"APPROVED FOR RELEASE: 03/13/2001 CIA-RDP86-00513R000927910012-0

ACC NR: AP6036320

is joined with Bi in "pairs" and thus for practical purposes is excluded from the phonon scattering. This hypothesis was verified by a direct measurement of the thermal conductivity of the Bi_2Te_3 lattice grown with a small excess Te or Bi with an admixture of 0.17% iodine (At). The authors thank Dr. G. I. Gelkov for conducting the chemical analysis of the Bi_2Te_3 specimens and of the solid solutions. Orig. art. has: 3 tables, 4 figures, 6 formulas.

SUB CODE: 20/ SUBM DATE: 12Apr66/ ORIG REF: 005/ OTH REF: 016

Card 2/2

APPROVED FOR RELEASE: 03/13/2001 CIA-RDP86-00513R000927910012-0"

"APPROVED FOR RELEASE: 03/13/2001 CIA-RDP86-00513R000927910012-0

AGABAYEV, Ch.; KULIYEV, Kh.K.; KUTASOV, V.A.

Determining the activation energy of semiconductors in the mixed conductivity band. Izv. AN Turk. SSR. Ser. fiz.-tekh., khim. i geol. nauk no.3:3-7 '64 (MIRA 18:1)

APPROVED FOR RELEASE: 03/13/2001 CIA-RDP86-00513R000927910012-0"

"APPROVED FOR RELEASE: 03/13/2001 CIA-RDP86-00513R000927910012-0

[illegible], P.F.

Casting of steam pipe fittings. Lit. proizv. no.12:35-36 D '6[illegible]. (MIRA 19:3[illegible])

APPROVED FOR RELEASE: 03/13/2001 CIA-RDP86-00513R000927910012-0"

"APPROVED FOR RELEASE: 03/13/2001 CIA-RDP86-00513R000927910012-0

L 63097-65 EWT(m)/EWG(m)/EWP(t)/EWP(b) IJP(c) RDW/JD

ACCESSION NR: AP5019922 UR/0202/65/000/004/0100/0102

AUTHOR: Guriyeva, Ye. A.; Kakhromanov, K.; Kutasov, V. A.; Kuliyev, Kh. M.

TITLE: Thermal conductivity of solid solutions based on bismuth telluride

SOURCE: AN TurkmSSR. Izvestiya. Seriya fizliko-tekhnicheskikh, khimicheskikh i geologicheskikh nauk, no. 4, 1965, 100-102

TOPIC TAGS: thermal conductivity, bismuth telluride, bismuth selenide, antimony telluride, antimony selenide, electric conductivity, forbidden gap width heteromorphism, isomorphism

ABSTRACT: An attempt was made to compare the thermal conductivity of the lattice of solid solutions based on Bi_2Te_3 formed by isomorphous substitution (Bi_2Se_3, Sb_2Te_3) and heteromorphous substitution (Sb_2Se_3). Oriented crystals grown by Bridgman's method were used. The content of the second component of the solution (Bi_2Se_3, Sb_2Te_3, Sb_2Se_3) was 10 mole %. The thermal conductivity, electrical conductivity, and thermo-emf coefficient were measured at 300—700K. The thermal conductivity of the lattice was found to decrease from solid solutions of isomorphous compounds (Bi_2Te_3—Bi_2Se_3, Bi_2Te_3—Sb_2Te_3) to those of heteromorphous compounds (Bi_2Te_3—Sb_2Se_3). The role of ambipolar diffusion in the

Card 1/2

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"APPROVED FOR RELEASE: 03/13/2001 CIA-RDP86-00513R000927910012-0

L 63097-65

ACCESSION NR: AP5019922

solid solution based on the heteromorphous compounds is much smaller than in the solutions of isomorphous compounds. It is postulated that this decrease is due not only to a large forbidden gap width, but also to the ratio of mobilities of the majority and minority carriers. Orig. art. has: 3 figures and 4 formulas.

