L 22459-66 EWT(d)/EWP(h)/EWP(1)
ACC NR: AP6002543 (A) SOURCE CODE: UR/0286/65/000/023/0043/0043

AUTHORS: Klyuyev, M. G.; Yermolov, V. I.

19
16

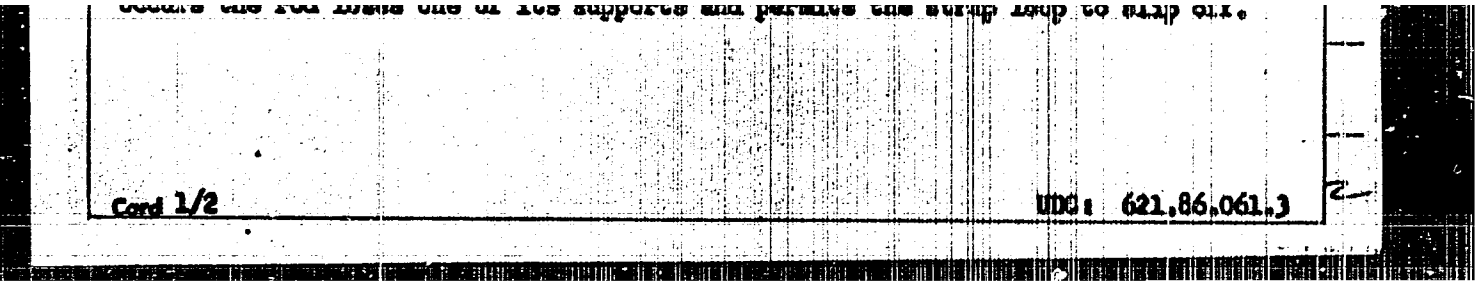
ORG: none

TITLE: Strap grip. Class 35, No. 176668 [announced by Special Construction Bureau Gazstroymashina (Spetsial'noye konstruktorskoye byuro gazstroymashina)]

SOURCE: Byulleten' izobreteniy i tovarnykh znakov, no. 23, 1965, 43

TOPIC TAGS: crane grip, gripping device, hoisting equipment, transportation equipment

ABSTRACT: This Author Certificate presents a strap grip for insulated pipes, consisting of a flexible member slipped through end loops onto rods mounted in supports on the transom. To mechanize the strap removal and to decrease insulation



Card 1/2 UDC: 621.86.061.3

L 22459-66

ACC NR: AP6002543

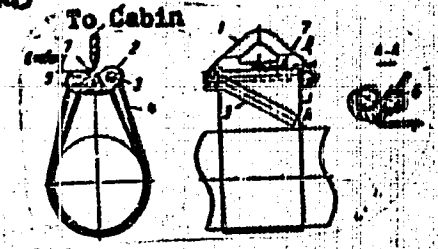


Fig. 1. 1 - transom; 2 - support; 3 - rod; 4 - strap; 5 - rotary hook; 6 - axis of hook rotation; 7 - hook control.

Orig. art. has: 1 figure.

SUB CODE: 13/ SUBM DATE: 21Apr64

Card 2/2 BK

YERMOLOV, V.N.

Computing daily discharges of a bributary river in case of variable backwater afflux from the receiving river. Sbor. rab. po gidrol. no.2:16-20 '61. (MIRA 15:2)

1. Ural'skoye upravleniye gidrometeorologicheskoy sluzhby.
(Stream measurements)

YERMOLOV, Viktor Veniaminovich; TROITSKIY, S.L., otv. red.; SHPAKOVSKAYA, L.I., red.

[Genetically homogeneous surfaces in geomorphological mapping] Geneticheski odnorodnye poverkhnosti v geomorfologicheskom kartirovanii. Otv. red. S.L.Troitskii. Novosibirsk, Red. izdatel'skii otdel Sibirskogo otd-niia AN SSSR, 1964. 36 p. (MIRA 17:9)

YERMOLOV, V. V. and PETROV, G. D.

"Frame Form Work in Concrete Constructions of Hydro-electrical Power Plant Installations," 1951.

YERMOLOV, V. V.

YERMOLOV, V.V.; PETROV, G.D.; TISTROVA, O.N., redaktor.

[Falsework on large-scale structures of hydroelectric power stations] Opalubka massivnykh sooruzhenii gidroelektrostantsii. 2-e ispr. i dop. izd. Moskva, Gos. energ. izd-vo, 1954. 347 p. (MLRA 7:7)

(Concrete construction--Formwork) (Hydroelectric power stations)

YERMOLOV, V.V.

BORODIN, P.V., kandidat tekhnicheskikh nauk; NIKLASHEVSKIY, Ye.P., professor, doktor tekhnicheskikh nauk.

"Sheathing of massive hydroelectric power plant structures." V.V. Ermolov, G.D.Petrov. Reviewed by P.V.Borodin, E.P.Niklashevskii. Gidr.stroi 23 no.6:47-48 '54. (MLRA 7:9)
(Ermolov, V.V.) (Petrov, G.D.) (Concrete construction--Formwork)

YERMOLOV, Viktor Veniaminovich; Prinimal uchastiye; STRELNIKOV, S.A.; SOKOLOV, N.N., doktor geograf.nauk, red.

[Making medium-scale geomorphological maps in general geological surveying of northern regions] Voprosy sostavleniia geomorfologicheskikh kart pri srednemasshtabnoi kompleksnoi s"emke severnykh raionov. Leningrad, 1958. 31 p. (Leningrad Nauchno-issledovatel'skii institut geologii Arktiki. Trudy vol.83) (MIRA 12:6)
(Siberia, Northern--Geology, Structural)
(Arctic regions--Geology, Structrual)

YERMOLOV, V.V.

GLUSHKOV, Georgiy Sergeyevich; YEGOROV, Ivan Rodionovich; YERMOLOV, Vadim Vladimirovich; YEGOROVA, N.O., red.izd-va; TOKMF, A.M., tekhn. red.

[Formulas for calculating structural frames] Formuly dlia rascheta ram. Moskva, Gos. izd-vo lit-ry po stroit. i arkhit., 1958. 166 p. (Structural frames) (MIRA 11:5)

YERMOLOV, V. V., CAND GEOGR SCI, "PROBLEMS OF COMPILING GEOMORPHOLOGICAL MAPS IN A COMPLEX GEOLOGICAL SURVEY OF THE NORTHERN REGIONS ON A MEAN SCALE," LENINGRAD, 1960. (LENINGRAD ORDER OF LENIN STATE UNIV IM A. A. ZHDANOV. SCI RES INST OF GEOL OF THE ARCTIC). (KL, 2-61, 201).

GLUSHKOV, Georgiy Sergeyevich, doktor tekhn. nauk, prof.; YEGOROV, Ivan Rodionovich; YERMOLOV, Vadim Vladimirovich; DOROKOV, N.P., inzh., retsenzent; YAKOVLEVA, V.I., red.; CHERNOVA, Z.I., tekhn. red.; UVAROVA, A.F., tekhn. red.

[Formulas for designing continuous beams and frames] Formuly dlia rascheta nerazreznykh balok i ram; spravochnoe posobie. Pod red. G.S.Glushkova. Moskva, Gos.nauchno-tekhn. izd-vo mashinostroit. lit-ry, 1960. 342 p. (MIRA 14:6)
(Girders) (Structural frames)

GLUSHKOV, G.S.; YEGOROV, I.R.; YERMOLOV, V.V.; GARANKINA, S.P., red.; DEMKINA, N.F., tekhn. red.

[Formulas for the design of continuous beams and frames] Formuly dlia rascheta nerazreznykh balok i ram; spravochnoe posobie. Izd.2., dop. i perer. Moskva, Mashgiz, 1963. 463 p. (MIRA 17:4)

YEPIFANOV, G., inzh.; YERMOLOV, Yu., inzh.

Standardize the design of safety valves. Bezop.truda v prom. 6 no.6:33 Je '62. (MIRA 15:11)
(Pressure vessels—Safety appliances)

OLSUF'YEV, N.G.; KUCHERUK, V.V.; BORODIN, V.P.; PETROV, V.G.; UGLOVOY, G.P.; KULIK, I.L.; NIKITINA, N.A.; SAMSONOVA, A.P.; YERMOLOVA, A.D.; SPITSYN, N.A.

Changes in the conditions of existence of the natural tularemia focus in the northern part of the Volga-Akhtuba flood plain area in connection with the construction of the Volgograd Hydroelectric Power Station. Zhur. mikrobiol., epid. i immun. 40 no.11:127-132 N '63. (MIRA 17:12)

1. Iz Instituta epidemiologii i mikrobiologii imeni Gamalei AMN SSSR i Volgogradskoy oblastnoy sanitarno-epidemiologicheskoy stantsii.

S/020/61/136/005/027/032
B101/B206

AUTHORS: Kravtsov, V. I. and Yermolova, A. F.

