculated curves for the magnetic-field distribution H(x, t) along the thickness of the magnetic material for $T_p = 1 \ \mu s$ for various values of t. Fig. 3 shows the increase in the induction B as a function of the thickness of the magnetic strip for the same sample as that represented in Fig. 2. The magnitude of the magnetic field along the thickness of the strip is represented in Fig. 4 for two different values of the magnetic after-effect time constant $(T_p = 1 \ \mu s \text{ and } \overline{T_p} = 0.25 \ \mu s);$ the sample is the same as The dependence of the magnetic field on time that of Fig. 2. t for various values of T is represented in Figs. 5. The p

07770

dependence of the surface magnetic field H on the magnetic after-effect time constant T for various materials is shown Card 5/6

APPROVED FOR RELEASE: 06/19/2000

网络新行马马拉马 建制 医近日副科学的制度和新兴和教授,是中国的政策。

CIA-RDP86-00513R000826710003-4

85:00

s/14(/60/003/003/015/021/XX E192/E3δ2

Analysis of the Electromagnetic Processes in the Core of a Pulse Transformer Which Takes Into Account the Nonlinearity of the Magnetisation and the Magnetic After-effects

in Figs. 6. Fig. 7 represents the function of the dependence of the surface magnetic field on time t for the case when the increase in the induction is near to the saturation condition. From the above results it is concluded that for small increments of the magnetic induction, the magnetic aftereffects can have a considerable influence on the magnetisation processes in the core of a pulse transformer. This manifests itself principally in the increased magnitude of the magnetic field on the surface of the strip. It is obvious, therefore, that the magnetic after-effects should be taken into account in the design of the pulse transformers based on soft magnetic materials. The author expresses his gratitude to Ya.S. Itskhoki for valuable advice and for directing this There are 7 figures, 2 tables and 9 references: work, 6 Soviet, 1 German and 2 English.

SUBMITTED: November 19, 1959 Card 5/6

APPROVED FOR RELEASE: 06/19/2000

CIA-RDP86-00513R000826710003-4

and the second of the second se

DRUZHININ, Vladimir Vyacheslavovich; KAZARNOVSKIY, L.Sh., kand. tekhn. nauk, retsenzent; KHOTOVA, Lala, red.; BUL'DYAYEV, N.A., tekhn. red.

> [Magnetic properties of electrical steel]Magnituye svoistva elektrotekhnicheskoi stali. Moskva, Gosenergoizdat, 1962. 319 p. (MIRA 15:11) (Steel--Magnetic properties)

(Electric engineering-Materials)

APPROVED FOR RELEASE: 06/19/2000

CIA-RDP86-00513R000826710003-4"

KROTOVA, L. I.

Krotova, L. I. - "Organizing the work in wards of the newly born in a Maternity Hospital," Collection dedicated to the Maternity Hospital im. Snegireva, on its 175th anniversary, Leningrad, 1949, p. 7-24

SO: U-4355, 14 August 53, (Letopis 'Zhurnal 'nykh Statey, No. 15, 1949)

APPROVED FOR RELEASE: 06/19/2000

and the state of the

CIA-RDP86-00513R000826710003-4

PETROV-MASIAKOV, M.A.; KROTOVA, L.I.

Prevention of prenatal infant mortality. Akush. gin. no.2:6-10 Mar-Apr 1953. (CLML 24:3)

1. Professor for Petrov-Maslakov; Candidate Medical Sciences for Krotova.

.

APPROVED FOR RELEASE: 06/19/2000

CONTRACTORIES.

CIA-RDP86-00513R000826710003-4"

TO A CONTRACTOR OF A CONTRACTOR OF A CONTRACT OF A CONTRAC

COLUMN THE STREET STREET STREET STREET

KROTOVA, L.I.

Late results of the therapy of erosive ectropion of the uterine cervix by diathermocoagulation. Akush. i gin. no.6:65-69 N-D '54. (MLRA 8:2) 1. Is kafedry akusherstva i ginekol. (sav.-prof. M.A.Petrov-Maslakov) Leningradskogo sanitarno-gigiyenicheskogo meditsinskogo instituta. (CERVIX UTERINE, diseases orosive ectropion, ther., electrocoagulation, late results) (DIATHERMIT, in various diseases electrocoagulation in erosive ectropion of uterine cervix, late results)

APPROVED FOR RELEASE: 06/19/2000

USSR / General Problems of Pathology. Experimental Treatment. U-5 : Ref Zhur - Biol., No 10, 1958, No 46967 Abs Jour Author : Krotova, L. I. Inst : Not given : Two Cases of Melanoma of the External Sex Organs. Title : Akusherstvo i ginegologiya, 1957, No 1, 120-121 Orig Pub : It seems that the title of the article does not fully Abstract correspond to its content. In one of the cases, a description is given of melanoma of the tibin skin which metastised to the lymphatic nodes of the groin. 1. IZ CASES KAFEDRY AKUSHE RISTVA IGIUEKCLEGI (EAV. PROF. M.A. PETROV- MASLAKOV) Card 1/1

APPROVED FOR RELEASE: 06/19/2000

KROTOVA, L.I. (Leningrad, ul. Mayakovskogo, d.41, kv.6)

Clinical and morphological parallels in the development of precancerous conditions and cancer of the cervix uteri. Vop. onk. 9 no.12. 26-38 163. (MIRA 17:12)

1. Iz Instituta onkologii AMN ESSR (direktor - dejstvitel'nyy chlen ANN SSSR prof. A.I. Serebrov) i iz laboratorii moriologii Instituta fiziologii AN SSSR (zav. - chlen-korrespondent AN SSSR prof. N.G. Kolosov).