ASSOCIATION: Fiziko-tekhnicheskiy institut AN Turkmenskoy SSR (Physicotechnical Institute, AN Turkmen SSR)

SUBMITTED: 06Jan65 ENCL: 00 SUB CODE: SS, EC

NR REF SOV: 003 OTHER: 003

Card 2/2

APPROVED FOR RELEASE: 03/13/2001 CIA-RDP86-00513R000927910012-0"

"APPROVED FOR RELEASE: 03/13/2001 CIA-RDP86-00513R000927910012-0

SMIRNOVA, Ye.A.; KUTASOV, V.A.; SMIRNOV, I.A.

Heat conductivity of the crystal lattices of solid solutions on a Bi_2Te_3 base. Fiz. tver. tela 6 no.8:2453-2456 Ag '64. (MIRA 17:11)

1. Institut poluprovodnikov AN SSSR, Leningrad.

APPROVED FOR RELEASE: 03/13/2001 CIA-RDP86-00513R000927910012-0"

"APPROVED FOR RELEASE: 03/13/2001 CIA-RDP86-00513R000927910012-0

L 52527-65 EWT(1)/EWT(m)/T/EWP(t)/EWP(b)/EWA(c) IJP(c) UR/0181/65/007/004/1065/1077
ACCESSION NR: AP5010712

AUTHOR: Kutasov, V. A.; Moyzhes, B. Ya.; Smirnov, I. A.

TITLE: Thermal and electric properties, and the width of the forbidden band of the system of solid solutions Bi_2Te_3-Sb_2S_3

SOURCE: Fizika tverdogo tela, v. 7, no. 4, 1965, 1065-1077

TOPIC TAGS: bismuth compound, antimony compound, solid solution, electric conductivity, thermal emf, thermal conductivity, forbidden band

ABSTRACT: The authors measured the electric conductivity, the thermal emf, and the thermal conductivity of crystals of solid solution Bi_2Te_3-Sb_2S_3 in the direction of the cleavage planes. The apparatus used for the measurements was described in an earlier paper (FTT v. 2, 738, 1960). From the measurement results in the region of the start of the intrinsic conductivity, the authors calculated the width E_g of the forbidden band of Bi_2Te_3 and of the solid solution Bi_2Te_3-Sb_2S_3 (up to 9% of Sb_2S_3). The width was directly proportional to the added amount of Sb_2S_3, and increased 0.005 eV for each per cent of introduced Sb_2S_3. Its time derivative

Card 1/2

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"APPROVED FOR RELEASE: 03/13/2001 CIA-RDP86-00513R000927910012-0

L 52527-65

ACCESSION NR: AP5010712

2

- dE_g/dT in the interval 300--420K is practically the same for the Bi_2Te_3 and the solid solution. The values of E_g calculated from different experimental data are in good agreement. The agreement between E_g obtained from optical measurements and the authors' calculations confirms that the mean free path of the carriers does not depend on the energy. "The authors thank Ye. G. Guriyev for help with the samples." Orig. art. has: 7 figures and 33 formulas.

ASSOCIATION: Institut poluprovodnikov AN SSSR, Leningrad (Institute of Semiconductors, AN SSSR)

SUBMITTED: 30Sep64 ENCL: 00 SUB CODE: SS, EM

NR REF SOV: 007 OTHER: 013

Card 2/2

APPROVED FOR RELEASE: 03/13/2001 CIA-RDP86-00513R000927910012-0"

"APPROVED FOR RELEASE: 03/13/2001 CIA-RDP86-00513R000927910012-0

AKULOVA, N.S., kand.veterin.nauk; D'YAKONOV, L.P., kand.ve[illegible], [illegible], A.N., mladshiy nauchnyy sotrudnik; KAZAKOV, N.A., [illegible] sotrudnik

Use of chlortetracycline against anaplasmosis in sheep. Veterinariia [illegible] no.9:29-31 S '63. (MIRA 17:[illegible])

1. Vsesoyuznyy institut eksperimental'noy veterinarii.

APPROVED FOR RELEASE: 03/13/2001 CIA-RDP86-00513R000927910012-0"

"APPROVED FOR RELEASE: 03/13/2001 CIA-RDP86-00513R000927910012-0

KUTASHI, Layosh [Kutasi, Lajos], starshiy nauchnyy sotrudnik, laureat premii im. Koshuta (Budapesht)