TITLE: Steady potentials of zinc and amalgamated zinc in sulfate solutions containing variable amounts of zinc and hydrogen ions

PERIODICAL: Doklady Akademii nauk SSSR, v. 136, no. 5, 1961, 1146-1149

TEXT: A. N. Frumkin (Ref. 1) showed that during dissolution of metals in acid electrolytes, both equilibrium potentials and non-equilibrium potentials can occur, depending on the ratio of the electrodic processes proceeding on the dissolving metal. Therefore, an attempt has now been made to find out whether a transition from non-equilibrium to equilibrium potential is possible by changing the concentration of acid and zinc ions during the dissolution of Zn in sulfuric acid. Na_2SO_4 containing different amounts of H_2SO_4 and $ZnSO_4$ served as electrolyte, the total concentration $H_2SO_4 + Na_2SO_4$ equaling 1 N. Polycrystalline zinc with

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$1 \cdot 10^{-4}$% impurities served as electrode. Measurements were made at 25°C in a hydrogen atmosphere. The potentials mentioned are related to the zero potential of the hydrogen electrode. Fig. 1 shows the steady potential φ'_0 as a function of log $[Zn^{++}]$ for different concentrations of H_2SO_4.

Linear dependence according to the Nernst equation was found for $[H_2SO_4] = 10^{-4}$ N and $[Zn^{++}]$ between $3 \cdot 10^{-3}$ and $1 \cdot 10^{-1}$ N. In the case of amalgamated zinc (Fig. 2), the linear dependence is maintained at higher concentrations of H_2SO_4 than is the case with zinc. The deviation from linearity is explained by the increasing effect of the hydrogen ions. The following is written down:

$$k_1 [H^+]_s \exp(-\alpha_1 F \varphi'_0/RT) = k'_2 \exp(\beta_1 F \varphi'_0/RT) - k_2 [Zn^{++}]_s \exp(-\alpha_1 F \varphi'_0/RT) \quad (1).$$

$[H^+]_s$, $[Zn^{++}]_s$ are the concentrations on the electrode surface. With thorough intermixing of the electrolyte, this concentration can be set equal to the concentration $[H^+]_o$, $[Zn^{++}]_o$ in the volume of the solution.

The steady potential φ'_0 is more positive than the equilibrium potential

Steady potentials of zinc and ...

φ_0: $\Delta\varphi = \varphi_0' - \varphi_0$. Assuming $[H^+]_0 = 1$ and substituting $\varphi_0' = \varphi_0 + \Delta\varphi$ in (1); the following relation is found for the discharge rate I_0' of the hydrogen ions: $I_0' [H^+]_0 \exp(-\alpha F \Delta\varphi/RT) = i_0(\exp \beta_1 F \Delta\varphi/RT - \exp(-\alpha_1 F \Delta\varphi/RT)$ (2). i_0 is the exchange current at a given concentration $[Zn^{++}]_0$. The solution of Eq. (2) reads

$\Delta\varphi = a + k\{\log [1 - \exp(-2F\Delta\varphi/RT)] + pH\}$ (3), where

$a = -2.3RT/[F(\alpha+\beta_1)] \log(i_0 f_{H^+}/I_0')$; $k = 2.3RT/F(\alpha+\beta_1)$ (4). a is constant at $[Zn^{++}] = \text{const}$; $f_{H^+} = \text{const}$. Eq. (3) was valid for amalgamated zinc, whether the solution was intermixed by bubbling of hydrogen or by means of a magnetic stirrer. When using zinc electrodes, thorough intermixing caused a positive shift of their potential (Table 2). A deviation from Eq. (3) was observed during the dissolution of the zinc electrode in a strongly acid electrolyte. The deviation is traced back to activation of the electrode surface, which sets in at a high rate of dissolution. A. L. Rotinyan, N. P. Fedot'yev, and Li Un Sok are mentioned.

Card 3/6

S/020/61/136/005/027/032
B101/B206

Steady potentials of zinc and ...

There are 3 figures, 2 tables, and 12 references: 12 Soviet-bloc and 1 non-Soviet-bloc.

ASSOCIATION: Leningradskiy gosudarstvennyy universitet im. A. A. Zhdanova (Leningrad State University imeni A. A. Zhdanov)

PRESENTED: July 20, 1960, by A. N. Frumkin, Academician

SUBMITTED: July 9, 1960

Legend to Fig. 1. Steady potential of zinc at H_2SO_4 concentrations of: 1) 10^{-4} N; 2) $5 \cdot 10^{-4}$ N; 3) 10^{-3} N; 4) 10^{-2} N; 5) 10^{-1} N

Fig. 1

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Steady potentials of zinc and ...

Legend to Fig. 2. Steady potential of amalgamated zinc at H_2SO_4 concentrations of: 1) 10^{-3} N; 2) 10^{-2} N; 3) 10^{-1} N; 4) $2 \cdot 10^{-2}$ N; 5) $5 \cdot 10^{-1}$ N; 6) 1 N

Fig. 2

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S/020/61/136/005/027/032
B104/B206

Legend to Table 2. Potential shift $\Delta\varphi_{mix}$ (mv) owing to intermixing of electrolyte.

Таблица 2

Сдвиги потенциала цинкового электрода $\Delta\varphi_n$ (мв), наблюдавшиеся под влиянием перемешивания *

$[ZnSO_4]$, N	$[H_2SO_4]$, N					
	10^{-4}	10^{-3}	$4\cdot10^{-3}$	10^{-2}	$2\cdot10^{-2}$	10^{-1}
10^{-2}	2,0	4,5	8,0	9,5	9,0	0,5
10^{-2}	1,0	4,0	6,5	10,0	8,5	0,5
10^{-1}	0	1,5	8,0	9,5	5,0	0,5

Table 2

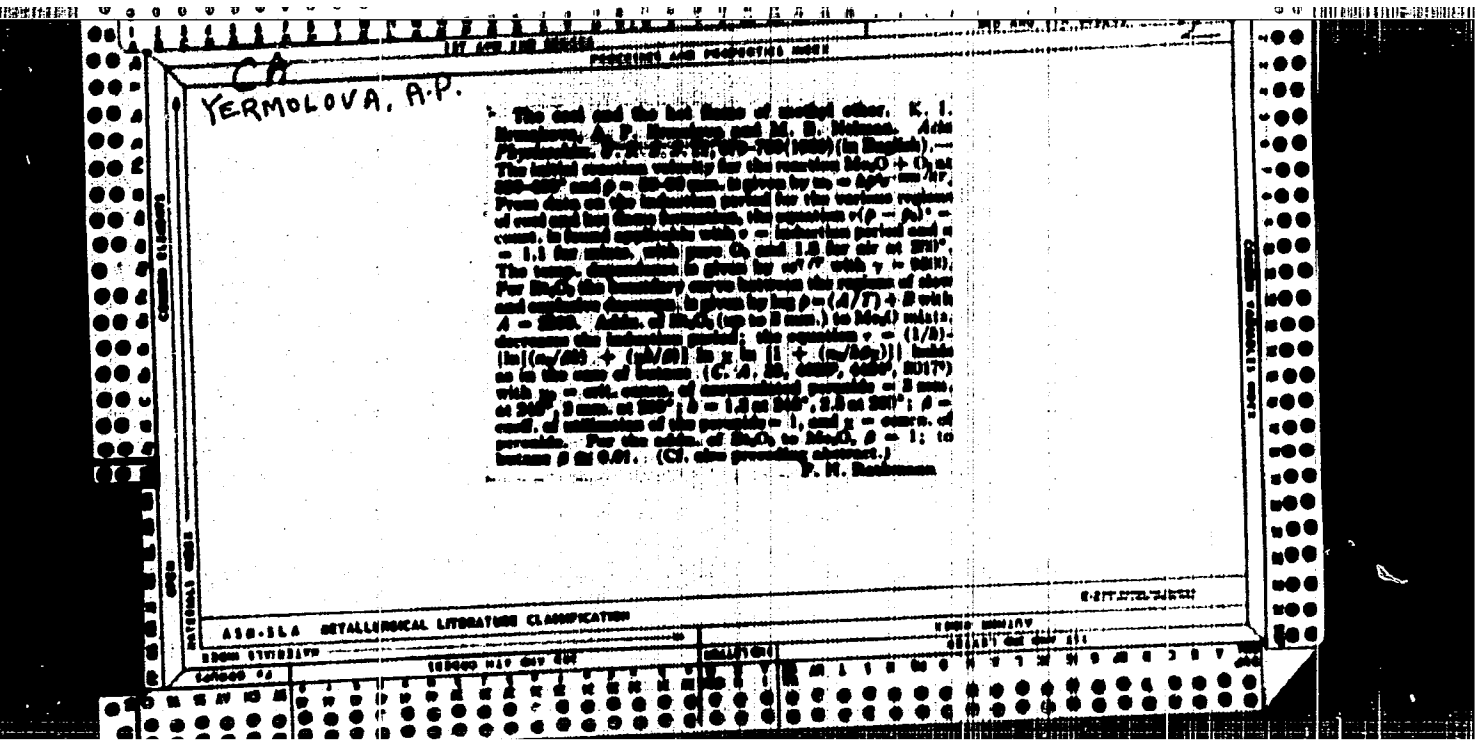
Card 6/6

COUNTRY : USSR
CATEGORY : Cultivated Plants. Grains. Leguminous Grains. Tropical Cereals.
ABS. JOUR.: Ref Zhur -Biologiya, No. 5 , 1959, No. 20257

Author : Yermolova, A.N.
INST. : Chelyabinsk State Agric. Experiment Station
TITLE : Corn Seed Planting Depth in Relation to Planting Time.

