

L 36014-66

ACC NR: AP6024513

turns out then to be 10^{13} cm^{-3} . If a ruby laser is used (power $\sim 10^7 \text{ W/cm}^2$), induced Raman scattering can be observed in liquids, with a quantum yield of several times ten per cent and a molecule density 10^{16} cm^{-3} at the upper level. The proposed excitation mechanism is realizable in principle in crystals, too. Orig. art. has: 1 figure and 2 formulas. [02]

SUB CODE: 20/17/ SUBM DATE: 14May66/ ORIG REF: 003/ OTH REF: 003/
ATD PRESS: 5037

Card 2/2/76/17

OSTASHKO, F.I., kand. biolog. nauk; CHIRKOV, V.A., aspirant

Gloves from polyethylene film. Veterinariia 42 no.11:111-112
N '65. (MIRA 19:1)

1. Nauchno-issledovatel'skiy institut zhivotnovodstva
lesostepi i Poles'ya UkrSSR.

CHIRKOV, V.A., starshiy nauchnyy sotrudnik

Using brushwood as fertilizer. Put' i put. khoz. 7 no.10:34 '63.
(MIRA 16:12)

1. Vsesoyuznyy nauchno-issledovatel'skiy institut zheleznodo-
rozhnogo transporta.

EXCERPTA MEDICA Sec 13 Vol 13/5 Dermatology May 59

1295. LATE RESULTS OF THE TREATMENT OF SKIN PATIENTS BY SUG-
GESTION (Russian text) - Chirkov V. D. - NAUCH. ZAP. GORK. INST.
DERM. I VENER. KAF. KOZHNO-VENER. BOLEZ. GGMI 1956, 17 (132-141)
Sixty-seven patients with various skin conditions were treated by hypnosis and
followed up for 1.5 to 18 months. Good lasting results were obtained in cases of
juvenile warts and lichen ruber planus, less favourable in eczema and neuro-
dermatitis. All patients with psoriasis relapsed.

(S)

CHIRKOV, V. D. (Gor'kiy)

O vliyani vzbuzhdeniya korkovykh proyeksionnykh zon na protsessy
desinkhronizatsii elektricheskoy aktivnosti kory bol'shikh polushzii

report submitted for the First Moscow Conference on Reticular Formation,
Moscow, 22-26 March 1960.

CHIRKOV, V. D., Cand Med Sci -- "On the mechanism^s of excitation irradiation in the cortex of the cerebral hemispheres."
Rostov n/D, 1961. (Rostov n/D State Med Inst) (KL, 8-61, 266)

- 538 -

BELENKOV, N. Yu.; CHIRKOV, V. D.

Irradiation of strychnine stimulation provoked in the cerebral cortex. Zhur. vys. nerv. deiat. 11 no.3:512-521 My-Je '61. (MIRA 14:7)

1. Chair of Normal Physiology, Medical Institute, Gorky.
(STRYCHNINE) (CEREBRAL CORTEX)
(EPILEPSY)

BELENKOV, N.Yu.; CHIRKOV, V.D.

On the effect of stimulation of the cortical projection zones on the process of generalization of the electrical reaction (desynchronization) in the cerebral cortex. Zh. vyssh. nerv. deiat. Pavlov 13 no.3:390-397 '63. (MIRA 17:9)

1. Kafedra normal'noy fiziologii Gor'kovskogo meditsinskogo instituta.

(CEREBRAL CORTEX) (RETICULAR FORMATION)
(BRAIN ELECTROPHYSIOLOGY) (SOUND) (LIGHT)

BELENKOV, N.Yu.; CHIRKOV, V.D.

Origin of generalized epileptiform discharges in the cerebral cortex. Zhur.vys.nerv.deiat 14 no.1:68-76 Ja-F '64. (MIRA 17:6)

1. Chair of Normal Physiology, Medical Institute, Gorkiy.

BELENKOV, N.Ya.; CHIRKOV, V.D.

Mechanism of the synchronization of neuron activity. Zhur. vys.
nerv. deiat. 15 no.1:128-139 Ja-F '65.

(MIRA 18:5)

1. Kafedra normal'noy fiziologii Gor'kovskogo meditsinskogo
instituta.

LYCH, N.M.; CHIRKOV, V.G.

Why automatic machine tools stand idle. Mashinostroitel'
no.10:39-40 0 '61. (MIRA 14:9)
(Factory management)

LYCH, Nikolay Mikhaylovich; CHIRKOV, Vladimir Grigor'yevich; TAURIT,
G.E., dots., retsenzent; RIKBERG, D.B., red.; GORNOSTAYPOL'SKAYA,
M.S., tekhn. red.

[Improving the efficiency of automatic lathes] Povyshenie ef-
fektivnosti tokarnykh avtomatov. Moskva, Mashgiz, 1962. 158 p.
(MIRA 15:4)

(Lathes)

CHIRKOV, V.G.

Efficient operation of automatic lathes. Vest.mashinostr. 42
no.7:80-82 J1 '62. (MIRA 15:8)
(Lathes)

CHIRKOV, V. G., kand. ekonom. nauk

Dependence of the time in which additional capital expenditures pay for themselves from the productivity of equipment.
Mashinostroenie no.5:101-105 S-O '62. (MIRA 16:1)

1. Kiyevskiy politekhnicheskij institut.

(Machinery industry—Finance)

CHIRKOV, V. G.

Calculating the effective cost of a machine/hour. Mashinostroitel'
no.10:36-37 0 '62. (MIRA 15:10)

(Machine tools--Production standards)

LYCH, N. M., kand. tekhn. nauk, dotsent; CHIRKOV, V. G., kand. ekonomicheskikh nauk

Increasing labor productivity by automation. Izv. vys. ucheb. zav.; mashinostr. no.7:200-208 '62. (MIRA 16:1)

1. Kiyevskiy politekhnicheskiy institut.

(Automation)

LYCH, N.M., kand.tekhn.nauk; CHIRKOV, V.G., kand.ekonom.nauk

Most important objectives of further mechanization and automation of
automatic-lathe shops. Mekh,i avtom. proizv. 17 no.2:1-4 F '63.