Use of piano-wire concrete ties. Zhel.dor.transp. 44 no.9: 44-47 S '62. (MIRA 15:9)

1. Nauchno-issledovatel'skiy institut zheleznodorozhnogo transporta Vengerskoy Narodnoy Respubliki.
(Hungary--Railroads--Ties, Concrete)

APPROVED FOR RELEASE: 03/13/2001 CIA-RDP86-00513R000927910012-0"

"APPROVED FOR RELEASE: 03/13/2001 CIA-RDP86-00513R000927910012-0

KUTASIN, B. T.

"Automatic Regulation of the Voltage of Marine Synchronous Generators With the Use of Carborundum Resistors." Cand Tech Sci, Leningrad Inst of Water Transport Engineers, Leningrad, 1954. (RZhElekh, Nov 54)

Survey of Scientific and Technical Dissertations Defended at USSR Higher Educational Institutions (11)

SO: Sum. No. 521, 2 Jun 55

APPROVED FOR RELEASE: 03/13/2001 CIA-RDP86-00513R000927910012-0"

"APPROVED FOR RELEASE: 03/13/2001 CIA-RDP86-00513R000927910012-0

ARKHIPOV, Yu.P., starshiy prepodavatel'; DIDENKO, V.Ye., assistent; KUTASIN, B.P., dotsent

Compounding synchronous generators with carbon pile voltage regulators (RUN") on tank vessels of the "Kazbek" type. Biul. tekh.-ekon. inform. Tekh. upr. Min.mor flota 7 no. 8: 37-47 '62. (MIRA 16:5)

1. Odesskoye vyssheye inzhenernoye morskoye uchilishche. (Tank vessels) (Electricity on ships)

APPROVED FOR RELEASE: 03/13/2001 CIA-RDP86-00513R000927910012-0"

"APPROVED FOR RELEASE: 03/13/2001 CIA-RDP86-00513R000927910012-0

KUTASIN, Boris Petrovich, kand.tekhn.nauk, dotsent

Decrease of power losses in a d.c. propulsion system of a ship moving through turbulent waters. Izv.vys.ucheb.zav.; elektromekh. 7 no.12:1465-1469 '64. (MIRA 18:2)

1. Zaveduyushchiy kafedroy elektrooborudovaniya sudov i elektroavtomatiki Odesskogo vysshego inzhenernogo morskogo uchilishcha Ministerstva torgovogo flota.

APPROVED FOR RELEASE: 03/13/2001 CIA-RDP86-00513R000927910012-0"

"APPROVED FOR RELEASE: 03/13/2001 CIA-RDP86-00513R000927910012-0

KUTASIN, Boris Petrovich; MIKHAYLOV, V.A., red.; NORNEVSKIY, B.I., red.; LAPINA, Z.D., red. izd-va; TIKHONOVA, Ye.A., tekhn. red.

[Electronic and automatic control on ships]Sudovaia elektroavtomatika. Moskva, Izd-vo "Morskoi transport," 1962. 407 p. (MIRA 16:2)

(Automatic control) (Electronic control)
(Ships--Electronic equipment)

APPROVED FOR RELEASE: 03/13/2001 CIA-RDP86-00513R000927910012-0"

"APPROVED FOR RELEASE: 03/13/2001 CIA-RDP86-00513R000927910012-0

KUTASIN, Boris Petrovich, kand.tekhn.nauk, dotsent

Stability diagram for linear systems of the fourth order. Izv. vys.ucheb.zav.; elektromekh. 5 no.10:1186-1187 '62. (MIRA 15:11)

1. Zaveduyushchiy kafedroy sudovoy elektroavtomatiki i vychislitel'noy tekhniki Odesskogo vysshego inzhenernogo morskogo uchilishcha.
(Automatic control)

APPROVED FOR RELEASE: 03/13/2001 CIA-RDP86-00513R000927910012-0"

"APPROVED FOR RELEASE: 03/13/2001 CIA-RDP86-00513R000927910012-0

KUTASIN, B.P., dotsent

Direct-current electric propeller drive in conditions of ship rolling. Sud. sil. ust. no.2:90-101 '63. (MIRA 17:1)

1. Odesskoye vysshaye inzhenernoye morskoye uchilishche.

APPROVED FOR RELEASE: 03/13/2001 CIA-RDP86-00513R000927910012-0"

"APPROVED FOR RELEASE: 03/13/2001 CIA-RDP86-00513R000927910012-0

KUTASIN, B.P.