ORIG. PUB.: Byul. nuachno-tekhn.inform. Chelyab. gos. s.-kh. opytn. st., 1958, No.2, 19-22
ABSTRACT : When sowing during the early period it is recommended that the seeds be embedded at the shallow depth of 4-5 cm (where the soil is best heated), while when sowing during later periods with adequate moisture in the top soil layer one should also use the 4-5 cm deep planting, deeper when the moisture is insufficient; when planting at the optimum times the seeds are placed 6-8 cm deep.

CARD : 1/1



YERMOLOVA, A.P.

YERMOLOVA, A.P.

600

1. YERMAKOVA, K.I.; YERMOLOVA, A.P.; NEYMAN, M.B.

2. USSR (600)

"Research on the Conditions of the Combustion of Gaseous Mixtures — XV. The Cold and Hot Flames of Methyl Ether", Zhur. Fiz. Khim 13, No 12, 1939. Leningrad, Inst. of Chemical Physics, Lab of the Oxidation of Hydrocarbons. Received 26, July 1939.

9. [redacted] Report U-1615, 3 Jan 1952.

VOYTSEKHOVSKAYA, I.A.; GRAMMAKOV, A.G., prof.; YERMOLOVA, A.F.; LYATKOVSKAYA, N.M.; MALYSHEVA, T.D.; ORLOV, V.M.; PIGULEVSKIY, Ye.D.; VASILEVSKAYA, V.N., tekhn. red.

[Exercises in physics] Posobie k uprazhneniiam po fizike. Leningrad, Leningr. elektrotekhn. in-t im. V.I.Ul'ianova (Lenina). Part 3.[Optics, atomic physics] Optika, atomnaia fizika. 1962. 197 p. (MIRA 16:12)
(Physics--Problems, exercises, etc.)

DMITRIYEV, Aleksandr Semenovich; SEMENTSOV, Sergey Andrianovich; YERMOLOVA, D.I., kand. tekhn. nauk, retsenzent

[Masonry and reinforced masonry elements] Kamennye i armokamennye konstruktsii. Izd.2., perer. i dop. Moskva, Stroiizdat, 1965. 186 p. (MIRA 19:1)

YEREMOLOVA, O., mekhanik.

Automatic machinery lighten work. Rabotnitsa 34 no.10:5 O '56. (MLRA 9:11)

1. Yefremovskiy zavod sinteticheskogo kauchuka.
(Automatic control)

YERMOLOVA, L.A.

The concept of life should reflect the level of modern natural sciences. Priroda 54 no.5:89 My '65. (MIRA 18:5)

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

ROVENSKIY, G.M.; YERMOLOVA, M.I.

X-ray determination of small quantities of austenite. Zav.lab. no.11:1330-1332 '59. (MIRA 13:4)
(Austenite)

BOKSHTEYN, S.Z.; KISHKIN, S.T.; NIKISHOV, A.S.; POLYAK, E.V.; SOLOV'YEVA, G.G.; Prinimali uchastiye: ARZHAKOV, V.M.; BULANOV, A.V.; VERTYUKOVA, L.G.; KORABLEVA; MIRSKIY, L.M.; PODVOYSKAYA, O.N.; SAZONOVA, T.N.; SOLOMINA, O.P.; TITARENKO, I.I.; RINK, L.P.; KOZLOVA, M.N.; YERMOLOVA, M.I.; MOROZ, L.M.

Aging of plastically deformed alloys. Metalloved. i term. obr. met. no.5:40-44 My '63. (MIRA 16:5)
(Heat-resistant alloys—Hardening) (Deformations (Mechanics))

ACC NR: AP7005752 (A) SOURCE CODE: UR/0126/67/023/001/0063/0072

AUTHOR: Yermolova, M. I.; Solonina, O. P.

ORG: none

TITLE: X-ray diffraction analysis of phase transformations during heat treatment of VT3-1 titanium alloy

SOURCE: Fizika metallov i metallovedeniye, v. 23, no. 1, 1967, 63-72

TOPIC TAGS: diffractometer, titanium alloy, x ray diffraction analysis, phase composition, metal heat treatment, metal aging / VT3-1 titanium alloy, URS-50IM diffractometer

ABSTRACT: The thermally hardenable alloy VT3-1 (5.5% Al, 2% Mo, 2% Cr, 0.4% Fe, 0.2% Si) undergoes changes in its mechanical properties on quenching and aging. Since the reports on the nature of these changes are contradictory, the article elucidates it over a broad range of temperatures, on the basis of x-ray diffraction analysis of forged specimens of the alloy heated to from 200 to 1050°C for 1 hr and cooled in water and subsequently aged for 2 hr at from 100 to 700°C. Debyegrams were taken with the aid of an URS-50IM diffractometer (Cu K_α radiation). Tests of mechanical properties showed that at quenching temperatures of from 700

Card 1/3 UDC: 548.5

to 1100°C ultimate strength changes from 110 to 140 kg/mm^2 and yield point, from 73 to 126 kg/mm^2. On quenching from 850°C the plasticity characteristics increase while the ultimate strength and yield point reach their minimum (Fig. 1). X-ray diffraction analysis of phase

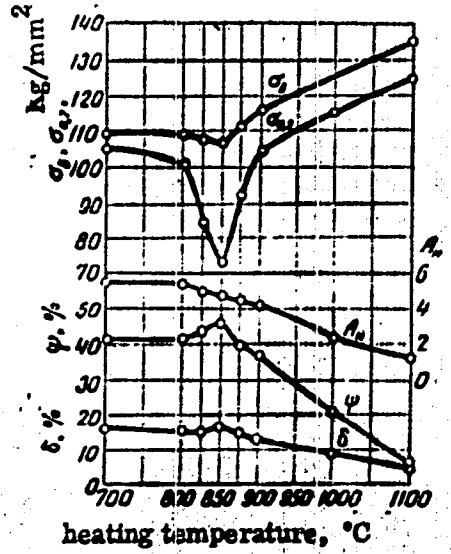


Fig. 1. Variation in mechanical properties of VT3-1 titanium alloy water-quenched from various temperatures

ACC NR: AP7005752

transformations explains these changes: the drop in ultimate strength and yield point following quenching from 850°C is due to the appearance of the metastable phase α". The increase in strength and decrease in plasticity following quenching from the temperature exceeding the temperature of α + β →β transformation is due to the formation of the α'-phase. Aging at 450--500°C of the alloy quenched from 800-1050°C leads to a sharp increase in hardness and decrease in plasticity. The decompostion of the metastable phases (β, α", α') at 300-600°C is accompanied by a redistribution of alloy elements which leads to a high saturation of the β-phase with Cr, Mo, Fe at aging temperatures of 450-500°C. The temperature region of existence of the supersaturated β-phase coincides with the maximum hardness of the alloy (470 kg/mm^2). These findings indicate that the hardening of the alloy during its aging is not due to the ω-phase but rather to the decomposition of the metastable phases β, α", α' and the formation of sectors with disperse hetero-phase structure. This information is of practical significance: since the VT3-1 alloy is used as the material of work-parts performing at temperatures of up to 450°C, using this alloy in quenched state may lead to an increase in the hardness and a decrease in the plasticity of the metal. The conducted analysis of phase transformations demonstrates the need to introduce the operation of aging following quenching from temperatures higher than 450-500°C. Following quenching from 860°C the optimal aging regime is 550°C for 5 hr; this makes it possible to increase strength by 10-20 kg/mm without detriment to plasticity. Orig. art. has: 8 figures, 2 formulas.

SUB CODE: 20, 11/ SUBM DATE: 08Jan66/ ORIG REF: 016/ OTH REF: 003

Card 3/3

YERMOLOVA, N.M.

Some adaptive characteristics of the extremities of reindeer.
Biul. MOIP. Otd. biol. 68 no.3:46-50 My-Je '63.
(MIRA 17:8)

YERMOLOVA, N.V.

25994 Yermolova N.V. i Krol', O.F. Travmy Mozga I Gipertonicheskaya Bolezn' V SB: Problemy Vosstanovit Lecheniya Invalidov Otechest'. Voyny. Astrakhan'. 1948, S. 125-37.

SO: Letopis' Zhurnal Statey, No. 30 Moscow, 1948

ZAK, A.F.; KLIMOVA, N.Ye.; YERMOLOVA, O.B.; YAKOBSON, L.M.

Evaluation of the harmlessness of erythromycin based on data of various tests. Antibiotiki 10 no.7:622-625 Jl '65. (MIRA 18:9)

1. Otdel antibiotikov Kontrol'nogo instituta imeni A.N. Tarasevicha, Moskva.

SHIRYAYEV, V.L.; AVERKH, V.V.; GRIGOR'YEVA, V.M.; BACHURINA, V.G.; SNEZHNOVA, L.P.; YERMOLOVA, O.B.; OGLOBLINA, L.S., red.; YAKOBSON, L.M., red.