(MIRA 16:2)

(Lathes)

(Automation)

CHIRKOV, V.G., kand.ekonom.nauk

Determining equipment productivity in the production of a wide
range of articles. Mashinostroenie no.4:113-115 J1-Ag '63.
(MIRA 17:2)

1. Kiyevskiy politekhnicheskiy institut.

CHIRKOV, V.G., kand. ekonom. nauk

How to measure the steadiness of the utilization of equipment.
Mashinostroitel' no.12:40 D '63. (MIRA 17:1)

CHIRKOV, V.G., kand. ekon. nauk

Accounting for the standstill of machine tools. Mashinostroitel'
no.4:36-37 Ap'64 (MIRA 17:7)

RATSANOV, S.S.; MAZALOV, L.N.; CHIRKOV, V.I.

Computing refractions of ions of the "non-noble" gases. Izv.Sib.
otd. AN SSSR no.2:121-125 '61. (MIRA 14:3)

1. Institut neorganicheskoy khimii Sibirskogo otdeleniya AN SSSR,
Novosibirsk.

(Ions)

S/020/62/145/005/007/020
B181/B104

AUTHORS: Vaynshteyn, E. Ye., and Chirkov, V. I.
TITLE: Peculiarities of the X-ray emission spectrum of titanium in carbon nitrides
PERIODICAL: Akademiya nauk SSSR. Doklady, v. 145, no. 5, 1962, 1031-1034

TEXT: The K_{β} -satellite line in the X-ray emission spectrum of metallic compounds was assumed to originate in the cross transition of electrons from the valence level of the anion to freedom as the result of a K-ionization of the 1s-levels of the absorbing metal ion. For this reason the K_{β} -energy may be expected to depend strongly on the character of the bond. Where various elements are bound, a splitting into K_{β_1} and K_{β_2} is to be expected. A APC-2 (DRS-2) spectrometer was used to investigate the spectrum of titanium carbon nitrides. The X-ray apparatus was operated with 20 kv and 8 ma. The lines were recorded with the MΦ-4 (MF-4) microphotometer at a rate of 6 mm/min and a slit width of 0.3 mm,

Peculiarities of the X-ray ...

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B181/B104

the same conditions having been taken as a basis in the previous paper on the fine structure of the X-ray-K-spectrum (DAN, 140, 560 (1961)). The lines K_{β_1} and K_{β_2} , occurring in carbon nitride, show a dependence on the

C-concentration which differs from that of the corresponding substances in a mixture of titanium carbide with titanium nitride. There are 3 figures and 1 table.

ASSOCIATION: Institut neorganicheskoy khimii Sibirskogo otdeloniya Akademii nauk SSSR (Institute of Inorganic Chemistry of the Siberian Department of the Academy of Sciences USSR)

PRESENTED: April 9, 1962, by A. P. Vinogradov, Academician

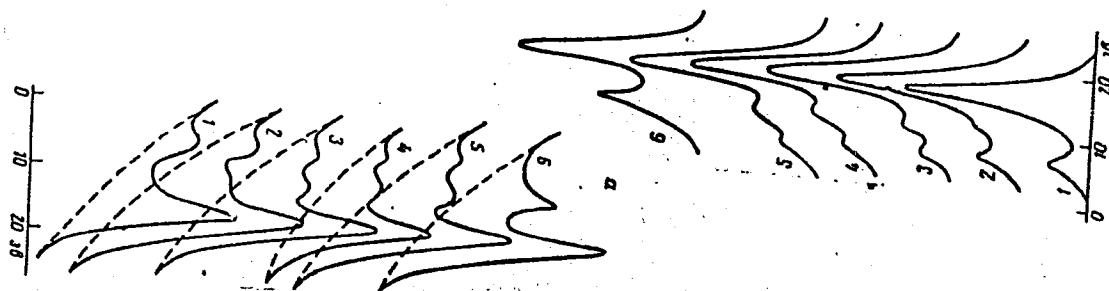
SUBMITTED: February 23, 1962

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Peculiarities of the X-ray ...

S/020/62/145/005/007/020
B181/B104

Fig. 1. The lines of the K_{β} -group of the X-ray spectrum of titanium in carbides, nitrides and carbon nitrides at various C-concentration, (a) shows the experimental microphotometric curves (recorded on a photographic plate); (b) shows the same curves after elimination of the superposed K_{β_1} -line (dotted on picture a) and of the variation of intensity. Legend: $\frac{C}{C+N}$ in %: (1) 0; (2) 22; (3) 26; (4) 35; (5) 43; (6) 100.



Card 3/3

VAYNSHTEYN, E. Ye.; CHIRKOV, V.I.

X-ray K-spectra of titanium emission in lower oxides (Ti - TiO_n)
Dokl. AN SSSR 155 no. 2:381-384 Mr '64. (MIRA 17:5)

1. Institut neorganicheskoy khimii Sibirskogo otdeleniya AN
SSSR. Predstavleno akademikom I.V.Tananayevym.

VAYNSHTEYN, E.Ye.; CHERKOV, V.I.

Structure of X-ray $K\beta$ -emission bands of titanium in oxides
($Ti_{0.85}-Ti_{1.20}$). Dokl. AN SSSR 157 no. 2:388-391 J1 '64.
(MIRA 17:7)

1. Institut neorganicheskoy khimii Sibirskogo otdeleniya
AN SSSR. Predstavleno akademikom A.P.Vinogradovym.

DANILOV, A.A.; CHIRKOV, V.I.

Correction factor for the K-index of the Yakutsk magnetic
observatory. Geomag. i aer. 5 no.3:588-590 My-Je '65.

(MIRA 18:5)

1. Institut kosmofizicheskikh issledovaniy i aeronomii Yakutskogo
filiala Sibirskogo otdeleniya AN SSSR.

L 3897-66 EWT(l)/EWT(m)/EPF(c)/T/EWP(t)/EWP(b) IJP(c) JD/GG
ACCESSION NR: AP5018073 UR/0020/65/163/001/0063/0066

AUTHOR: Vaynshteyn, E. Ye.; Chirkov, V. I.; Vasil'yev, Ya. V.