Resinance phenomena in the system ship hull - propeller - direct current electric motor during roll. Sudorem. i sudostr. no.2: 140-147 '63. (MIRA 17:4)

1. Odesskoye vysshoye inzhenernoye morskoye uchilishche.

APPROVED FOR RELEASE: 03/13/2001 CIA-RDP86-00513R000927910012-0"

"APPROVED FOR RELEASE: 03/13/2001 CIA-RDP86-00513R000927910012-0

[illegible], S.P., [illegible]

Effect of the [illegible] of the ship on the performance of the propulsion [illegible]. Sudostroenie 31 no.4:20-22 Ap '65. (MIRA 18:8)

APPROVED FOR RELEASE: 03/13/2001 CIA-RDP86-00513R000927910012-0"

"APPROVED FOR RELEASE: 03/13/2001 CIA-RDP86-00513R000927910012-0

SHAPIRO, I. O.; KUTASNIKOV, V. Ya.

Use of "biological gloves" in industrial plants in the Moscow and Lenin Districts of Leningrad. Vest. derm. i ven. no.6:57-59 '61. (MIRA 15:4)

1. Iz Leningradskikh kozhno-venerologicheskikh dispanserov No. 17 (glavnyy vrach Z. P. Polyakova) i No. 19 (glavnyy vrach L. P. Iznairskaya)

(SKIN—DISEASES) (INDUSTRIAL HYGIENE)
(BIOLOGICAL PRODUCTS)

APPROVED FOR RELEASE: 03/13/2001 CIA-RDP86-00513R000927910012-0"

"APPROVED FOR RELEASE: 03/13/2001 CIA-RDP86-00513R000927910012-0

KLEBANOV, G. Ya.; ABEL'SKIY, A. M.; BEYDER, A. V.; VAYNER, S. V.; VLASIK, V. S.; GOL'DFEDER, Ya. M.; DUDKINA, D. F.; ZHURAVLEVA, L. D.; KANE, D. B.; KUBALNOV, M. L.; KOLODEZNAYA, T. B.; KUTASNIKOV, V. Ya.; SOLODOVNIKOV, B. M.; STROYMAN, L. A.; SHUMKOVA, N. S.

Results of dispensary treatment of occupational dermatoses in the clinics of Leningrad. Vest. derm. i ven. 36 no.6:58-62 Je '62. (MIRA 15:6)

1. Iz kozhno-venerologicheskikh dispanserov No. 1, 2, 3, 5, 8, 10, 11, 12, 13, 14, 15, 17, 18, 19, 22 (nauchnyy rukovoditel' - chlen-korrespondent AMN SSSR prof. P. V. Kozhevnikov)

(LENINGRAD--OCCUPATIONAL DISEASES)
(SKIN--DISEASES)

APPROVED FOR RELEASE: 03/13/2001 CIA-RDP86-00513R000927910012-0"

"APPROVED FOR RELEASE: 03/13/2001 CIA-RDP86-00513R000927910012-0

LIDSKIY, Viktor Borisovich; OVSYANNIKOV, Lev Vasil'yevich; TULAYKOV, Anatoliy Nikolayevich; SHABUNIN, Mikhail Ivanovich. Prinimali uchastiye: ABRAMOV, A.A.; BOCHEK, I.A.; YEVGRAFOV, M.A.; ZYKOV, A.A.; KARABEGOV, V.I.; KARIMOVA, Kh.Kh.; KUDRYAVTSEV, L.D.; KUTASOV, A.D.; SHURA-BURA, M.R.; SHCHEGLOV, M.P. SOLODKOV, V.A., red.; KRYUCHKOVA, V.N., tekhn.red.