[Antibiotics; collection of methodological instructions of the supervision and standardization of antibiotic preparations] Antibiotiki; sbornik metodicheskikh ukazanii po kontroliu i standartizatsii antibioticheskikh preparatov. Pod red. L.S.Ogloblinoi i L.M.IAkobson. Moskva, 1959. 134 p. (MIRA 15:3)

1. Gosudarstvennyy kontrol'nyy institut meditsinskikh biologicheskikh preparatov.

(ANTIBIOTICS)

YAKOBSON, L.M.; EL'BERT, L.B.; GRIGOR'YEVA, V.M.; YERMOLOVA, O.B.

Comparaitve studies on the neotoxic properties of various antibiotics. Antibiotiki 5 no. 5:98-101 S-O '60. (MIRA 13:10)

1. Otdel antibiotikov Gosudarstvennogo kontrol'nogo instituta meditsinskikh bioleqicheskikh preparatov imeni L.A. Tarasevicha.
(ANTIBIOTICS)

YERMOLOVA, P. S

USSR/Pharmacology and Toxicology - Analeptics. V-4

Abs Jour : Ref Zhur - Biol., No 21, 1958, 98501

Author : Yermolova, P.S.

Inst : Chelyabinsk Medical Institute.

Title : Effect of Schizandra Chinensis on the Course of Fat Dystrophy of the Liver of White Rats, Induced by Carbon Tetrachloride.

Orig Pub : V sb.: Materialy nauchn. konferentsii Chelyab. med. in-ta, posvyashch. 40-letiyu Velikoy Okt. sots. revolyutsii, Chelyabinsk, 1958, 29-31.

Abstract : In rats, in the rations of which meat and milk were excluded, 0.15 ml/100 g of a 50% oil solution of CCl_4 (I) and 0.2-0.5 ml/100 g of tincture of Schizandra chinensis (II) were introduced into the stomach through a catheter during 4 days, and I was introduced 30-40 min. after II.

Card 1/2

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USSR/Pharmacology and Toxicology - Analeptics. V-4

Abs Jour : Ref Zhur - Biol., No 21, 1958, 98501

One part of the animals received an alcohol tincture of II; the other a preparation from which alcohol had been removed by evaporation. On the 5th day of the experiment, the fat content of the liver consisted of: in control animals, which received 0.2 ml of alcohol + I, 22.13%; alcohol tincture of II + I, 20.24%; water preparation of II + I, 18.08%. On the 14th day of the experiment, the fat content of the liver was normal. A blocking effect of water preparation II on the development of fat infiltration of the liver is noted. -- R.S. Vorob'yeva

Card 2/2

YERMOLOVA, P.S.

Effect of barbamil and caffeine on the course of toxic fatty infiltration of the liver in rats caused by carbon tetrachloride. Farm. i toks. 25 no.4:485-490 Jl-Ag '62. (MIRA 17:10)

1. Kafedra farmakologii (zav. - dotsent M.G. Stepanov) Chelyabinskogo meditsinskogo instituta.

YERMOLOVA, E.S.

Spermaturic reaction of frogs in the diagnosis of pregnancy. Vop.okh. mat. i det. 2 no.1:52-54 Ja-F '57. (MLRA 10:2)

1. Iz Rostovskogo nauchno-issledovatel'skogo instituta akusherstva i pediatrii Ministerstva zdravookhraneniya RSFSR (dir. - kandidat meditsinskikh nauk F.S.Baranovskaya, nauchnyy rukovoditel' - prof. F.Ya.Zel'chuk)

(PREGNANCY--SIGNS AND DIAGNOSIS)

KALABINA, A.V.; FILIPPOVA, A.Kh.; DOMNINA, Ye.S.; YERMOLOVA, T.I.; MAYTANOVICH, M.L.; DMITRIYEVA, G.V.

Synthesis and some conversions of vinyl ethers of chlorophenols. Izv.Sib.otd.AN SSSR no.11:9-16 '58. (MIRA 12:2)

1. Irkutskiy gosudarstvennyy universitet im. A.A.Zhdanova.
(Ethers)

KOTLYAREVSKIY, I.L.; YERMOLOVA, T.I.

Synthesis of acetates of acetylenic γ-ketols. Izv. Sib. otd. AN SSSR no.10:92-96 '61. (MIRA 14:12)

1. Vostochno-Sibirskiy filial Sibirskogo otdeleniya AN SSSR, Irkutsk.

(Ketols)

USSR/Diseases of Farm Animals. Diseases Caused by Helminths R

Abs Jour : Ref Zhur - Biol., No 19, 1958, No 88278

Author : Bondareva V.I., Yermolova Ye.N.
Inst : Institute of Veterinary Medicine of the Kazakh Branch of the All-Union Academy of Agricultural Sciences imeni Lenin
Title : Surgical Treatment of Coenurosis in Sheep

Orig Pub : Tr. In-ta vet. Kazakhsk. fil. VASKhNIL, 1957, 8, 396-403

Abstract : No abstract

Card : 1/1

COUNTRY : USSR R
CATEGORY : Diseases of Farm Animals. Diseases Caused by Helminths
ABS. JOUR. : RZhBiol., No. 6 1959, No. 26024

AUTHOR : Yermolova, Ye. N.
INST. : [redacted]
TITLE : Effect of Phenothiazine upon Helminths Belonging to Different Genera of Strongylata

ORIG. PUB. : Sb. rabot po gel'mintol. Alma-Ata, Kazgosizdat, 1958, 191-200
ABSTRACT : It was shown that a prolonged and liberal feeding of phenothiazine (I) along with concentrated feeds exerts a destructive action on the parasites of the lungs and the gastrointestinal tract. Daily feeding of I leads to a more rapid freeing of the sheep's organism from parasites than feeding it on alternate days. The combination of single doses of I with its liberal

CARD: 1/2

COUNTRY :
CATEGORY : R

ABS. JOUR. : RZhBiol., No. 6 1959, No. 26024

AUTHOR :
INST. :
TITLE :

ORIG. PUB. :

ABSTRACT cont'd. : feeding produces more rapid liberation of parasites than liberal feeding alone without single doses. The trial of various combinations of the application of I demonstrated their high anthelminthic and economical effectiveness. The most effective method was found to be imaginal dehelminthization associated with daily feeding of I. -- L. S. Kirichenko.

CARD: 2/2

YERMOLOVA, Ye.N., mladshiy nauchnyy sotrudnik

Ridding a sheep farm of gid in southern Kazakhstan. Veterinariia 35 no.5:58-60 My '58. (MIRA 12:1)

1. Institut veterinarii Kazakhskogo filiala Vsesoyuznoy akademii sel'skokhozyaystvennykh nauk V.I. Lenina.
(Kazakhstan--Sheep--Diseases and pests)
(Brain--Parasites)

YERMOLOVA, Ye. P.

YERMOLOVA, Ye. P. -- "Secondary Mineralogical Processes in Oil-Bearing Deposits of the Miocene and Oligocene in Georgia," Sub 29 May 52, Inst of Petroleum, Acad Sci USSR. (Dissertation for the Degree of Candidate in Geological and Mineralogical Sciences).

SO: Vechernaya Moskva January-December 1952

1. YERMOLOVA, Ye. P.

2. USSR (600)

4. Rocks, Sedimentary - Georgia

7. Sequence of processes in the formation of minerals in sandy deposits of the Miocene and Oligocene in Georgia. Dokl. AN SSSR 90, No. 2, 1953.

Inst. Petroleum, AS USSR

States that results of studying epigenetic processes and establishing their sequence in individual sections of terrigenous deposits help significantly to explain the detailed history of existing sedimentary rocks. Investigations on a regional scale make it possible to establish the laws governing formation and change in secondary mineral bodies not only in time, but also as to distribution.

260Th3

9. Monthly List of Russian Accessions, Library of Congress, April 1953, Uncl.

YERMOLOVA, Yu.P.

Analcime and mordenite in Oligocene and Miocene deposits of western Transcaucasia. Trudy Min.muz. no.7:76-82 '55. (MLRA 9:5)
(Transcaucasia--Analcime) (Transcaucasia--Mordenite)

15-57-4-4635

Translation from: Referativnyy zhurnal, Geologiya, 1957, Nr 4, p 93 (USSR)

AUTHOR: Yermolova, Ye. P.

TITLE: The Formation of Authigenic Minerals in the Sandy and Silty Miocene and Oligocene Deposits of Georgia (Obrazovaniye autigennykh mineralov v peschanykh i alevritovykh otlozheniyakh miotsena i oligotsena Gruzii)

PERIODICAL: V sb: Materialy po geol. i neftenosnosti Gruzii. Moscow, AN SSSR, 1956, pp 82-131, 160-161.