TITLE: X-ray $K_{\alpha_{1,2}}$ and K_{β_1} emission lines of titanium in oxides

SOURCE: AN SSSR. Doklady, v. 163, no. 1, 1965, 63-66

TOPIC TAGS: titanium oxide, x ray emission, line width, crystal lattice structure, spectral fine structure

ABSTRACT: This is a continuation of earlier experimental investigations (DAN v. 155, no. 2, 1964 and DAN v. 157, no. 2, 1964) devoted to the fine structure of K_{β_5} emission bands of titanium in lower oxides (TiO_n) of the hexagonal ($0 < n < 0.48$) and cubic ($0.85 < n < 1.2$) structure in the region of homogeneity of these phases. In the present paper these data are supplemented with information on the energy and shape of the $K_{\alpha_{1,2}}$ and K_{β_1} emission lines in the same phases, of variable composition, and also in other oxides with $1.5 < n < 2$. The lower oxides were prepared in the same manner as before. The preparation of the other oxides is described briefly. The x-ray spectra and the fluorescence of the titanium in the oxides were determined with a DRS-2 spectrograph under conditions similar to those of the earlier experiments. The results show that for the lower oxides (up to $n = 1.20$) the energy of the maxima of the K_{α_1} and K_{α_2} lines remains constant and the same as

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ACCESSION NR: AP5018073

in metallic titanium. The maximum of the $K_{\beta 1}$ remains constant for the hexagonal oxides, but shifts in the range $0.85 < n < 1.2$ towards the longer wavelengths. The shapes (half-widths and asymmetry indices) of the $K_{\alpha 1,2}$ lines remain constant when $0 < n < 0.45$. The half-width of the $K_{\beta 1}$ line increases linearly, and its asymmetry index has a more complicated variation. In the cubic structure oxides the parameters of all lines behave in analogous fashion, the half-width increasing linearly and the asymmetry index exhibiting nonmonotonic variation. No appreciable degree of homogeneity is observed when $1.5 < n < 2$, but the maxima of all lines shift towards the long-wave side. The results are interpreted from the point of view of the number of electrons participating in the chemical bond. This report was presented by A. P. Vinogradov. Orig. art. has: 4 figures and 1 table.

ASSOCIATION: ^{44, 55} Institut neorganicheskoy khimii Sibirskogo otdeleniya Akademii nauk SSSR (Institute of Inorganic Chemistry, Siberian Department, Academy of Sciences, SSSR); Institut geokhimii i analiticheskoy khimii im. V. I. Vernadskogo Akademii nauk SSSR (Institute of Geochemistry and Analytic Chemistry, Academy of Sciences, SSSR)

^{44, 55}
SUBMITTED: 11 Dec 64
NR REF 30V: C10

ENCL: 00
OTHER: 003

SUB CODE: OP, SS

Card 2/2 md

L 40380-66 ENT(1) IJP(c) AT/JM

ACC NR: AP6025075

SOURCE CODES: UR/0115/66/000/006/0041/0042

AUTHOR: Chirkov, V. P.

ORG: none

TITLE: Determination of electron concentration of plasma in a reflex klystron

SOURCE: Izmeritel'naya tekhnika, no. 6, 1966, 41-42

TOPIC TAGS: reflex klystron, SHF oscillator, gas discharge plasma, plasma diagnostics

ABSTRACT: The use of a positive-repeller reflex klystron for diagnosing gas-discharge plasma is discussed; the plasma is created inside the klystron, and its electron concentration is determined. Two methods of plasma generation are possible:

(1) Two needle electrodes are inserted into the space between the resonator grids, and a voltage is applied to the needles; the plasma is formed due to the presence of residual gases; (2) A plasma is injected into the resonator cavity by means of a plasma gun at right angles to the klystron axis. Interacting with the electron beam, the plasma is continuously withdrawn from the resonator by means of a special probe held at a potential positive with respect to the cathode. The plasma electron

concentration is calculated from this formula:

$$N = \alpha \cdot \sin \frac{\varphi_0}{2} \cdot \frac{(U_1 U_{03} - U_2 U_{01})}{U_{01} (U_2 \cos \frac{\varphi_0}{2} - U_{03})}$$

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UDC: 621.385.6

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ACC NR: AP6025075

where $\alpha = \frac{m \omega^2}{8 \pi^2 e^2}$. A total net error of $\pm 1\%$ is expected; however, considering discharge-electrode effect on the beam, probe field, ion background, etc., the error may reach ± 5 to $\pm 10\%$. Orig. art. has: 10 formulas. [03]

SUB CODE: 20, 09 / SUBM DATE: none / ORIG REF: 002 / ATD PRESS: 5053

Card 2/2 MLP

CHIRKOV, V.N.; SOLYANOV, N.M., red.; DEMIDOVA, L.F., tekhn. red.

[Oilseed plants in Uzbekistan] Maslichnye kul'tury v Uzbekistane.
Tashkent, Gos. izd-vo UzSSR, 1954. 67 p. (Trekhletnie kolkhoznnye
agrozootekhnicheskie kursy 2. god obucheniia). (MIRA 11:8)
(Uzbekistan--Oilseed plants)

CHIRKOV, V.N.

4678. Maslichnyye Kul'tury (Uzbekistane). Tashkent, Gosizdat UzSSR, 1954, 72 s.s.
Ill. 23 Sn. (Trekhetniye Agrosotekhn. Kursy. Vtoroy God Obucheniya). 10.000 Ekz.
2R. 50 K V Per---Na Pereplete Avt. Ne Ukazan.---Na Uzbek. Yaz---(54-57015) 633.85
(584.4).

YEVGRAFOV, G.K.; IOSILEVSKIY, L.I., kand. tekhn. nauk; CHIRKOV, V.P., inzh.

Effectiveness of using polygonal and upper prestressed reinforcement
in bridge spans. Transp. stroi. 9 no.4:10-16 Ap '59.
(MIRA 12:6)

1. Deystvitel'nyy chlen Akademii stroitel'stva i arkhitektury (for
Yevgrafov).

(Bridges, Concrete)

IOSILEVSKIY, L.I., kand.tekhn.nauk; CHIRKOV, V.P., kand.tekhn.nauk

Resistance to torsion in unribbed spans. Transp.stroi.
14 no.12:39-42 D '64.

(MIRA 19:1)

CHIRKOV, V. P.

Field tests of prestressed girders for the effect of transverse forces. Transp. stroi. 13 no.4:53-57 Ap '63.
(MIRA 16:4)

(Beams and girders--Testing)

IOSILEVSAIY, L.I., kand.tekhn.nauk; CHIRKOV, V.P., inzh.

Experimental spans with vertically stressed hoops. Transp.stroi.

13 no.9:54-57 S. '63.