APPROVED FOR RELEASE: 06/19/2000

CIA-RDP86-00513R000826710003-4"

STATISTICS TO A STATE OF A STATE

No. 24 No. 2 No. 2

- AROTOVA, L.I.

ACCESSION OF THE OWNER OF THE OWNER

State of the nerve apparatus of the envix uteri following its injury in pregnancy. Arkh. anat., gist. i embr. 46 no.6:71-77 Je 164. (MIEA 18:3)

1. Institut onkologii AMN SSSR (dir. - deystvetel'nyy oblem AMN SSSR prof. A.I. Serebrov) i laboratoriya monfologii (mav. chlen-korrespondent AN SSSR prof. N.G. Kolosov) instituta firiologii imeni Pavlova AN SSSR, Leningrad. Adres avtora: Leningrad, 121, 2-ya Berezovaya alleya, 3, institut onkologii ANN SDE.

APPROVED FOR RELEASE: 06/19/2000

2.361102.582.5641442.5544442.554447

窽

NERRE TRANSFORMERS AND THE CONTROL OF THE CONTRACT OF THE TRANSFORMERS AND THE TRANSFORMERS AND THE TRANSFORMER

	ACC NR: AP6002044 SOURCE CODE: CE/0030/65/012/002/0905/0912
	AUTHOR: Bagdasarov, Kh. S.; Voronko, Yu. K.; Kaminskii, A. A.; 64 Krotova, L. V.; Osiko, V. V. B
	ORG: P. N. Lebedev Physical Institute of the Academy of Sciences of th USSR, Moscow; Institute of Crystellography of the Academy of Sciences
	of the USSR, Moscow 21 TITLE: Modification of the optical properties of CaF ₂ -TR ³⁺ crystals
	by yttrium admixtures SOURCE: Physica status solidi, v. 12, no. 2, 1965, 905-912
	TOPIC TAGS: optic crystal, crystal imperfection, crystal impurity, yttrium compound, absorption spectrum, luminescence spectrum, equilib- rium constant, fluoride, ionic crystal, rare earth element
a ana cana a	ABSTRACT: Absorption and luminescence spectra of CaF_2 -Nd ³⁺ (type 1) (V. V. Osiko, Crystal growth, Encyclopedia, v. 5, Publishing House of the Academy of Sciences SSSR, 1965) crystals were investigated as a
· · ·	function of the concentration of added yttrium fluoride. The appear- ance of new lines and a decrease in the line intensities because of the addition of yttrium is attributed to a shift in the equilibrium of Nd centers.
	Nd centers. Some possible models are discussed. The equilibrium of centers of rare-earth ions (TR^{3+}) in the presence of yttrium fluoride Cord $1/2$

CIA-RDP86-00513R000826710003-4



APPROVED FOR RELEASE: 06/19/2000

CIA-RDP86-00513R000826710003-4

TYDERILEMENT (2) THE REPORT OF THE PROPERTY OF

43493 5/051/62/013/006/008/027 213500 E039/E120 AUTHORS : Levshin, V.L., and Krotova, L.V. TITLE: Associated nature of the concentration quenching of the luminescence of Na-fluoresceine in aqueous and glycerine solutions PERIODICAL: Optika i spektroskopiya, v.13, no.6, 1962, 809-818 TEXT : The spectra, quenching and other characteristics of aqueous and glycerine solutions of Na-fluoresceine are investigated. Concentration quenching is shown to be connected with the formation of non-luminescent associations in the solution. Thermal dissociation is so small that a noticeable degree of association arises only at large concentrations. This explains the slow change of absorption spectra with increasing concentration. The small value of non-active absorption has a comparatively weak effect on the development of concentration quenching. Most of the quenching occurs as a result of the migration of excitation energy in non-luminescent associations. The nature of the solvent and the concentration Card 1/215- 5105, K2 /012/ 5-6/25/1029 E. skiplante kaj

APPROVED FOR RELEASE: 06/19/2000



and the state of the second state of the secon	A DESCRIPTION OF
Levshin	, V. L.; KROTOVA, L. V.
	Association nature of the concentration quenching of the luminescence of Na-fluorescein in aqueous and glycerin solutions. Opt. 1 spektr. 13 no.6:809-818 D '62. (MIRA 16:1)
	(Luminescence) (Fluorescein_Spectra) (Clycerol)
an e succession de la companya des la	

		4.
	(1, 2, 2, 2, 2, 2, 2, 2, 2, 2, 2, 2, 2, 2,	
	<pre>converse of exygen imporing on the process of exit.ed f c.s</pre>	· F -
	Priska tverdogo tela, v. 7, no. 1, 145 (38-24)	
	Real fluorite drystal, optical exeptite of Heneropuri Ampulity, doping	ty.
or oxyge by three	The authors have established that the reduction of if fluorite crystals, and consequently also the optic to these crystals, is closely related with the pres- minipurities. The crystals were given if with the pres- different methods. The samarium was added in all cas of Sm ₂ O ₃ in concentrations 0.05-0.1 wt.%. The samar- to other by additive color parts of the transmission	este tute es in ium
<u>Part - Chestres - Fredrik - Fredrik</u>		