ABSTRACT: A large group of authigenic minerals is found in the sandy and silty Oligocene and Miocene rocks. The author has investigated chiefly those minerals that showed a marked influence on increasing the effective capacity (porosity) of the rock: calcite, dolomite, analcite, mordenite, stilbite, chlorite, quartz, chalcedony, alkalic feldspar, brown iron hydroxides, gypsum, kaolinite, jarosite, siderite, and pyrite. Some of the

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The Formation of Authigenic Minerals in the Sandy (Cont.)

factors that controlled the formation of the authigenic minerals are the pH and rH of the liquid phase in the sandstone. Each mineral develops and may exist at definite intervals of pH and rH. Two mutually exclusive associations of minerals were recognized in the first phase of authigenic generation in the sandstones and siltstones: 1) zeolites (analcime and mordenite); and 2) quartz and alkalic feldspars. Later mineral growths of chlorite, dolomite, and clear crystals of calcite are found in both associations of authigenic minerals. The development of iron hydroxides, later calcite, gypsum, and, in places, jarosite is found principally in secondary pores in the rocks and apparently represents new formations in the zone of weathering. The minerals that formed from the liquid phase in the sandstones and siltstones, and also their alteration in the course of time, were determined by the composition and concentration of the salt-water solutions in the basin of sediment accumulations, by the nature of the minerals in the clays, carbonates, and other finely dispersed sediments, by the underlying and overlying sandy and silty beds, and by the seepage of water through the formation. The fragmental material takes part in the formation of authigenic minerals in the sandy and silty rocks when the sandy and silty particles are

The Formation of Authigenic Minerals in the Sandy (Cont.) 15-57-4-4635

unstable in the reactive environment or were unstable in the earlier stage.
Card 3/3

G. A. G.

3(5)

AUTHORS: Chepikov, K. R., Corresponding Member AS USSR, Yermolova, Ye. P., Orlova, N. A. SOV/20-125-5-39/61

TITLE: Epigene Minerals as Time Indicators of the Petroleum Appearance in Sandy Reservoirs Capable of Exploitation (Epigennyye mineraly kak pokazateli vremeni prikhoda nefti v peschanyye promyshlennyye kollektory)

PERIODICAL: Doklady Akademii nauk SSSR, 1959, Vol 125, Nr 5, pp 1097-1099 (USSR)

ABSTRACT: The problem of the time indication mentioned in the title is of great significance both practically and theoretically. In order to determine this, the authors have studied the character of the correlation between petroleum and the epigene minerals. Samples of petroleum containing rocks of the largest petroleum fields in the Volgo-Ural'skaya (Volga-Ural) region served for this purpose: Romashkino, Bavly, Tuymazy, in addition to the Yablonovyy and Zol'nyy ravines. From there came the quartz sandstones of the Pashiyskaya suite, while samples of Lower Carboniferous rocks came from Mukhanovo. The clastic material of the sand and "alguritic" rocks is almost exclusively formed by quartz (95-98 %). Only non-clayey varieties were studied

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whose cement consists of epigene minerals. Most of the reservoirs investigated had high effective porosity values (P_{eff} = 17-22 %). There were also, however, sandstones with a slight P_{eff} value, and even impermeable varieties. The roll played by the individual epigene minerals in the cementation of the non-clayey varieties of sandstone and "aleurite" is different. Regenerated quartz takes the first and most important place; it generally penetrates through the entire rock. Other epigene minerals occur only as local precipitations and have a limited distribution. The epigene quartz is mostly precipitated as a regeneration overgrowth of various thicknesses. It often binds only the clastic grains and only slightly fills the pore space. Carbonates (calcite and dolomite) as well as anhydrite, cement the sandstones and "aleurites" only superficially. As a rule, all of the minerals mentioned corrode the clastic and regenerated quartz. Often they replace it completely, in which case they indicate a basic cementation type. The genesis of the epigene minerals is briefly discussed. If pyrite, whose genetic conditions deviate from those of the

Epigene Minerals as Time Indicators of the Petroleum Appearance in Sandy Reservoirs Capable of Exploitation

SOV/20-125-5-39/61

other minerals, is excluded from the observed formation sequence - quartz, pyrite, carbonate, anhydrite - the sequence of the precipitation of the remaining minerals agrees well with their increasing solubility. The regeneration process is discussed. The analysis of the formation sequence of the epigene minerals in quartz sandstones and "aleurites" has shown that the last minerals precipitated (the carbonates and anhydrites) represent new formations which originated at considerable depths. Petroleum filled all of the freely interconnecting pore channels in all samples of sandstones and "aleurites" which were already earlier cemented by epigene minerals. The form of the petroleum inclusions is determined here by the morphology of the pore space. As a rule, epigene minerals contain no petroleum inclusions; at most they have thin petroleum films on the contact of the quartz grains with the epigene carbonate and anhydrite cement in fractures and individual calcite, dolomite, and anhydrite crystals. This can be utilized as an indication that the petroleum has not filled the pore spaces until after the precipitation of the entire complex of epigene minerals. Consequently the petroleum has a younger age. By comparison

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Epigene Minerals as Time Indicators of the Petroleum Appearance in Sandy Reservoirs Capable of Exploitation

SOV/20-125-5-39/61

of the assemblage and the intensity degree of the epigene mineral formation in water and petroleum [illegible], the same assemblage of epigene minerals is encountered again and again; additionally, their precipitation is always the same (Mukhanovo), however, the precipitation of calcite and dolomite in water bearing rocks is more intense. This is due to the fact that the formation of these minerals had come to a stand still in petroleum bearing rocks, while it continued for a time in the water bearing rocks.

SUBMITTED: December 9, 1958

Card 4/4

CHEPIKOV, K.E.; YERMOLOVA, Ye.P.; ORLOVA, N.A.

Epigenetic minerals in arenaceous rocks of producing horizons and their effect on reservoir properties of rocks as revealed by the studies in Second Baku. Trudy Inst. geol. i razrab. gor. iskop. 1 '60. (MIRA 14:1)

(Second Baku--Petroleum geology)

CHEPIKOV, K.R.; YERMOLOVA, Ye.P.; ORLOVA, N.A.

Corrosion of quartz grains and cases of a possible effect of petroleum on the reservoir properties of sandy rocks. Dokl. AN SSSR 140 no.5:1167-1169 O '61. (MIRA 15:2)

1. Institut geologii i razrabotki goryuchikh iskopayemykh AN SSSR. 2. Chlen-korrespondent AN SSSR (for Chepikov).
(Petroleum geology)

CHEPIKOV, K.R.; YERMOLOVA, Ye.P.; ORLOVA, N.A.

Variations in the porosity of sandstones with depth. Dokl.AN SSSR 144 no.2:435-437 My '62. (MIRA 15:5)

1. Institut geologii i razrabotki goryuchikh iskopayemykh.
2. Chlen-korrespondent AN SSSR (for Chepikov).
(Sandstone)

CHEPIKOV, K. R.; YERMOLOVA, Ye. P.; ORLOVA, N. A.

"Authigenic minerals in oil-bearing terrigenous rocks."

report submitted for 22nd Sess, Intl Geological Cong, New Delhi, 14-22 Dec 1964.

YERMOLOVA, Z.D.

USSR/General Biology. Individual Development. B-4

Abs Jour: Ref. Zh.-Biol., No 9, 1957, 35137

Author : Ermolova, Z.D.
Inst :
Title : Comparative Morphological Research on the Healing Process of Wounds in Sheep and Dogs

Orig Pub: Tr. Alma-Atinsk. zoovet. in-ta, 1955, 8, 287-299

Abstract: Skin-muscular wounds were inflicted simultaneously on sheep and dogs on symetrically located parts of the body in the region of the croup or near the rear corner of the shoulder blade. The length of the wounds was 4-5 cm and the depth 1.5 - 2.5 cm. In the left wound was put white streptocide powder; the right served as a control. The experiment continued two weeks. No substantial difference was observed in the course of the process of the untreated and treated wound. In the sheep the differentiation of the new grown epithelium began on the 4th day. After 10 days

Card : 1/3 -4-

the new formed epithelium on the periphery of the wound did not differ from the old. The connection of the edges of the wound took place by means of a gradual filling in of the wound slit with granulated connecting tissue or as a result of a primary-fibrous healing of the wound (the author notes that this latter type is not described in literature). The fundamental peculiarity of the primary-fibrous healing of wounds (observed in 10 of 32 experiment animals) was the formation in the place of the wound slit (in the region of the papilla and veined layer) of a thin or wider bunch of vertically distributed osseinic fibres without any preliminary development of granulated tissue. The author assumes that the fibres come from the blood clot without the phase of cellular proliferation and in the course of a few days are transformed into a tight fibrous bundle. When a biopsy was made on the dogs in the 4th to 7th day the junction of the wound easily disintegrated and the pieces cut out broke into

Abs Jour: Ref. Zh.-Biol., No 9, 1957, 35137

two halves, while at the same time on the 4th day the wound junction did not break in sheep. The epithelization of the surface of the wound set in at a later time, but the development of the granulated tissue was expressed significantly more intensively than in the sheep. The general differentiation of the connective tissue (the scar) was on the twelfth day after the wound fundamentally the same as in the sheep. In the dogs, in distinction to the sheep, the primary-fibrous type of healing wounds was not observed.

YERMOLOVA, Z.D., dotsent

Role of leucocytes in the development of granular tissue during the healing of wounds. Trudy AZVI 9:233-250 '56. (MIRA 15:4)

1. Iz kafedry obshchey i chastnoy khirurgii (zav. kafedroy - kand. veterinarnykh nauk P.F.Fat'kin) Alma-Atinskogo zooveterinarnogo instituta.
(Leucocytes) (Wounds) (Connective tissue)

YERMOLOVA, Z.S.