(MIRA 16:12)

OS'MININ, A.A.; CHIRKOV, V.P.

Junction transistor R-C oscillator with a great number of phasing
circuits. Izv.tekh. no.11:46-48 N '63. (MIRA 16:12)

CHIRKOV, V.P.; SHITOV, Ye.V. [deceased]

Method of visible recording with a magnetoelectric oscillograph.
Priborostroenie no.6:9-10 Je '64. (MIRA 18:3)

CHIRKOV, V.P.

New method for frequency measurements based on the Hall effect.
Izv. vya. ucheb. zav.; radiotekh. 8 no.2:284-286 Mr-Apr '65.

(MIRA 18:7)

YEVGRAFOV, Georgiy Konstantinovich, prof., doktor tekhn.nauk; IOSILEVSKIY, Lev Izrailevich, kand.tekhn.nauk, dotsent; ALEKSANDROV, Anatoliy Vasil'yevich, kand.tekhn.nauk, dotsent; BOGDANOV, Nikolay Nikolayevich, kand.tekhn.nauk, dotsent; YEREMEEV, Genrikh Mikhaylovich, inzh.; CHIRKOV, Vladilen Pavlovich, inzh. Prinsipali uchastiye: RYBIN, V.I., inzh.; ANTIPOV, A.S., inzh. MITROPANOV, Yu.M., inzh., retsepmzant; KARAMYSHEV, I.A., inzh., red.; USENKO, L.A., tekhn.red.

[Prestressed bridge girders with stretching of the reinforcement before the concrete is placed] Predvaritel'no napriazhennyye balochnye proletnyye stroeniya mostov s napriazheniem armatury do betonirovaniya. Moskva, Vses.izdatel'sko-poligr.ob'edinenie M-va putei soobshcheniya, 1962. 282 p. (MIRA 15:4)

1. Deystvitel'nyy chlen Akademii stroitel'stva i arkhitektury SSSR (for Yevgrafov).
(Bridges, Concrete) (Prestressed concrete)

ACC NR: AP7002027

SOURCE CODE: UR/0142/66/009/005/0671/0672

AUTHOR: Chirkov, V. P.

ORG: none

TITLE: Low frequency RC oscillator as a device for sensing a weak constant magnetic field

SOURCE: IVUZ. Radiotekhnika, v. 9, no. 5, 1966, 671-672

TOPIC TAGS: constant magnetic field, magnetic field measurement, electronic oscillator, magnetoresistance

ABSTRACT: A new circuit for measuring magnetic field is proposed. One of active resistors of the phasing four-pole network of an RC oscillator is replaced by a semiconductor with magnetoresistive effect. The semiconductor is placed in a thermostat to maintain its resistance at a constant level. A variable capacitor with its dial calibrated in capacitance units to compensate the phase shift which takes place is included in this circuit. As the magnetic field acts on the semiconductor. The oscillator is tuned to the maximum amplitude of the quasi-resonance frequency. The initial capacitance of the circuit is determined using the dial reading of the variable capacitor. The semiconductor is then placed in the magnetic field being investigated. The resistance of the semiconductor increases in magnetic field resulting in phase unbalance of the oscillator and, consequently, a decrease in its amplitude of

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ACC NR: AP7002027

oscillation. In order to restore oscillations to the frequency of quasi-resonance, the variable capacitor must be retuned and the new reading noted. Test results indicate that the circuit can determine the magnetic field with not less than $\pm 3\%$ accuracy. Orig. art. has: 7 formulas

SUB CODE: 09/ SUBM DATE: 28Jun65/ ORIG REF: 003/ OTH REF: 002

Card 2/2

CHIRKOV, V.P., inzh.

Transfer of stress from the reinforcement to the concrete.
Bet. 1 zhel.-bet. 8 no.10:462-466 0 '62. (MIRA 15:11)
(Prestressed concrete--Testing)

CHIRKOV, Vladlen Pavlovich, inzh.; YEVGRAFOV, G.K., prof.; MIKHALEVSKAYA, V.I., red.; GARINA, T.D., tekhn.red.

[Preliminary squeezing of concrete in beams with various reinforcements; selection of an efficient system for reinforcing the supporting sections of prestressed beams] Predvaritel'noe obzhatie betona v balkakh s razlichnymi skhemami armirovaniia; k vyboru effektivnoi skhemy armirovaniia opornykh uchastkov. predvaritel'no napriazhennykh balok. Moskva, Gos. izd-vo "Vysshiaia shkola," 1962. 81 p. (Trudy Moskovskogo ordena Lenina i ordena Trudovogo Krasnogo Znameni institute inzhenerov zheleznodorozhnogo transporta. no. 163) (MIRA 16:7)

1. Chlen Akademii stroitel'stva i arkhitektury SSSR (for Yevgrafov).
(Reinforced concrete construction)

KOGAN, R.M., kand.tekhn.nauk; NIKIFOROV, M.V.; FRIDMAN, Sh.D., kand.tekhn.
nauk; CHIRKOV, V.P.; YAKOVLEV, A.F., kand.fiz.-matem.nauk

Determining the water equivalent of snow cover by means of
airplane gamma surveys. Meteor. i gidrol. no.4:51-55 Ap '65.
(MIRA 18:4)

1. Institut prikladnoy geofiziki AN SSSR.

IOSILEVSKIY, L.I., kand. tekhn. nauk; CHIRKOV, V.P., inzh.; CHESTNOY, V.M., inzh.

Effect of anchors on strength, crack resistance, and bundle
fastening in prestressed beams. Bet. i zhel.-bet. no.11:
515-518 '61. (MIRA 16:8)

(Beams and girders) (Prestressed concrete)

CHIRKOV, V.P., aspirant

Simplifying the method of consecutive approximations in the calculation of the redistribution of stresses in continuous reinforced concrete beams. Sbor. trud. Inzh.-stroi. fak. (Chel. politekh. inst. no.3:14-27 '63.