[Problems in elementary mathematics] Zadachi po elementarnoi matematike. Moskva, Gos.izd-vo fiziko-matem.lit-ry, 1960. 463 p. (MIRA 14:1)

(Mathematics--Problems, exercises, etc.)

APPROVED FOR RELEASE: 03/13/2001 CIA-RDP86-00513R000927910012-0"

"APPROVED FOR RELEASE: 03/13/2001 CIA-RDP86-00513R000927910012-0

BAKLANOVSKAYA, V.F. (Moskva); KUTASOV, A.D. (Moskva); NEYGAUZ, M.G. (Moskva)

Numerical quasi-stationary solution of a system of one-demensional parabolic equations. Zhur. vych. mat. i mat. fiz. 1 no.2:354-357 Mr-Ap '61. (MIRA 14:8)

(Differential equations--Numerical solutions)

1072

APPROVED FOR RELEASE: 03/13/2001 CIA-RDP86-00513R000927910012-0"

"APPROVED FOR RELEASE: 03/13/2001 CIA-RDP86-00513R000927910012-0

38[illegible]
S/044/62/000/005/018/0[illegible]
C111/C333

16.3500
24.4200

AUTHORS: Baklanovskaya, V.F., Kutasov, A.D., Neyganz, M. G.

TITLE: The numeric determination of the quasi-stationary solution to a system of one-dimensional parabolic equations

PERIODICAL: Referativnyy zhurnal, Matematika, no. 5, 1962, 72, abstract 3B328. (Zh. vychisl. matem. i matem. fiz.", 1961, 1, no. 2 354-357)

TEXT: Considered is the system of equations

$$\frac{\partial C}{\partial t} = \frac{\partial^2 C}{\partial x^2} - C\varphi(T), \qquad (1)$$

$$\frac{\partial T}{\partial t} = \alpha \frac{\partial^2 T}{\partial x^2} + C\varphi(T)$$

$-\infty < x < +\infty$, $0 < t < +\infty$, $\alpha > 0$, α — constant. The given initial conditions are: $T(x,0) = \tilde{T}(x)$, $C(x,0) = \tilde{C}(x)$, $\tilde{C}(x)$ and $\tilde{T}(x)$ are monotonic, $\tilde{C}(x) \to 0$ and $\tilde{T}(x) \to 1$ for $x \to -\infty$, $C(x) \to 1$, $\tilde{T}(x) \to 0$ for $x \to +\infty$. The function $\varphi(t)$ is continuous, it is $\varphi(T) \equiv$ for $0 \leq T \leq \varepsilon$, $\varphi(T) > 0$

Card 1/2

APPROVED FOR RELEASE: 03/13/

The numeric determination of the ... S/044/62/000/005/018/072
C111/C333

for $\varepsilon < T < 1$. The solution of the Cauchy problem is given in the form $C(x,t) = C_0(x-\omega_0 t) + u(x,t)$, $T(x,t) = T_0(x-\omega_0 t) + v(x,t)$. It is assumed that there exist only one constant ω_0 and only one quasi-stationary solution to (1) with the form $\{C_0(x-\omega_0 t), T_0(x-\omega_0 t)\}$, so that $u(x,t)$ and $v(x,t)$ for $t \to \infty$ and arbitrary monotonic initial functions $\tilde{C}(x)$, $\tilde{T}(x)$ tend to zero. Two numerical methods are described for determining the number ω_0 and the quasi-stationary solution. These methods have been tested by the authors with the help of the computer BESM (БЭСМ). The first method consists of the integration of the Cauchy problem for (1) using an implicit difference scheme. According to the second method, a boundary value problem must be solved for a certain system of ordinary differential equations satisfied by the quasi-stationary solution $\{C_0(\xi), T_0(\xi)\}$.

[Abstracter's note: Complete translation.]

Card 2/2

"APPROVED FOR RELEASE: 03/13/2001 CIA-RDP86-00513R000927910012-0

DEVYATKOVA, Ye. D.; IOFFE, A. V.; MOYZHES, B. Ya.; SMIRNOV, I. A.; KUTASOV, B. A.; GURYEVA, E. A.