Influence of therapeutic peat from Sapozhok on the regeneration of the peripheral nerve under experimental conditions. Vop., kur., fizioter. i lech. fiz. kul't. 25 no. 6:496-498 N-D '60.
(MIRA 14:2)

1. Iz kafedry operativnoy khirurgii i topograficheskoy anatomii (zav. - prof. M.A. Yegorov) Ryazanskogo meditsinskogo instituta imeni akademika I.P. Pavlova.
(NERVES, PERIPHERAL—WOUNDS AND INJURIES)
(SAPOZHOK—BATHS, MOOR AND MUD)

YERMOLOVA, Z. S., Cand Med Sci -- (diss) "Nerve ligation in the battle with amputational neuroma." Ryazan', 1960. 18 pp; (Ryazan' State Medical Inst im Academician I. P. Pavlov); 200 copies; price not given; (KL, 18-60, 156)

YERMOLOVA, Z.S.

Changes in the intervertebral nodes and spinal cord after ligation of a peripheral nerve. Eksper. khir. 5 no. 3:61-62 My-Je '60. (MIRA 14:1)

(NERVES, PERIPHERAL) (SPINAL CORD)

YERMOLOVICH, A.V.

PHASE I BOOK EXPLOITATION SOV/4973

Soveshchaniye po lyuminestsentsii, 8th, 1959

Metody lyuminestsentnogo analiza; materialy soveshchaniya (Methods for Luminescence Analysis: Materials of the 8th Conference) Minsk, Izd-vo AN BSSR, 1960. 147 p. 1,000 copies printed.

Sponsoring Agency: Akademiya nauk Belorusskoy SSR. Institut fiziki.

General Ed.: B. A. Borisevich; Ed.: L. Timofeyev; Tech. Ed.: M. Sidorko.

PURPOSE: This collection of articles is intended for chemists and physicists interested in molecular luminescence, and for scientific personnel concerned with applications of this and related phenomena in research in the life sciences.

COVERAGE: The collection contains 28 papers read at the Eighth Conference on Luminescence, which took place 19-24 October, 1959 [place of conference not given]. These studies are concerned principally with the development of new luminescence methods for quantitative and qualitative chemical analysis, and with the applications of luminescence in medical and biological research. They discuss luminescence methods for the determination of uranium, mercury, magnesium, aluminum, boron, and other elements, as well as luminescence methods for the diagnosis of skin cancer and the detection of grippe virus, pathogenic microorganisms, etc. The structural design of new instruments for luminescence analysis is described. The conference was not concerned with studies on the phosphorescence of crystal phosphores. There is a discussion of the contributions of Soviet specialists in molecular luminescence in the course of the year and a half preceding the conference. The articles of V. K. Matveyev (p. 75) and of V. V. Patrikeyev (p. 79) have been annotated because of their importance. No personalities are mentioned. References accompany most of the articles.

Balitina, T. A. [Institute of Nutrition of the Academy of Medical Sciences AS USSR]. Fluorescent [Immunization] Serum for the Detection of Cl. Botulinum 122

Vasilov, S. I., and V. I. Nikolayev [Chitinskiy gosudarstvennyy meditsinskiy institut (Chita State Medical Institute)]. Quantitative Determination of Cardiac Glycosides in Solutions by Objective Luminescence Analysis 127

Vladimirov, Yu. A. [Moscow State University imeni M.V. Lomonosov]. Spectral Investigation of Luminescence and Afterglow of Albumins and Aromatic Amino Acids 132

Bazov, S. Y., and I. I. Kozunin [Vsesoyuznyy institut zhivotnovodstva (All-Union Institute of Animal Husbandry)]. New Fluorescence Method of Determining Albumin in Milk 137

Mikhaylov, G. I., and N. N. Kosnikova [All Union Scientific Research Institute of Chemical Reagents]. Fluorescent Dyes for Labelling Albumens

Gruzinskiy, V. V., G. I. Morzaylik, and A. V. Yermolovich [Institute of Physics AS BeloSSR]. Determination of the Germination of Seeds of Certain Tree Species by the Luminescent Method 145

AVAILABLE: Library of Congress

YERMOLOVICH, I.B. [IErmolovych, I.B.]; SH[illegible], M.K.

Determining the parameters of recombination centers in single crystals of CdS, CdSe, and CdS_x-$CdSe_{1-x}$. Ukr. fiz. zhur. 9 no.10:1153-1157 O '64 (MIRA 18:1)

1. Institut poluprovodnikov AN UkrSSR, Kiyev.

GALUSHKA, A.P. [Halushka, O.P.]; YERMOLOVICH, I.B. [IErmolovych, I.B.]; KORSUNSKAYA, N.Ye. [Korsuns'ka, N.IE.]; KONOZENKO, I.D.; SHEYNKMAN, M.K.

Some properties of CdS single crystals grown by the zonal sublimation method. Ukr. fiz. zhur. 10 no.7:808-809 Jl '65. (MIRA 18:8)

1. Institut fiziki AN UkrSSR i Institut poluprovodnikov AN UkrSSR, Kiyev.

ACC NR: AP5025407 SOURCE CODE:

AUTHOR: Sheynkman, M. K.; Gorodetskiy, I. Ya.; Yermolovich, I. B.

ORG: Institute of Semiconductors AN UkrSSR, Kiev (Institut poluprovodnikov AN UkrSSR)

TITLE: Effect of temperature on the cross sections for capture of electrons by recombination centers in CdS and CdSe

SOURCE: Fizika tverdogo tela, v. 7, no. 10, 1965, 3134-3136

TOPIC TAGS: cadmium sulfide, cadmium selenide, single crystal, semiconductor research, capture cross section, photoelectric property

ABSTRACT: Three recently proposed methods are used for studying the relationships between temperature and the cross sections for capture of electrons by r-centers and various s-centers in CdS and CdSe single crystals in the 110-330°K temperature range. The methods used are based on a study of the photocurrent kinetics when the crystals are illuminated: a) by a powerful short pulse of light--the "luminous shock" method; b) by constant radiation and a weak pulse of stimulating light--the "natural pulse" method; c) by constant illumination and a weak pulse of infrared light which quenches the photocurrent--the "IR pulse" method. The "light shock" and "natural pulse" methods were used for measuring the cross sections for capture by r-centers. Each of these methods gave extremely close values for S_r. The values of $S_s(T)$ were determined by

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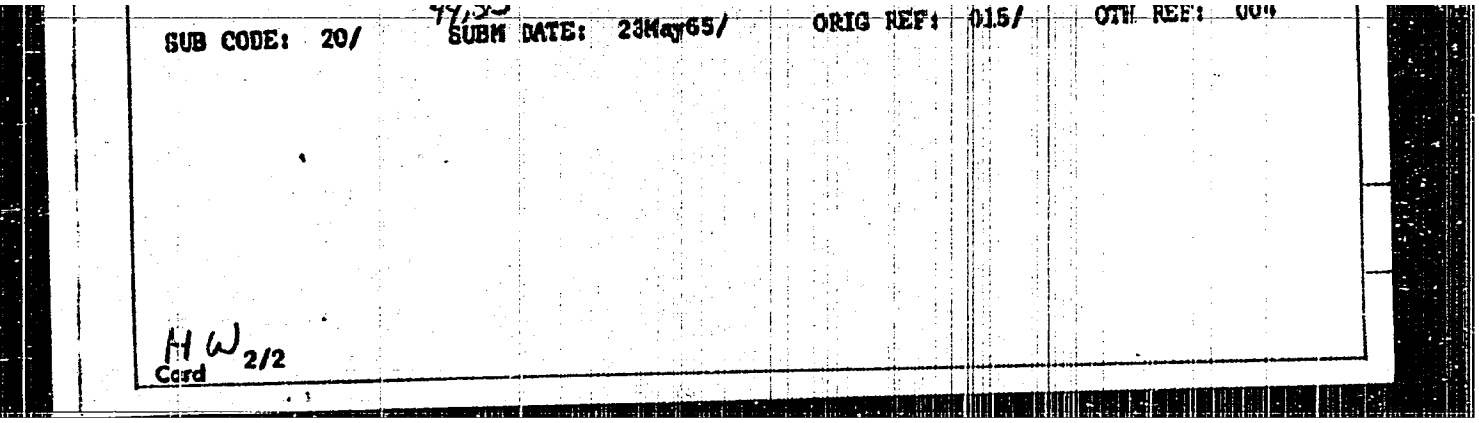
the "natural pulse" method. High-resistance undoped photosensitive single crystals of cadmium sulfide and cadmium selenide were studied. The cross sections for capture by various r-centers in these crystals are extremely weakly dependent on temperature. The values of S_g are also only slightly sensitive to temperature near 110°K; however a further increase in temperature results in an exponential increase in $S_g(T)$ with an activation energy lying between 0.1 and 0.2 ev for various r-centers in CdS and CdSe. This increase in $S_g(T)$ starts long before the beginning of temperature quenching of photocurrent in these crystals. A theoretical model is proposed to explain the relationship between temperature and the capture cross section. The authors

[illegible] for valuable consultation. Orig. art. has: 1 figure.