Determining bending deformations in an element with a single reinforcement in the second stage of the tensioning condition taking a long-term process into account. Ibid.:28-30 (MIRA 17:9)

ACCELERATION

constant, I_0 is the amplitude of the current, $\omega = \frac{2\pi}{\lambda} v = 2\pi \nu$, $\epsilon_0 = \frac{1}{4\pi k}$ is the permittivity of free space, n is the refractive index of plasma, c is the velocity of light.

isotropic homogeneous non-relativistic plasma

$$\epsilon = \epsilon_0 \left(1 - \frac{\omega_p^2}{\omega^2} \right)$$

$$\omega_p = \sqrt{\frac{4\pi N e^2}{m}}$$

is the plasma electron frequency, N is the electron concentration, and e and m

are the charge and mass of the electron.

where ϵ is the permittivity of the plasma, ω is the angular frequency, and ω_p is the plasma frequency.

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ACCESSION NO. 100-100000

$$\frac{u^2}{g} = \frac{u^2}{g} + \frac{u^2}{g}$$

Assuming that (8) into (1) and solving the last equation for the free

where

or

ASCE 1986-11-11-11

... magnetic field plasma will now be examined
... dispersion equation is of the following form:

$$n^2 = 1 - \frac{\omega_p^2}{\omega(\omega - \omega_c \cos \theta)}$$

where

$$\omega_p = \sqrt{\frac{4\pi n e^2 N}{m}}$$

... H is the external magnetic field
... and θ is the angle between the
... vector of the magnetic field H

... direction of (S) into (H) , and ω_c is

... ω_c

ACCESSION

1 (21-41) 1
4 (21-41) 1
6 (21-41) 1

ROBERTSON
The error is much smaller

1. 2. 3. 4.

EXPRESS

1. 2. 3.

1. 2. 3. 4. 5.

1. 2.

1. 2. 3. 4. 5. 6. 7. 8. 9. 10.

1. 2.

CHIRKOV, V. V.

ADY Phosphorus metabolism changes in anemias. V. V. Chirkov (Med. Inst., Saratov). *Terap. Arkh.* 27, No. 6, 21-3(1955).--Decreased blood organic P and its increased excretion occurred in severe anemias with low hemoglobin levels. Inorganic blood P was either normal or somewhat decreased while that of the urine was always below normal. During remissions the P fractions returned to normal. A disturbed carbohydrate metabolism also was noted. These 3 metabolic disturbances were probably due to hypoxia which develops during the exacerbation of severe anemias. A. S. Mirkin

VOLKOV, A.M.; CHIRKOV, V.Ya. (Moskva)

Oscillations of the human body under the influence of vibrations.
Gig. truda i prof. zab. 4 no.5:8-12 My '60. (MIRA 13:9)
(VIBRATION--PHYSIOLOGICAL EFFECT)

SOV/124-58-5-5765

Translation from: Referativnyy zhurnal, Mekhanika, 1958, Nr 5, p 121 (USSR)

AUTHOR: ~~Chirkov, Ya. N.~~

TITLE: On the Effect of Suddenly Applied and Suddenly Removed Loads
(O deystvii mgnovenno voznikayushchikh i mgnovenno ischezayushchikh nagruzok)

PERIODICAL: V sb.: Issledovaniya po teorii sooruzheniy. Nr 7. Moscow, Gosstroyizdat, 1957, pp 111-120

ABSTRACT: The effect of suddenly applied and suddenly removed loads on a beam of finite length is examined on the basis of the solution of the problem concerning the oscillation of a beam of infinite length to which a concentrated load is applied suddenly. The beam of infinite length is loaded in such a way that any finite section of its length bounded by two especially selected cross sections can be considered as a freely supported beam. The solution of the oscillation problem of such a beam section is obtained from the solution of a beam of infinite length by the superimposition method. A detailed investigation of a uniformly distributed load of short duration is made. The duration of load application is taken from the formula $\Delta t = T_1/2^n$,

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SOV/124-58-5-5765

On the Effect of Suddenly Applied and Suddenly Removed Loads

where T_1 is the period of the basic mode of natural vibration and is successively given the values of 1, 2, This method reveals the overall picture of the variation of the bending moments in the cross-sectional plane of the beam in relation to time. By applying the deductions drawn from the above experiment, the author is inclined to explain the location of crack formations, during the failure of a brittle beam, which tend to occur in cross sections nearer the supports rather than in the central cross section.

A. I. Oseled'ko

1. Beams--Oscillation
2. Oscillations--Mathematical analysis

Card 2/2

CHIRKOV, Ya.N.

Calculating scaffold frames with elastic supports. Nauch.-tekhn.
inform.biul. LPI no.1/2:193-204 '58. (MIRA 12:6)
(Structural frames)

CHIRKOV, Ya.N.

Designing continuous beams on elastic supports and fixings.
Trudy LPI no.197:56-67 '58. (MIRA 13:3)
(Girders)

CHIRKOV, Ya.N.

Calculating statically indeterminate systems. Trudy LPI no.197:68-72
'58. (MIRA 13:3)

(Girders)

CHIRKOV, Ya.N.

Practical method of determining thermal stresses in a unilaterally
fixed plate. Trudy LPI no.208:207-222 '60. (MIRA 13:9)
(Elastic plates and shells)

CHIRKOV, Yakov Nikitich; VASIL'YEV, P.I., red.

[Ribbed reinforced-concrete floors and roofs] Zhelezobeton-
noe rebristoe perekrytie; uchebnoe posobie po kursovomu
proektirovaniu. Leningrad, Leningr. politekhn.in-t, 1962.
167 p. (MIRA 16:11)

(Reinforced concrete construction)

37991

S/137/62/000/005/139/150

A052/A101

1.2300

AUTHORS: Pugachev, A. I., Chirkov, Ye. F.

TITLE: Spot welding M 40 (M40) alloy

PERIODICAL: Referativnyy zhurnal, Metallurgiya, no. 5, 1962, 45, abstract
5E239 (V sb. "Deformiruyemyye aluymin. splavy". Moscow, Oborongiz,
1961, 164 - 173)

TEXT: When M40 alloy was introduced in the industry the task was set to investigate its weldability, to work out welding conditions and to determine the strength characteristics of joints. M40 alloy in the state after hardening at 500°C and 10 hour artificial aging at 200°C has $\sigma_b = 40 \text{ kg/mm}^2$ at $\delta = 8\%$. The welding was carried out on МТИП -600 (MTIP-600) machine and on PMCO -5C5 (RMSO-5S5) electromagnetic machine. It is established that for hardened plated sheets 2 mm thick a high electrode reduction pressure ($\approx 4,000 \text{ kg}$) is necessary which enables one to overcome completely the elastic resistance of sheets at reduction and to eliminate splashes and other welding defects. The welding pressure must be as low as possible (0.15 - 0.20 of the electrode reduction pressure)

Card 1/2

Spot welding M40 (M40) alloy

S/137/62/000/005/139/150
A052/A101

and the welding current pulse as stable as possible (≤ 0.2 sec.). The forging pressure must exceed the welding pressure by a factor of 6 - 7. The recommended welding conditions on MIP-500 machine for various states of the alloy are summarized in the table 1 and those for the artificially aged state at sheets of different thicknesses in the table 2. High mechanical properties of spot joints are the essential advantage of M40 alloy. Compared with other alloys of its group it is considerably less liable to the thermal softening, pore and crack formation.