LAR DE STATE TERMETER DE TRANSPORTER DE TRANSPORTER DE TRANSPORTER DE LE COMPANY DE LA COMPANY DE LA COMPANY DE

4. F. 4. 4. 4. 4. 4. 4. 4. 4. 4. 4. 4. 4. 4.			
			1
			1
44 <u>4</u> 1			
	with dumma rate tree		
the analyzed in the constraint of CaF	11 ght of simultaneous . $-5m^{3+}$ crystals and other	stigations to be roppes of fluorite	į
	earth elements 11		1
s trate from a mo	n-equilit		
	nereest, the to t	na na sa	;
· · · · · · · · · · · · · · · · · · ·		1. A	1
	er import to the		1
	· · · · · · · · · · · · · · · · · · ·		1
ere topet rinor:	16-21/854.4.4 (б		tion and the second
odifications, only one o	fe al sections sati	sfies this condi-	
ere topet rinor:	fe al sections sati		
odifications, only one o ion. Orig. art. has: 4 SSOCIATION: Fizicheskiy	f the modifications sati figures and 1 formula. Institut im. P. N. Lebe	sfies this condi- [02]	
odlfications, only one o ion. Orig. art. has: 4	f the modifications sati figures and 1 formula. Institut im. P. N. Lebe	sfies this condi- [02]	
odifications, only one o ion. Orig. art. has: 4 SSOCIATION: Fizicheskiy	f the modifications sati figures and 1 formula. Institut im. P. N. Lebe	sfies this condi- [02]	
odifications, only one o ion. Orig. art. has: 4 SSOCIATION: Fizicheskiy	f de modifications sati figures and 1 formula. institut im. P. N. Lebe	eries this condi- [02] deva AN SSSR,Koscow	
oper filor; odifications, only one o ion. Orig. art. has: 4 SSOCIATION: Fizicheskiy Finite Loatitute. AN SS	f die modifications sati figures and 1 formula. institut im. P. N. Lebe SR)	deva AN SSSR, Moscow	
oper filof: odifications, only one o ion. Orig. art. has: 4 SSOCIATION: Fizicheskiy in the leafiture. AN SS	f die modifications sati figures and 1 formula. institut im. P. N. Lebe SR)	deva AN SSSR, Moscow	
oper filof: odifications, only one o ion. Orig. art. has: 4 SSOCIATION: Fizicheskiy in the leafiture. AN SS	f die modifications sati figures and 1 formula. institut im. P. N. Lebe SR)	deva AN SSSR, Moscow	
oper timot: odifications, only one o ion. Orig. art. has: 4 SSOCIATION: Fizicheskiy	f die modifications sati figures and 1 formula. institut im. P. N. Lebe SR)	deva AN SSSR, Moscow	
oper filor; odifications, only one o ion. Orig. art. has: 4 SSOCIATION: Fizicheskiy Finite Loatitute. AN SS	f die modifications sati figures and 1 formula. institut im. P. N. Lebe SR)	deva AN SSSR, Moscow	

"APPROVED FOR RELEASE: 06/19/2000 CIA-RDP86-00513R000826710003-4

			. •
	s an the logic level of down in the second		
TOPTC TA	GS: absorption spectrum, luminescence spectrum, fluctie c	rvetal, nen	1
	 A second weath assess to travelation of the second s	та стала 1970 г. – Стала 1970 г. – Стала	,
	 A second sec second second sec	т. - ст. е.,	,

	The by C. Kiss (J. Chem. Phys. v. 1, 1) and a tethod using a fluor difficult	- "" Ante statued by
	and the second secon	
	to and the production of the	
; Þ.	Maicheekiy institut im. P. N. Lobectra A.	第一個語音で、 Muse in Marthe
	1, 24	

AUTHOR : Krote	va, L. V.	9.
institut, AN SSSR TITLE: Determin	nation of prascodymium, neodymiu	
fluorite monocrys SOURCE: Zhurna	atals Al analiticheskoy khimii, v. 21, no	. 7, 1966, 789-792
TOPIC TAGS: вр holmium, erbium	ectrophotometric analysis, fluorit	e, praseodymium, neodymium
Nd, Ho, and Er in crystalline fluori	pectrophotometric method has been n fluorite <u>monocrystals</u> which are te in hydrochloric acid (1 : 1) conta th no additional separation of Pr.	used in labers. A solution of ining 5% boric acid was used
Card 1/2	UDC: 543.70	

APPROVED FOR RELEASE: 06/19/2000 CIA-RDP86-00513R000826710003-4"

2372

ACC NRI AP6024288		С
The accuracy of the method is I formula. [Based on author!	s 10-20%. Orig. art. has: 1 figu s abstract]	re, 3 tables, and [KP]
SUB CODE: 20/ SUBM DATE	E: 20Nov64/ ORIG REF: 001/ C)TH REF: 002/
	· · · · ·	
•		
		v
	· .	
Card 2/2/C		

.