BORISOV, Ye.F., dots.; BREGEL', E.Ya., prof.; BUKH, Ye.M., dots.; VASHENTSEVA, V.M., dots.; GOLEVA, Yu.P., kand. ekon. nauk; GOLEVA, A.P., kand. ekon. nauk; DEMOCHKIN, G.V., dots.; DONAEEDOV, G.T., kand. ekon. nauk; YERMOLOVICH, I.I., dots.; KALYUZHNYY, V.M., dots.; KORNEYEVA, K.G., dots.; KUZNETSOVA, A.S., prof.; MIROSHNICHENKO, V.S., dots.; MYASNIKOV, I.Ya., kand. ekon. nauk; PIKIN, A.S., dots.; SIDOROV, V.A.; SMIRNOV, A.D., dots.; SOLOV'YEVA, K.F., dots.; SOROKINA, I.F., dots.; TARUNIN, A.F., kand. ekon. nauk; KHARAKHASH'YAN, G.M., prof.; MENDEL'SON, A.S., red.; SHVEYTSER, Ye.K., red.; ROTOVA, R.S., red.; GARINA, T.D., tekhn. red.

[Economics of socialism] Politicheskaia ekonomiia sotsializma. Moskva, Gos.izd-vo "Vysshaia shkola," 1963. 476 p. (MIRA 17:2)

AUTHOR: Yermolovich, N. SOV/25-58-12-4/40

TITLE: Prospectors for Polymers (Razvedchiki polimerov)

PERIODICAL: Nauka i zhizn', 1958, Nr 12, pp 7-9 (USSR)

ABSTRACT: The author reports on the work of the Institut vysokomolekulyarnykh soyedineniy Akademii nauk SSR (the Institute of High-Molecular Compounds, of the Academy of Science USSR). Headed by Professor M.M. Koton, the institute is presently engaged in solving 2 problems: to create polymers with a high resistance to heat, and to improve their mechanical properties. The laboratory of Professor Koton has successfully solved different methods of copolymerization. The same problems, but by methods of polycondensation, are being studied in the laboratory of Professor A.A. Vansheyt. Important services were rendered to the mining industry by its cooperating with Institut Galurgii (Institute for Halurgy). In the near future polymers will be widely applied in agriculture. Experiments

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conducted by Professor P.V. Vershinin of the Agrofizicheskiy Institut (Agrophysical Institute) showed the possibility for increasing the fertility of structureless soil by the application of polyacrylamide. The author mentions the studies of Professors S.Ye. Bresler and A.A. Samsonov who elaborated the theory of applying synthetic resins as agents for ion exchanges. By using this theory, Professor A.A. Vansheyt obtained insolluble swollen resins with a high absorbing capacity. There are 3 photographs.

YERMOLOVICH, M.

Electric power plant without turbines. IUn.tekh. 4 no.6:47-48 Je '60. (MIRA 13:9)
(Plasma (Ionized gases)) (Electric power plants)

YEFIMOLOVICH, V.

Use of a vibration conveying device at the Novocherkassk Electrode Plant. Tsvet. met. 33 no.10:82-84 O '60. (MIRA 13:10)

1. Novocherkassiy elektrodnyy zavod.
(Novocherkassk--Electrodes) (Conveying machinery)

ARTAMONOV, A.Ya., YERMOLOVICH, Yu.B.

New method of determining the coefficient of friction and drag. Vop. por. met. i prochn. mat. no.8:99-102 '60. (MIRA 13:8)

(Clutches (Machinery)—Testing)
(Friction)

L 1561-66 EWT(1)/EWT(m)/T/EWP(t)/EWP(b)/EWA(c) IJP(c) JD/JD

ACCESSION NR: AP5018642 UR/0185/65/010/007/0808/0809

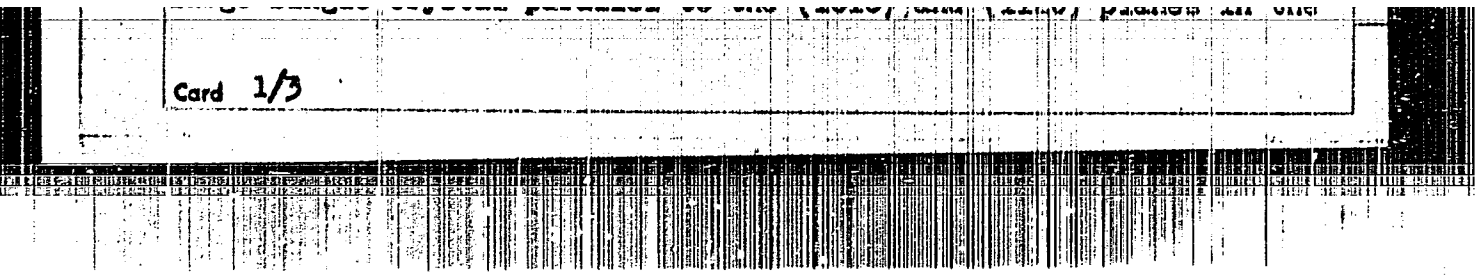
AUTHORS: Halushka, O. P.; Yermolovych, I. B.; Korsuns'ka, N. Ye; Konozenko, I. D.; Sheynkman, M. K.

TITLE: Some properties of CdS single crystals grown by zone sublumation

SOURCE: Ukrayins'kyy fizychnyy zhurnal, v. 10, no. 7, 1965, 808-809

TOPIC TAGS: cadmium sulfide, optic activity, activated crystal, single crystal growing, electron trapping, recombination luminescence, luminescence quenching

ABSTRACT: The mobility measurements of majority carriers and activation energies of trapping levels, the infrared quenching of the photocurrent, the concentration of slow recombination centers and their



at 77K the mobility varied between 70--320 cm²/V-sec for different samples, there being as a rule no difference between measurements under illumination and in darkness. With decreasing temperature the mobility increased initially. After that the mobility changed little with temperature. At about 220--250K the curves of the temperature dependence of the mobility under illumination and in darkness coalesce. At low temperatures the mobility is lower under illumination. This is apparently connected with the appreciable scattering by ionized impurities and microinhomogeneities. The occupancy of the centers changes upon illumination. The thermally stimulated conductivity was also measured. In thick single crystals trapping levels were found with activation energies 0.13--0.16 and 0.42--0.46 eV and concentra-

cross section was measured by the method of light 'shock.' The

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in thick as in thin CdS crystals. Orig. article has: 2 figures.

ASSOCIATION: Instytut fizyky AN URSR [Institut fiziki AN UkrSSR] (Institute of Physics, AN UkrSSR); Instytut napivorpvidnykiv AN URSR, Kiev [Institut poluprovodnikov AN UkrSSR] (Institute of Semiconductors, AN UkrSSR)

SUBMITTED: 24Mar65 ENCL: 00 SUB CODE: SS, OP

NR REF SOV: 003 OTHER: 002

Card 3/3

L 18883-66 EWT(1)/EWT(m)/ETC(f)/ENG(m)/T/EWP(t) IJP(c) RDW/GG/JD
ACC NR: AP6007803 SOURCE CODE: UR/0185/65/011/002/0221/0224

AUTHOR: Lashkar'ov, V. Ye.; Sheynkman, M. K.; Lyubchenko, O. V.; Gorodets'kyy, I. Ya.; Yermolovych, I. B.

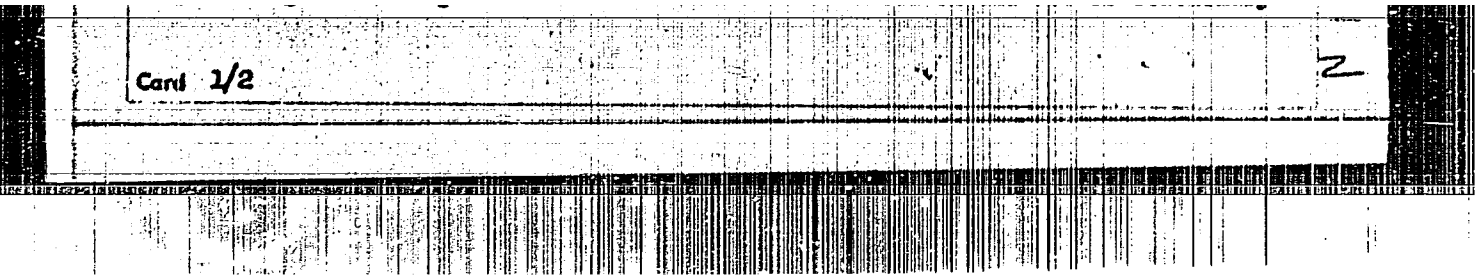
ORG: Institute of Semiconductors AN UkrSSR, Kiev (Instytut napivprovidnykiv AN URSR)

TITLE: Determination of the parameters of "sensitizing" recombination centers in CdS and CdSe single crystals

SOURCE: Ukrayins'kyy fizychnyy zhurnal, v. 11, no. 2, 1966, 221-224

TOPIC TAGS: color center, cadmium sulfide, cadmium selenide, single crystal, electron recombination, capture cross section, valence band, ir light

ABSTRACT: Continuing earlier investigations of the kinetics of relaxation of photocurrent in CdS and CdSe single crystals (FTT v. 7, 1717, 1965 and earlier papers), the authors consider in this paper new stationary and kinetic methods of determin-



L 18883-66
ACC NR: AP6007803

exciting illumination in conjunction with pulses of exciting or quenching ir light. The theory underlying the methods is briefly described. The methods were tested on selected high resistance undoped CdS and CdSe single crystals. The tests showed

tical results. Orig. art. has: 2 figures, 5 formulas, and 1 table. [02]

SUB CODE: 20/ SUBM DATE: 01Oct65/ ORIG REF: 005/ OTH REF: 004

ATD PRESS: 4217

Card 2/2

L 23309-66 EWT(m)/EPF(n)-2/EWP(t) IJP(c) JD/GG

ACC NR: AP6012459 SOURCE CODE: UR/0181/66/008/004/1040/1048

AUTHOR: Galushka, A. P.; Yermolovich, I. B.; Korotunskaya, N. Ye.; Konozenko, I. D.; Sheynkman, M. K.