Ye. Terpugov.

Card 2/4

CHIRKOV, Ye.F., inzh.

Some problems in argon-arc welding of the M-40 alloy. Svar. proizv.
no.7.34-37 JL '65. (MIRA 18:8)

L 46979-66 EWP(k)/EWT(m)/T/EWP(w)/EWP(t)/ETI IJP(c) JH/JD/IR/WB
 ACC NR: AT6024949 (A,N) SOURCE CODE: UR/2981/66/000/004/0331/0340
 3/28
 B+1

AUTHOR: Chirkov, Ye. F.; Simonova, I. I.

ORG: none

TITLE: Thin-walled tubes of M-40 alloy

SOURCE: Alyuminiyevyye splavy, no. 4, 1966. Zharoprochnyye i vysokoprochnyye splavy (Heat resistant and high-strength alloys), 331-340

TOPIC TAGS: aluminum alloy property, metal tube

ABSTRACT: Thin-walled tubes of M-40 aluminum alloy (41 x 38 mm in diameter), obtained by cold rolling of pressed tube billets, had the following properties: $\sigma_u = 48-49$ kg/mm², $\sigma_{0.2} = 33-34$ kg/mm², $\delta = 16-17\%$. The optimum conditions of the process for producing thin-walled tubes from M-40 alloy were found to be: pressing of the intermediate tube 54 x 48 mm in diameter from 415-435°C, pressing rate 1 m/min; annealing; cold rolling to a diameter of 41 x 38 mm; quenching from 508±3°C; sizing and mechanical straightening. It was found that tubes of M-40 alloy can be cold-rolled at high delivery rates; the latter do not affect the mechanical properties. The tubes can be forged in the quenched state. Sizing and straightening do not impair the mechanical properties. The optimum schedule of artificial aging was found to be 16 hr at 175°C. The mechanical properties of thin-walled tubes were shown to have only slight differences along the direction of rolling and at right angles to it. The corrosion behavior

Card 1/2

L 16979-66

ACC NR: AT6024949

ior of thin-walled tubes of M-40 alloy is similar to that of tubes of D-16 alloy. 16 3
Authors thank V. A. Shelamov and K. A. Timokhova for assistance in the preparation of
the tubes. Orig. art. has: 6 figures and 5 tables.

SUB CODE: 11/ SUBM DATE: none

ms
Card 2/2

L 46113-66 EWI(m)/EWP(v)/I/EWP(t)/ETI/EWP(l) IIP(c) JD/HM
ACC NR: AP6031411 SOURCE CODE: UR/0135/66/000/009/0020/0023

AUTHOR: Chirkov, Ye. F. (Engineer); Sokolov, V. L. (Engineer); Mel'nikov, Yu. V. (Engineer)

37
B

ORG: none

TITLE: Automatic argon-shielded welding of M40 alloy

SOURCE: Svarochnoye proizvodstvo, no. 9, 1966, 20-23

TOPIC TAGS: aluminum alloy, alloy welding, MIG welding, automatic ~~MIG~~ welding, ~~weld~~ mechanical property/M40 alloy

ABSTRACT: Experiments have been made to determine the optimum conditions for automatic MIG welding M40 aluminum alloy. Clad alloy sheets, 3-mm thick, heat-treated, strain-hardened and aged (TN1), or heat-treated and strain-hardened (TN), were automatically MIG welded with M40 or HMg6 alloy filler. All welds were found to be helium tight. The highest weld efficiency (87.7%) and a tensile strength of 38.5-42.2 kg/mm² at a bend angle of 38-40 deg were obtained in welds with base and root reinforcements made with M40 filler wire, a specific heat input of 0.408 cal/sec·cm, and a steel backup plate with a 6.0 x (1.2-1.3) mm groove. The same welds without reinforcement had a tensile strength of 34-35 kg/mm², a bend angle of 44-48 deg, and a weld efficiency of 76.5%. A 7-12% increase in the heat input lowers the weld strength by 12%. The use of a copper backup plate, the absence

UDC: 621.791.753.93:669.35

Card 1/2

L 46113-66

ACC NR: AP6031411

of a gap between faying edges, or a small groove in the backup bar require a higher heat input, which lowers the weld strength. Aging after welding M40 alloy in the TN condition did not improve the mechanical properties; hence, full heat treatment of parts from M40 alloy should precede welding. Welding with AMg6 filler wire brought about no appreciable difference in the strength of M40 alloy welds, but it increased the bend angle to 50—57 deg and also increased by almost five times the susceptibility of M40 alloy welds to hot cracking. The difference in strength between the weld and base metal decreases with increasing temperature, and at 250C equals zero. Orig. art. has: 3 figures and 2 tables. [MS]

SUB CODE: 13/ SUBM DATE: none/ ORIG REF: 005/ OTH REF: 001/ ATD PRESS: 5087

Card 2/2 LC

DYKHOVA, Z.I.; MATYUSHINA, N.A.; MOSKVINA, M.M.; PROKOP'YEVA, G.P.;
KHARLAMOV, V.T.; CHIRKOV, Ye.P.; FODOR, G.; FILIP, I.

[Radioactive isotopes and labeled compounds; a catalog]
Radioaktivnye isotopy i mechenye soedineniia; katalog.
Moskva, Atomizdat, 1964. 341 p. (MIRA 18:1)

1. Sovet ekonomicheskoy vzaimopomoshchi. Postoyannaya komissiya po ispol'zovaniyu energii v mirnykh tselyakh.

REF ID: A650778
11/03/76 5:00 PM
621 701 850 31669 719

AUTHOR: CHITABY, G. L. (engineer)

TITLE: ... provided an outline of M-40 alloy

SYNOPSIS: ...