,

WAT AT A

L 12817-63 EWP(q)/EWT(m)/BDS AFFT(ACCESSION NR: AT3003013	D/RH S/2927/62/000/000/0249/0251
AUTHOR: Pleskov, Yu. V.; Tyagay, V. A.; Kroto	
TITLE: Investigation of properties of <u>Oe</u> sur [Report at the <u>All-Union Conference on Semico</u> 1961]	face contacting a liquid phase nductor Devices, Tashkent, 2-7 October,
SOURCE: Elektronno-dy*rochny*ye perekhody* v AN UzSSR, 1962, 249-251	poluprovodnikakh. Tashkent, Izd-vo
TOPIC TAGS: Ge surface conductivity, Ge surf the ABSTRACT: Effects of type of <u>elactrolyte</u> and the surface conductivity and surface-recombin experimentally. Resistivities of the emitter, and 8 ohm.cm respectively; base width, 0.5 mm ed with the transistor immersed in normal hep formamide, and purified water. Carbon tetrach conductance. Effect of heptane is represented formamide and water caused an increase in the	field strength at the interface on ation rate of Ge were investigated base, and collector were 0.06, 3, . The surface conductance was measur- tane, carbon tetrachloride, N-methy1- loride did not change the surface
Card 1/2	

1

			•
L 12817-63 ACCESSION	NR: AT'5003013	איז אור איז	
a current-		as measured in thin Ge specimens ctive lifetime of minority currie stic of the Ge-electrolyte conta	
ASSOCIATIO	N: none	• • • •	
SUBMITTED:	00	DATE ACQ: 15May63	ENCL: 00
SUB CODE:	PH, OE	NO REF SOV: 002	OTHER: 006
		•	

CIA-RDP86-00513R000826710003-4

KROTOVA, M.D.I. PLESKOV, Yu.V. "Investigation of the Commanium-Electrolyte Interface." Report presented at the lith meeting CITCE, Intl. Comm. of Electrochemical Thermodynamics and Kinetics, Moscow, 19-25 Aug 63. Institute of Electrochemistry, Academy of Sciences of U.S.S.R., Moscow.

APPROVED FOR RELEASE: 06/19/2000 CIA-

15

ALTORIAS BIAL	h)/EF(1)/E/C	(m)/1944(b)/77/2	III MI FARTE	TOLIAN N	TI DOL ONLAG	
	. .		 .	•	· · · · · · · · · · · · · · · · · · ·	,
THE FT-T WA	; ^m , j [‡] 24752.5	cy∀, tu, ≁-				
	. ·	· · · · · ·			. . *	
		· · ·				
r	, ⁻	nation di servici	• •			
race property, C	ti temistry rystal surfac	, ele traiste. e, photosleatr.	nettert Mairrighter	· ·	-TYLE, T.	11 7 -
-⊷ilan angefa Santa santa sa	na states at 11 tated 14	ty and the puls a germanium-me the fact that	thvitorman; 14 there are		and measured The choice a a the	j in of
	. •					
lan ta a tay em ti - j⊂ being me	all when the asured (in co	ronductivity o ntrast to aque	<mark>ous solutions</mark>	l. surtare	conductivity	; as

	······			
÷	. ·			4
	alisie palentada	tor germaniser is given	and the second states of the	e cherosure,
	1974) T T T T T T	Hopefical relation	• * • • • • • • • •	e see to see
	all defined also	1 · · ·		• · · · • • •
ат счтув пак а м	ell defined minin	num, in contrast to the	o nar a witt alµ⊕	
•	A A A A A A A A A A A A A A A A A A A	international de la companya de la c		* p n * j 3
		the production of the second		
		······································		Y
	at star			
			•	
		AN APPEND		
	n na star star star star star star star sta			A
ere a ereg	··· · elektroniki	Akatem tan		v servi se
	a in the second s			11111 B -
	44,55			
THITTE SEARCH	54	ENCL: 01	THE COL	E SS, GC
*				
	TA JOHNN BY THE THE MUSIC AND THE PARTY			



	and the second
KROTOVA, N. I.	
(or KROTOVA-VODOP'YANOVA, M. I.)	
see VODOP'YANOVA, M. I.	
	:
สารางและวานและแรกปละก ับเก๋ย์ (I.A. 247 () - 258 () - 258 () เลื่าง 1 - 7 4 . การ 1 - 258 () เลื่อง 1 - 258 () เลื	TRANSFORMENT NUMBER STOCK

• 经公司延迟运用按照指用期间值 做 ## 是用的加速转换。1999年的新用。你可以不可以完了。

EROTOVA, H.V., aspirant
Nature of the pathological process in demodecosis in cattle and its effect on the quality of hides. Trudy VHIIVSE 12: 14-27 '57. (MIRA 11:12)
1. Laboratoriya profilaktiki i terapii ektoparasitarnykh sabolevaniy sel'skokhosyaystvennykh shivotnykh Veseoyuznogo nauchno-issledovatel'skogo instituta veterinarnoy sanitarii i ektoparazitologii. (Scabies) (Skins and hides)

APPROVED FOR RELEASE: 06/19/2000

The second second francism between the second se

KROTOVA, M.V.