ORG: Institute of Physics, AN UkrSSR (Institut fiziki AN UkrSSR); Institute of Semiconductors, AN UkrSSR, Kiev (Institut poluprovodnikov AN UkrSSR)

TITLE: Effect of gamma-ray and fast-neutron irradiation on electrophysical properties of CdS single crystals

SOURCE: Fizika tverdogo tela, v. 8, no. 4, 1966, 1040-1048

TOPIC TAGS: irradiation, gamma irradiation, neutron irradiation, irradiation effect, irradiation damage

ABSTRACT: An investigation was made of the effect of nuclear radiation on some properties of CdS single crystals grown by the zone sublimation method and not subjected to alloying. To measure Hall effect, specimens shaped as a paralielepiped (15 x 4 x 1 mm) were used; for other investigations, specimens 4 x 3 x 1 mm were used. The neutron irradiation was carried out in a VVR-M-type reactor at a temperature below 70C. The gamma-ray irradiation was carried out in a cobalt installation at a temperature below 20C. To determine the character of the

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L 23309-66
ACC NR: AP6012459

defects appearing in CdS single crystals due to neutron and gamma-ray irradiation, the following crystal characteristics were investigated before and after irradiation: dark resistance, photosensitivity to white light, spectral distribution of photoconductivity, spectra of infrared quenching, Hall mobility of majority current carriers and its dependence on temperature, concentration and depth of occurrence of capture levels, characteristics of recombination centers, and luminescence spectra at 300 and 77K. Mobility and spectral distribution of photoconductivity were measured in a cryostat at a vacuum of the order of 10^{-4} mm Hg. All other characteristics were measured in the air. It was found that gamma-irradiation primarily creates acceptor-type defects. In CdS, the simplest acceptors can be Cd vacancies or S atoms in interstices. Neutron irradiation creates donor-type defects. The simplest donors can be either Cd atoms in interstices or S vacancies. In addition, the products of nuclear transformations can also be donors. Orig. art. has: 6 figures and 2 tables. [JA]

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ATD PRESS: 4236

Card 2/2 UDC

YERMOLOVICH, Yu.B.

GABOVICH, M.D.; YERMOLOVICH, Yu.B.

On the radial distribution of the concentration of charged particles in a magnetic ion source. Ukr. fiz. zhur. 2 no.2:165-174 Ap-Je '57. (MIRA 10:6)

1. Institut fiziki Akademii nauk URSR.
(Ion beams) (Magnetic fields)

YERMOLOVICH, YU. B.

PHASE I BOOK EXPLOITATION SOV/3624

Akademiya nauk Ukrainskoy SSR. Institut metallokeramiki i spetsial'nykh splavov

Metallokeramicheskiye materialy i metody ikh issledovaniya; informatsionnyye materialy (Cermet Materials and Methods of Their Analysis; Information Material) Kiyev, Izd-vo AN UkrSSR, 1959. 55 p. 1,500 copies printed.

Ed. of Publishing House: I.V. Kisina; Tech. Ed.: A.M. Lisovets Editorial Board: I.N. Frantsevich, I.M. Fedorchenko, G.S. Pisarenko, G.V. Samsonov (Resp. Ed.), V.N. Yeremenko, and V.N. Paderno.

PURPOSE: This collection of articles is intended for scientific workers, designers, and engineering and technical workers in the metallurgical, machinery-manufacturing and other branches of industry.

COVERAGE: In this collection of articles the authors describe the production of carbides, nitrides and other heat resisting compounds, giving their physicochemical and mechanical properties. Their thermal processing and the processing installations are also described. A new method is proposed for the production of rods from refractory compounds. Certain compounds are analyzed, and the energy dissipation in materials during high-frequency mechanical vibrations is determined. No personalities are mentioned. There are 7 schematic drawings, 7 diagrams, 6 tables and 17 references, 16 of which are Soviet.

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B010/B009

AUTHORS: Fedorchenko, I. M.,
Yermolovich, Yu. B.

TITLE: Determination of the Evaporation Kinetics and Vapor Tension of Metallic Powders

PERIODICAL: Zavodskaya laboratoriya, 1960, Vol 26, Nr 2, pp 177 - 179 (USSR)

ABSTRACT: A method and apparatus for determining the evaporation kinetics and vapor tension of metallic powders have been developed. The method is based upon the continuous determination of the electric conductance of a metal film condensed in a high vacuum on a cooled glass lamella. It is possible to study, on the apparatus described, the effects of the heating temperature, surface condition of the metallic powder, preliminary treatment, degree of dispersion etc. upon the evaporation kinetics. The metallic powder is evaporated (Fig 1, scheme of the apparatus) by means of a heated tungsten (or molybdenum) lamella. The evaporating surface is 2 × 2 cm^2. The heater is fed by means of a "Tesla" stabilizer. The above-mentioned glass lamella is situated above the evaporating surface. The metal

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Determination of the Evaporation Kinetics and Vapor Tension of Metallic Powders

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vapor condenses on the glass lamella on an area which is also 2×2 cm^2. The glass lamella also carries two copper electrodes produced by evaporating copper, which serve for measuring the electric resistance of the condensed metal film. A vacuum of up to $2 \cdot 10^{-6}$ torr is produced by an RVN-20 pre-vacuum pump and a TsVL-100 diffusion pump. The apparatus described possesses two valves and two RVN-20 pumps. The distance between evaporator and glass lamella is fixed close enough to assure that sufficient metal vapor condenses but far enough to prevent irregularities from forming on the metal film surface. The distribution of the condensate is calculated from an equation (1) and can be represented graphically (Fig 2). The specific flow of the condensate is determined from the following equation:

$\xi = d\varrho \frac{d\sigma}{dt}$ (4) (d = specific gravity of the metal, ϱ = its specific electric resistivity, $\frac{d\sigma}{dt}$ = change of electric conductance of the metal film with time). The vapor tension may be calculated from Langmuir's formula (5). Measured values of the change in the electric conductance of the condensate with the

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evaporating time obtained by evaporating copper powder (reduced at 400° and glowed for half an hour at 600°) are given (Fig 3). There are 3 figures.

ASSOCIATION: Institut metallokeramiki i spetsial'nykh splavov Akademii nauk USSR (Institute of Metal Ceramics and Special Alloys of the Academy of Sciences of the UkrSSR)

Card 3/3

S/073/60/026/004/005/008
B016/B054

AUTHORS: Fedorchenko, I. M. and Yermolovich, Yu. B.

TITLE: Diffusion of Chromium Through Its Oxide

PERIODICAL: Ukrainskiy khimicheskiy zhurnal, 1960, Vol. 26, No. 4, pp. 429-431

TEXT: The authors wanted to determine the diffusion coefficient of chromium through its oxide. Their method (Ref. 6) permits a direct determination of the stream of chromium atoms which diffuse through the oxide and evaporate. This determination was carried out in vacuo at 1100, 1150, 1200, and 1250°C. The required oxide layer was produced by oxidation of an electrolytic chromium powder (particle diameter 50μ) in air at 700°C. It was $\sim 6.5 \cdot 10^{-5}$ cm thick. Fig. 1 shows the results of measurement of the electrical conductivity of the layer of condensed chromium atoms. The quantity of the flow of chromium atoms was determined from the inclination of the straight lines found at different temperatures. A table (p. 431) contains the diffusion coefficients D of chromium through its oxide layer calculated from the flows determined, and from

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the concentrations indicated by K. Hauffe and T. Block (Ref. 5). On the basis of this table, the authors plotted the diagram log D = f(1/T) (Fig. 2). The activation energy of the chromium diffusion through its oxide layer can be determined from this diagram (86 700 cal/g·atom). Thus, the authors consider the chromium diffusion through an oxide layer proved by experiment. Apparently, the diffusion rate of the chromium atoms determines the oxidation rate in chromium or strongly chromium-containing alloys. The diffusion coefficients determined by the authors are similar to those of thoron through Cr_2O_3 (Ref. 7). There are 2 figures and 7 references: 4 Soviet and 1 German.

ASSOCIATION: Institut metallokeramiki i spetssplavov AN USSR (Institute of Powder Metallurgy and Special Alloys of the AS UkrSSR)

SUBMITTED: March 5, 1959

YERMOLOVICH, Yu.B. [Ermolovych, IU.B.]

Cyclotron resonance in p-InSb. Ukr. fiz. zhur. 8 no.9:1039 S '63. (MIRA 17:8)

1. Kiyevskiy politekhnicheskiy institut.