TOPIC: ...

ALLY

ABSTRACT: ...
Detailed description of the M-40 alloy and its properties, including its composition and mechanical characteristics. The text discusses the alloy's performance under various conditions and its application in specific contexts. It mentions that the alloy was developed by the ... and is characterized by its high strength and resistance to ... The document provides a comprehensive overview of the material's properties and its use in engineering applications.

Card

than AMg-6 alloy. Orig. art. has: 5 figures and 3 tables.

ABSTRACT

SUBJECT

ENCL

NO. REF

OTHER

Cord 016

POLISSKIY, N.Ya., inzhener; GONTOVENKO, N.P., inzhener; TAMARIN, L.I., inzhener; CHIRKOV, Ye.V., inzhener; AVRAMENKO, P.S., inzhener.

Mechanization and automation of the varnish insulation section in the line for continuous manufacturing of armatures for direct

ZHUKOVA, T.; SARANIN, K.; BELYAYEV, I.; TYMCHINKO, L.; BIRYUKOVA, V.;
KHOKHLOV, F.; YERMOLAYEV, P.; MORYGANOV, A.; BUTIKOV, Yevg.;
CHIRKOV, Yu., starshiy nauchnyy sotr.; POLYAKOVA, V., red.;
USTINOVA, S., tekhn. red.

[Corn] Kukuruzna. Moskva, Mosk. rabochii, 1962. 99 p.
(MIRA 15:12)

1. Nauchnyye sotrudniki Nauchno-issledovatel'skogo instituta
sel'skogo khozyaystva tsentral'nykh rayonov nechernozemnoy
zony (for all except Chirkov, Polyakova Ustinova). 2. TSent-
ral'nyy institut prognozov (for Chirkov).
(Corn (Maize))

CHIRIKOV, Yu.F.

Effect of phosphates on the output of ethereal oil. Dokl. AN SSSR
155 no.6:1460-1462 Ap '64. (MIRA 17:4)

1. Krymskiy filial Vsesoyuznogo nauchno-issledovatel'skogo
instituta maslichnykh i efiromaslichnykh kul'tur. Predstavleno
akademikom N.M.Sisakyanom.

CHIRKOV, Yu. G.; BURSHEYN, R. Kh.; MARKIN, V. S.; PSHENICHNIKOV, A. G.;
CHIZMADZHEV, I. A.

"Investigation of the Relationship between the Structure and the
Electrochemical Properties of a Porous Gas Electrode."

Report presented at the 11th meeting. CITCE, Intl. Comm. of Electrochemical
Thermodynamics and Kinetics, Moscow, 19-25 Aug 63.

Institute of Electrochemistry, Academy of Sciences of USSR.

LEVICH, V.G.; MARKIN, V.S.; CHIRKOV, Yu.G.

Electric conductivity and electron paramagnetic resonance signal
in polymeric materials built up of molecules with conjugate double
bonds. Dokl. AN SSSR 149 no.4:894-896 Ap '63. (MIRA 16:3)

1. Institut elektrokhemii AN SSSR. 2. Chlen-korrespondent AN SSSR
(for Levich).
(Polymers--Electric properties)
(Electron paramagnetic resonance and relaxation)

MARKIN, V.S.; CHIZMADZHEV, Yu.A.; CHIRKOV, Yu.G.

Theory of porous gas electrodes. Computation of effective coefficients. Dokl. AN SSSR 150 no.3:596-599 My '63.

(MIRA 16:6)

1. Institut elektrokhemii AN SSSR. Predstavleno akademikom A.N. Frumkinym.

(Electrodes) (Porous materials)

CHIRKOV, Yu.G.; CHIZMADZHEV, Yu.A.

Mechanism of generation of current in a gaseous porous electrode.

Report No.1: Diffusion in σ -phase. Izv.AN SSSR.Ser.khim. no.2:

225-234 F '64.

(MIRA 17:3)

1. Institut elektrokhemii AN SSSR.

CHIRKOV, Yu.G.

Study of the mechanism of current generation in a gaseous porous electrode taking molecular diffusion and electrolyte film into account. Izv. AN SSSR. Ser.khim. no.3:558-561 Mr '64.

(MIRA 17:4)

1. Institut elektrokhemii AN SSSR.

LEVICH, V.G.; CHIZMADZHEV, Yu. A.; CHIRKOV, Yu.G.

Polarization curves for electrodes partly immersed in an
electrolyte solution. Dokl. AN SSSR 157 no. 2:404-407 J1 '64.
(MIRA :7:7)

1. Institut elektrokhemii AN SSSR. 2. Chlen-korrespondent AN
SSSR (for Levich).

LEVICH, V.G.; MARKIN, V.S.; CHIRKOV, Yu.G.

Thermal diffusion in liquids at the rotating disk surface.
Elektrokhimiya 1 no.12:1416-1421 D '65.

(MIRA 1961)

1. Institut elektrokhemii AN SSSR. Submitted April 19, 1965.

L 38161-66 EWI(m)/T IJP(c) DS

ACC NR: AP6019242

(A)

SOURCE CODE: UR/0364/66/002/003/0373/0377

AUTHOR: Chizmadzhev, Yu. A.; Chirkov, Yu. G.; Belokopytov, V. P. 72
B

ORG: Institute of Electrochemistry, Academy of Sciences, SSSR (Institut elektrokhemii Akademii nauk SSSR); Scientific Research Physicochemical Institute im. L. Ya. Karpov, Moscow (Nauchno-issledovatel'skiy fiziko-khimicheskiy institut)

TITLE: Current generation in electrodes with porous surfaces

SOURCE: Elektrokhemiya, v. 2, no. 3, 1966, 373-377

TOPIC TAGS: electrode, electric current, electrochemistry, surface condition, porous material, polarization, electric potential, hydrogen, porous metal, porosity