KROTOVA, M.V., Cand Vet Sci -- (diss) "Parthomorphologic changes in demodex infection of cattle." Mos, 1958. 19 pp (All-Union Inst of Exper Vet Sci Vaskhnil). 120 copies (KL, 20-58, 100)

APPROVED FOR RELEASE: 06/19/2000

CIA-RDP86-00513R000826710003-4"

	<u>11123-63</u> Pc-4 RM/	3	EPR/EWF(j)/EFF(c)/EW	r(1)/ewr(m)/BDS	ASD/AFFTC	Ps-4/P	r-4/
	ACCESSION	KR: AP300	3518			s/002	0/63/151/	001/0130/0	133
	AUTHOR: P	olyakov, A	. M.; Krot	OVE, N. A.			0	アグ	1
	TITLE: In tearing of	vestigatio f and <u>defo</u>	n of the i	ntensity of polymer fi	R. Jano		enission .	iuring the	
· · · · · · · · · · · · · · · · · · ·	SOURCE: A	N SSSR. D	oklady, v.	151, no. 1	, 1963, 1	130-133		· · · · · · · · · · · · · · · · · · ·	
	TOPIC TAGS: film:	: excelec	tronic emi	scion, mech	ancelecti	on, mech	anoemissi(m, polyme	5
	or between "mechanoemi of thousand constructed Exemples of chanically	red, strai two <u>adhes</u> ission" by is of elect instrument results (treated go	ned, or ot ively join the author tron volts its using o obtained in itta-perche	been made hervise neck ed haterial rs, yields Measurem electron mu nclude data a film, which about 100 p	hanically s. This' electrons ents were ltipliers on the e ch even 1	broken 1 type of a with ena made by with wid lectron a ml.5 br	bonds with emission, c ergies up means of le sensiti emission f after bei	in solids alled to hundred specially vity range rom a me-	1s
. (Card 1/2		· · · · · ·	· · · · · · · · · · · · · · · · · · ·		•	· · ·		
						•			

al de la companye de

"APPROVED FOR RELEASE: 06/19/2000 CIA-RDP86-00513R000826710003-4

ACCESSION NR: AP3003	· · ·	J
hesive bonds may play presented by Academics are grateful to A. M.	was noted when the sample was illuming at the free radicals produced during to a part in the process of mechanoemiss ian A. N. Frumkin, 5 March 1963. "In <u>Trutikov</u> for [the use] of the electro tion." Orig. art. has: 4 figures.	the destruction of ad-
ASSOCIATION: Thatftut	t fizicheskoy khimii Akademii nauk SSS cademy of Sciences SSSR)	R (Institute of
SUBMITTED: 26Feb63	DATE ACQ: 30Jul63	ENCL: 00
SUB CODE: PH	NO REF SOV: 012	OTHER: 009
SUB CODE: PH	NO REF SOV: 012	OTHER: 009
SUB CODE: PH	NO REF SOV: 012	OTHER: 009
SUB CODE: PH	NO REF SOV: 012	OTHER: 009



CIA-RDP86-00513R000826710003-4







CIA-RDP86-00513R000826710003-4"

.... . ٠ . 1 1 1 I I t o ĩ. Ĩ Ĩ ... ANT THE SEPTER 28 8-J-1 pr 00 ... 88 •• 10 O 60 -00 -00 **40 Ć** 90 10 Ö . 20 C ----ASB-SEA DETALLURGICAL LITERATURE CLASSIFICATION *** BION STYRBILTH abitat det der ant 100 (ILLIN OIL -• ::: 8 . • Ö • ě The second s In the second second second realized and the second s



APPROVED FOR RELEASE: 06/19/2000
CIA-RDP86-00513R000826710003-4



APPROVED FOR RELEASE: 06/19/2000

CIA-RDP86-00513R000826710003-4



KROTOVA, N. A. PA 37/49T10 USER/Chemistry - Films Chemistry - Adhesion, Theory of Nov. 48 "The Electrical Theory of Adhesion of Layers to Solid Surfaces and Its Explanation, " B. Deryagin, N. Krotova, 10 pp "Uspekhi Fiz Nauk" Vol XIXVI, No 3 - p-387-406 General discussion of the theory of adhesion. Presents mathematical proof of theoretical claims. Describes, various types of equipment used to determine the force of adhesion of films. 37/49710

intera, **H.** A. USER/Chemistry - Films (Contd.) site charges which form during separation of surfaces. in overcoming electrostatic attracting force of oppo-Investigates subject theory by method of measuring amount of energy (in units of work per cm) mecessary to tear a film away from a surface (A), and comparing it with work in attaching a liquid to a solid (A'). Advances new supposition that USSR/Chemistry - Films Film to Solid Surfaces," B. V. Duryagin, Corr Nem, Acad Sci USSR, N. A. Erotove, Inst of Phys-icochem, Acad Sci USSR, 4 pp "Dok Ak Mauk SSSR" Vol LII, No 5 practically all work in breaking away is expended "Electric Theory of the Adhesio" (Attachment) of Chemistry - Adhesion 24/49515 Aug 48 24 /49T15 Aug 48 建制型再

CIA-RDP86-00513R000826710003-4"

CIA-RDP86-00513R000826710003-4

APPROVED FOR RELEASE: 06/19/2000



CIA-RDP86-00513R000826710003-4



APPROVED FOR RELEASE: 06/19/2000

KARAJEV, V. V.; KROTOVA, N. A.; DEAYAGHN, B. V.