ABSTRACT: Partially submerged electrodes with porous surfaces are investigated. Some parameters considered in deriving the polarization characteristics were: Δ_1 --thickness of the porous layer; Δ --thickness of the electrolyte film of length L; the dimensionless polarization $\phi = e\phi/2kT$, where e =electronic charge, k =Boltzman constant and T =absolute temperature; and the dimensionless concentration $\bar{c}_s = c_s/c_0$ where c_s =the concentration of H_2 on the surface of the electrode and c_0 =concentration of H_2 on the surface layer. The current density for electrochemical changes inside the porous layer was given by

$$i = i_0[\sqrt{\bar{c}} e^{\bar{\phi}} - e^{-\bar{\phi}}],$$

UDC: 541.13

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ACC NR: AP6019242

where i_0 =current interchange on a smooth surface. Boundary conditions were established for the above equation and parametric curves were shown for c_s as a function of $\bar{\phi}$. The values for the current I were determined from the parameter $\gamma=(\Delta g S/\epsilon)^{1/2}$ where $\epsilon=2F D c_0/\Delta i_0$ - another parameter which depends on the boundary conditions, g =surface porosity, F =Faraday constant and S =specific surface reactivity. Curves are given for $I=f(S)$ for different values of $\bar{\phi}_0$ and for $I=f(\bar{\phi}_0)$, comparing porous with smooth surfaces. In the region of low polarization ($\bar{\phi}_0 \approx 4$) the porous electrode had a current generating ability about 10 times that of the smooth electrode. Orig. art. has: 4 figures, 7 formulas.

SUB CODE; 07,20

SUBM DATE: 29Jul65/

ORIG REF: 003/

OTH REF: 001

Card 2/2 MLP

MIKHAYLOV, Yu.I., kand. tekhn. nauk; CHIRKOV, Yu.I., inzh.
MAKEYEV, A.A., inzh.

Opening the northern group of mines in the Krivoy Rog
Basin. Met. i gornorud. prom. no. 5:56-61 S-0 '63.

(MIRA 16:11)

1. Krivorozhskiy gornorudnyy institut (for Mikhaylov,
Chirkov). 2. Rudnik im. Ordzhonikidze (for Makeyev).

CHIRKOV, Yu.I.

Methods of determining certain optimal parameters of mines with
conveyor hoisting in the Krivoy Rog Basin. Sbor. nauch. trud.
KGRI no.23:76-78 '63 (MIRA 17:8)

CHIRKOV, Yu.I.; NAZARCHUK, M.N.; KUCHERYAVENKO, I.A.

Improving stoping operation techniques at the "Saksagan"
Mine. Met. i gornorud. prom. no.1:72-74 Ja-F '64.

(MIRA 17:10)

CHIRKOV, Yu.I., inzh.

Opening of Krivoy Rog Basin ore deposits with the use of inclined conveyor shafts. Izv.vys.ucheb. zav.; gor. zhur.
7 no.3:24-30 '64 (MIRA 17:8)

1. Krivorozhskiy gornorudnyy institut, Rekomendovana kafedroy razrabotki mestorozhdeniy poleznykh iskopayemykh.

MIKHAYLOV, Yu.I., dotsent; CHIRKOV, Yu.I., dotsent

Determining the optimal number of levels being opened by one stage of an inclined conveyor shaft. Izv. vys. ucheb. zav.; gor. zhur. 7 no.10:11-14 '64.

(MIRA 18:1)

1. Krivorozhskiy gornyy institut. Rekomendovana kafedroy rudnichnogo transporta i gornyx mashin.

CHIRKOV, Yu.I., kand. tekhn. nauk; BERKALIYEV, B.T.

Methods of stripping thick steeply dipping iron ore beds. Vest.
AN Kazakh. SSR 20 no.7:77-84. J1 '64.

(MIRA 17:11)

MALAKHOV, G.M., doktor tekhn. nauk; CHIRKOV, Yu.I., kand. tekhn. nauk;
KUCHERYAVENKO, I.A., kand. tekhn. nauk; ZYMALEV, G.S.;
KHIVRENKO, A.F.; NESTERENKO, V.V.

Introduction of new variants of the system of sublevel caving
at "Dzerzhinskud" Trust mines. Met. i gornorud. prom. no.2:
50-54 Mr-Ap '65. (MIRA 18:5)

CHIRKOV, Yu.I.; MAKEYEV, A.A.; KUCHERYAVENKO, I.A.

Ways of increasing labor productivity in the haulage of hard
lump ore. Met. 1 gornorud. prom. no.2:56-58 Mr-Apr '65.

(MIRA 18:5)

MAKEYEV, A.A.; DYADECHKIN, N.I.; CHIRKOV, Yu.I.

Testing "zernogramlit" 80/20b in underground conditions. Gor. zhur.
no.5:34-35 My '65. (Mira 18:5)

1. Ridoupravleniye im. Ordzhonikidze (for Makeyev). 2. Krivorozhskiy
gornorudnyy institut (for Dyadechkin, Chirkov).

GHIRKOV, Yu.I., kand.geograf.nauk

Fundamentals of long-range agrometeorological forecasting of the
corn yield. Meteor. i gidrol. no.943-7. S '65.

(MIRA 28:8)

1. Tsentral'nyy institut prognozov.

ZINCHEVSKIY, N.P.; SHVETS, F.V.; CHIRKOV, Yu.I.; KUCHERYAVENKO, I.A.

Concrete lining of the workings of scraper levels in ore
mines. Met. i gornorud. prom. no.4877-78 JI-Ag '65.

(MIRA 18:10)

CHIRKOV, Yu.I.; BELUKHINA, G.V.

Microclimate and heat balance on crops of irrigated and nonirrigated
corn in Moldavia. Trudy TSIP no.145:90-99 '65.

(MIRA 18:10)

CHIRKOV, Yu. I.

AID P - 3186

Subject : USSR/Meteorology
Card 1/1 Pub. 71-a - 13/23
Author : Chirkov, Yu. I.
Title : Determining viability of winter crops at agricultural-meteorological stations by observing the growth of the cone
Periodical : Met. i. gidr., 5, 47-48, S/O 1955
Abstract : The article explains in detail the method worked out by Prof. F. M. Kuperman of Moscow State University for observation of winter crops viability.
Institution : None
Submitted : No date

CHIRKOV, Y. I.

AID P - 3858

Subject : USSR/Meteorology
Card 1/1 Pub. 71-a - 21/35
Author : Chirkov, Yu. I.
Title : ~~Chirkov, Yu. I.~~ Hydrometeorological service at regional agriculture exhibits. (Agro-meteorological station Lenino-Dachnoye).
Periodical : Met. 1. gidr., 6, 51-52, N/D 1955
Abstract : A report on the participation of this station in a regional agriculture exhibit in the Moskovskaya oblast. One photo.
Institution : None
Submitted : No date