Electric Discharge Through Gases

Study of a gaseous discharge during the break off of a layer of a high polymer from a solid base, Dokl. AN SSGR 69, No. 1, 1953.

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

CIA-RDP86-00513R000826710003-4



CIA-RDP86-00513R000826710003-4



APPROVED FOR RELEASE: 06/19/2000

ΚΡΟΓΟΥΑ	<u>іч. н</u> .
USSR/Physics -	Adhesion FD-915
Card 1/1	Pub 153-24/26
Author	: Deryagin, B. V. Krotova, N. A. and Karasev, V. V.
Title	Role of electric phenomena in adhesion of films
Periodical	: Zhur. tekh. fiz. 24, 1354-1357, Jul 1954
Abstract	: Letter to the editor. Criticize the article on adhesion by M. S. Skinner et al. (J. Appl. Phys. 24, 438 (1953)) as repeating the subject which they themselves published six years ago (Deryagin et al., DAN 61, 849 (1948)). Seven references, including 2 foreign.
Institution	:
Submitted	: February 25, 1954

APPROVED FOR RELEASE: 06/19/2000 CIA-RDP86-00513R000826710003-4"

· · · ·	·	a an					
KROTOVA, N.	Æ.						
USSR/ Chem	istr	y - Physical chemistry					
Card		1/1					
Authors	1	Doryagin, B. V., Memb. Corres. of Acad. of Sc. USSR, Krotova, N. A. and Kirillova, Yu. M.					
Title	:	Adhesion of high-polymers to glass and its dependence upon pressure and nature of the surrounding gas medium					
Periodical	:						
Abstract	I	A method of determining the discharge potential, discharge gaps and sur- face density of electrization, by studying the polymer-glass adhesiograms, is described. The effect of pressure and nature of the surrounding gas on the adhesion of high-polymers to glass was determined by the Paschen law. By studying the effect of various factors, including the molecular structure of the adhesive and liner, it is possible to make a rational selection of gluing and lacquer forming polymers and form conditions increasing the adhesion. Eight USSR references. Graphs.					
Institution	:	Acad. of Sc. USSR, Institute of Physical Chemistry					
Submitted		May 12, 1954					
	•						
TATIONUM SAFATANA							

.

USSR/ Phys	sics - Electron velocities Pub. 22 - 13/56
Authors Title	 Karasev, V.V., and Krotova, N.A. Velocity of electrons emitted during tearing-off a high polymer film from a hard bane, and distribution of the emitting centers. Dok. AN SSSR 99/5, 715-718, Dec. 11, 1954. Experiments, intended to determine velocity of electrons emitted during iments were conducted with the help of a special device designed for this used. Velocities were calculated by the following formula: V = e m Ha (C + a) Z where Vo velocity of electrons e-charge, and m - mass of an and L - distance between the magnet and photo film on which the amagnet.
	the experiments were intended to determine the centers of the emitting electrons. Five USSR references (1948-1953). Diagram; Photo-diagrams.

一下中的一個不能的中國的世界的基本的基本的基本的基本是在自然的中国的主义的

n prins 2000 in 1970 in In 1970 KROTOVA, Nataliya Aleksandrovna; LIKHTMAN, V.I., otvetetvennyy redaktor; PURMAL', A.P., redaktor isdatel'stva; POLYAKOVA, T.V., tekhnicheskiy [Gluing and adhesion] O skleivanii i prilipanii. Moskva, Izd-vo Akademii nauk SSSR, 1956. 164 p. (MLRA 9) (Adhesives) (Gluing) (MLRA 9:9) .

APPROVED FOR RELEASE: 06/19/2000

KROTCVA, N. A.; Kirillova, Yu. M. "Study of the Characteristics of Adhesion" (Issledovaniye kharakteristik adgezi1), from the book <u>Trudy of the Third All-Union Conference on Colloid</u> <u>Chemistry</u>, pp. 329-340, Iz. AN SSSR, Moscow, 1956 (Report given at above Conference, Minsk, 21-4 Dec 53)

APPROVED FOR RELEASE: 06/19/2000

THE STRUCTURE STRUCTURE STRUCTURE STRUCTURES

CIA-RDP86-00513R000826710003-4

CHARLEN REPAY HIMLE

19000

KROTOVA, N.A.; KIRILLOVA, Yu.M.; DERYAGIN, B. Investigation into the effect of chemical structure on adhesion [with English summary in insert]. Zhur.fis.khim. 30 no.9:1921-1931 9 156. (MLRA 9:12) · ·· 8 156. 1. Akademiya nauk SSSR, Institut fizicheskoy khimii, Moskva. (Adhesion) (Chemical structure)

CIA-RDP86-00513R000826710003-4



KROTOVA, N.A.

MEGHELMENAPOR

CIA-RDP86-00513R000826710003-4

SUBJECT AUTHOR	USSR / PHYSICS CARD 1 / 2 PA - 1433 DERJAGIN, B. V., KROTOVA, N.A., KARASEV, V.V.	
"TITLE	The Influence exercised by Electric Phenomena on the Mechanism of	
PERIODICAL	Destruction of Some Solids. Dokl.Akad.Nauk, 109. fasc. 4. 728-730 (1956)	
	Issued: 10 / 1956 reviewed: 10 / 1956	

At first some previous works bearing on this subject are discussed. The authors concentrate their attention on the occasion of these experiments on the destruction of mica and on the determination of the work of destruction as a function of velocity. In this connection they assume that on the occasion of the destruction of crystalline bodies (particularly mica) strong fields may occur in the interspace between the surfaces to be destroyed by the separation of the charges arranged in mosaic form. In the course of previous experiments the authors discovered an emission of electrons on the occasion of the destruction of mica, gypsum,

and other crystals in a high vacuum (10⁻⁴mm torr). N.A.KROTOV and V.V.KARASEV obtained pictures on the occasion of a repetition of these experiments which distinctly show that the maximum of radiation occurs in the interspace between the destroyed plates. Also the fission surfaces radiate electrons. Also in this case it was possible by the employment of suitable methods to observe the fine structure of the surfaces to be fissioned. In the case of a fission

parallel to the fission surfaces fraying was noticed in gypsum. On the basis of their own previously carried out work on adhesion the authors assumed that the energy necessary to destroy mica must depend on velocity and that it also depends

APPROVED FOR RELEASE: 06/19/2000

CIA-RDP86-00513R000826710003-4"

Dokl.Akad.Nauk, 109, fasc.4, 728-730 (1956) CARD 2 / 2 PA - 1433

on other factors as e.g. pressure and nature of the gas (in which destruction takes place). Experiments carried out in connection with the destruction of mica were undertaken by means of an adhesiometer with a rotating disk. The character of the adhesiograms differs with different pressures, and if pressure mica in an argon atmosphere the work function is less than in air, and this is the case at different pressures of the surrounding medium. Luminescence occurs within the domain of rapid stripping. Also in the case of the stripping off of argon atmosphere within the domain of rapid stripping. The modification of the argon on the amount of the discharge potential on the occasion of the drawing out of the coatings of the electric double layer.

It is interesting to compare the destruction of crystalline bodies with the tearing of rubber and some fibrous substances of the type of cardboard, for these substances show no traces whatever of electron emission when torn in a vacuum, as tearing takes place along the film of the high polymer in the case of not too large quantities of filling material.

INSTITUTION: Institute for Physical Chemistry of the Academy of Science in the USSR.

APPROVED FOR RELEASE: 06/19/2000

*stalling Ele

KROTOVA, N. A., KARAS'YEV, V. V., and DERYAGIN, B. V.

he p

Electric phenomena accompanying the formation of new interfaces and their role in adhesion and cohesion.

Academy of Science, Institute of thysical Chemistry, Bolshaya Kaloujskaya 31, Moscow, U.S.S.R.

A paper to be presented at the 2nd International Congress of Surface Activity London, April 1957

APPROVED FOR RELEASE: 06/19/2000

CIA-RDP86-00513R000826710003-4

KROTOVA, N. A., DERYAGTH, B. V. and KARAS'yev, V. V.
"Electric Phenomena Accompanying the Formation of New Interfaces on Their Role in Adhesion and Cohesion" a paper submitted at 2nd International.
Academy of Science, Institute of Physical Chemistry, Bolshays Kalouzhskaya 31, 8-5972



- A - TO MAD REPORT AND A DESCRIPTION OF A DESCRIPTION OF

AUTHOR	Morozova, L.P. and Krotova, N.A. 20-4-32/60
TITLE	The Correlation of Electric and Diffusion Processes in the Phenomena of Adhesion of two Polymers. (Otnositel'naya rol' elektricheskikh i diffusionnykh protsessov v yavleniyakh adgezii dvukh polimerov.)
PERIODICAL	Doklady Akademii Nauk SSSR, 1957. Vol. 115, Nr 4, PP. 747-750 (USSR)
ABSTRACT	In an earlier paper by the second author conceptions on the electric adhesion theory were developed. On the other hand various authors made statements concerning the part which the diffusion process plays during the formation of an adhesion and an autohesion bond. Since this problem is much disputed, the experimental in- vestigation of the formation of the adhesion bond is of special importance. It is in the binding of two- high-molecular materials that the relative part played by electric and diffusion processes in the processes of adhesion could be determined. The form of the adhesiogram is very informative for the
CARD 1/5	evaluation of the character of the adlesion bond. The rupture speed manifests itself comparatively

CALL A CONTRACT OF A STREET AND A

The Correlation of Electric and Diffusion Processes in the Phenomena of Adhesion of two Polymers.

> little in that case where the adhesion bond is caused by diffusion phenomena. If it is of an electric nature, however, the adhesiogram usually shows 3 clearly marked secions. The authors recorded adhesiograms of a number of polymers (glue of type BF, polyurethanes, polyamides, polymers of the vinyl series, rubbers and gutta percha, cellulose ethers etc.). The adhesiograms of these polymers with glass, metal and rubber on the basis of Nabutadiene and nitrile-acryl rubber usually yield 3 clearly marked domains. In some cases, however, there are only 3 sections, while the third one is lacking. Perhaps it also exists, but situated in a domain of sonsiderable speeds whose experimental determination is rendered difficult. The speed of electrons emitted by the rupture may give us a conception on the potential gradients of the electric double layer, for the electrons are forced apart by the fields which exist in the free space between the surfaces separating themselves. J can by calculated from test results, as well as the work function A, which may then be compared with the experimental-mechanically determined value A

CARD 2/5

计形式注意的

INTERNET PROVIDENT SECOND PROFILE PROFILE

APPROVED FOR RELEASE: 06/19/2000 CIA-

CIA-RDP86-00513R000826710003-4"

工作""可能是自己的特别的主义和希望的自己的特别。在2018年1月

20-4-32/60 and Diffusion Processes in the Phenomena of Adhesion of two Polymers.

> (tab. 1). From tab. 1 follows that the adhesion of the system is the greater the higher the speed of the emitted electrons. In an earlier paper the authors showed that emission centers exist in a polymer film after rupture. In this connection individual spots of the film which have the closest contact of all with the basis, are emitting. It is generally known that the mechanical treatment of the surface of the underlayer increases the adhesive power. Therefore it was of certain interest for the authors to investigate whether the emissive intensity of the detached film is really increased in the places where it is in contact with a mechanically treated surface. For this purpose the metal surface (brass) was first scratched with a file. The photographs (fig. 1,3) show that the electron emission is indeed most intensive on the places of rupture. The systems investigated here are divided into 2 large groups. The first group is

CARD 3/5

APPROVED FOR RELEASE: 06/19/2000

CIA-RDP86-00513R000826710003-4"

energi et marken ander ander andere

CIA-RDP86-00513R000826710003-4

20-4-32/60 1

The Correlation of Electric and Diffusion Processes in the Phenomena of Adhesion of two Polymers.

> characterized by electric phenomena in the disturbance of the adhesion bond (luminescence in the middle vacuum, electron emission in the high vacuum, presence of residual charge on separated surfaces). In special cases, in an especially high adhesion, the separation of layers passes through the polymer film. In this connection the electron emission and the residual charge are absent. The rubber filling material plays an important part. The systems of the second group, which were formed from nonpolar components, show essential deviations (fig. 2b). In a separation of components the electron emission and the residual charge are lacking. It has to be accepted that in the second group the adhesion bond is formed by a diffusion of the polymer chains in the contact zone. The underlayers also play an important part as far as the sign of the residual charge on the polymer and on the rubber is concerned.

> > STATES ISSUED

CARD 4/5

COMPANY AND INCOMENT

APPROVED FOR RELEASE: 06/19/2000 CIA-RDP86-00513R000826710003-4"

同時時期 約28 位于 经正立

將抗國

"APPROVED FOR RELEASE: 06/19/2000 CIA

CIA-RDP86-00513R000826710003-4



APPROVED FOR RELEASE: 06/19/2000

AUTHORS :	Morozova, L.P., Krotova, N.A.	69-20-1-9/20
TITLE:	Investigation of the Nature of the Ad Cementing of two High-Molecular Compo kharaktera adgezionnoy svyazi pri skl komolekulyarnykh soyedineniy)	hesion Bond in the
PERIODICAL:	Kolloidnyy Zhurnal, 1958, Vol XX, # 1	, PP 59 - 66 (ПSSR)
ABSTRACT:	Adhesion bonds and same	(000K)
•	Adhesion bonds are caused by electron of the coatings of a double electric is formed as an elastic film from a solution The article deals with an experimental formation of an adhesion bond when two rials adjoin. The relative role of the fusion processes in the adhesion phenom gated. The systems: polymer - polymer, and polymer - glass were used. The nat bond could be established by investigat characteristics of adhesion, the electr the rupture of the adhesion bond, and b vestigation of the interface of the var case of adhesion polymer - metal on col	ayer. This layer is ion of the polymer. investigation of the high-molecular mate- electrical and dif- nena are also investi- polymer - metal, ure of the adhesion ing the mechanical ical phenomena at y a microscopic in-
ard 1/3	case of adhesion polymer - metal or pol adhesion bond has an electric character	ymer - glass, the . This is indicated

APPROVED FOR RELEASE: 06/19/2000 CIA-RDP86-00513R000826710003-4"

Investigation of the Nature of the Adhesion Bond in the Cementing of two High-Molecular Compounds

> by the form of the adhesiogram, by an electron emission at rupture and by a residual charge in the ruptured surfaces. The adhesiograms were obtained by means of an adhesiometer system Krotova. The polymers under investigation were glue type BF, polyurethanes, polyamides, polymers of the vinyl range, rubbers and guttapercha, cellulose ethers, etc. After rupture the polymer film continues emitting electrons and reveals a negative residual charge. The substrata does not emit electrons and reveals a positive charge. The rupture of a strong adhesion bond causes the emission of electrons with a higher velocity than the rupture of a weak bond (table 3). This is in agreement with the electrical theory of adhesion. Adhesion systems formed by non-polar components show different characteristics. An electronic emission and a charge on the ruptured surfaces cannot be observed. The adhesion bond in these systems is formed by diffusion of the polymer chains in the contact zone (table 4). A mechanical processing of the metal surface by a file leads to an increase of the adhesion and to an increase of the electron emission from the processed places.

e en se		
THE BREES AND A SEC		

APPROVED FOR RELEASE: 06/19/2000

14.58

Card 2/3