"Change of thermal conductivity of the crystal lattice at uniaxial elastic stress or at the introduction of impurities and thermal imperfections."

report submitted for Intl Conf on Physics of Semiconductors, Paris, 19-24 Jul 64.

APPROVED FOR RELEASE: 03/13/2001 CIA-RDP86-00513R000927910012-0"

"APPROVED FOR RELEASE: 03/13/2001 CIA-RDP86-00513R000927910012-0

GRIGOR'YANTS, A.S.; KUTASOV, G.B.; TARAKAN, N.A.; ROVKAKH, S.Ye., inzhener, nauchnyy redaktor; PERELYGIN, G.M., redaktor izdatel'stva; YUDINA, L.A., redaktor izdatel'stva; PERSON, M.N., tekhnicheskiy redaktor

[Standard repair enterprises in construction organizations] Tipovye remontnye predpriiatiia stroitel'nykh organizatsii. Moskva, Gos. izd-vo lit-ry po stroit. i arkhit., 1957. 127 p. (MLRA 10:6)

(Building machinery--Maintenance and repair)

APPROVED FOR RELEASE: 03/13/2001 CIA-RDP86-00513R000927910012-0"

"APPROVED FOR RELEASE: 03/13/2001 CIA-RDP86-00513R000927910012-0

S/194/61/000/011/010/070
D256/D302

9,4320

AUTHOR: Kutasov, I.M.

TITLE: Specification of thermistor resistance dependence upon temperature

PERIODICAL: Referativnyy zhurnal. Avtomatika i radioelektronika, no. 11, 1961, 27, abstract 11 A218 (V sb. Teplo- i massoobmen v merzlykh pochvakh i gorn. porodakh. M., AN SSSR, 1961, 110-114)

TEXT: Semiconductor resistance thermometers (SRT) are considered, of high temperature coefficients (6% for 1°) and a small size but requiring individual calibration. Expressions are presented for SRT calculations, applicable to various types of SRT. A method of calibration using three points is described and applied to thermistors of the following types: MMT-4, MMT-1 and MMT-6. The accuracy of the method can be increased by using additional check points. The temperature dependence of the thermistors is presented

Card 1/2

APPROVED FOR RELEASE: 03/13/2001 CIA-RDP86-00513R000927910012-0"

"APPROVED FOR RELEASE: 03/13/2001 CIA-RDP86-00513R000927910012-0

S/194/61/000/011/010/070
D256/D302

Specification of thermistor...

in the form of tables. 1 figure. 5 references. [Abstracter's note: Complete translation]

Card 2/2

APPROVED FOR RELEASE: 03/13/2001 CIA-RDP86-00513R000927910012-0"

"APPROVED FOR RELEASE: 03/13/2001 CIA-RDP86-00513R000927910012-0

Teplo-i massoobmen v merzlykh tolshchakh zemnoy kory (Heat and Mass Transfer in the Frozen Strata of the Earth's Crust) Moscow, Izd-vo AN SSSR, 1963 213p.
Research by the staff of the Heat-and Mass-Transfer Division of the Institute of Permafrost Study, Siberian Branch, AS USSR.

Ivanov, N.S. On the Question of the Possibility of Determining the Thermal Conductivity Coefficient for Cryogenic Media Using the Theory of the Regular Thermal Regime 157

Filippov, P.I. An Instrument for the Determination of the Thermal Conductivity Coefficient of Rocks in Boreholes Without Casings 160

Korennov, B.I., and V.A. Savinov. An Instrument for Measuring the Dielectric Permeability of Rock Samples 165

Kutasov, I.M. Speed Determination of Thermal Convection Currents in Boreholes 168

Ivanov, N.S. Interference Method for the Determination of Thermal Currents in Soils and Rocks 175

Card 5/7

APPROVED FOR RELEASE: 03/13/2001 CIA-RDP86-00513R000927910012-0"

"APPROVED FOR RELEASE: 03/13/2001 CIA-RDP86-00513R000927910012-0

KUTASOV, I.M.

Restoration of the temperature field of rocks after boring a well. Izv. AN SSSR. Ser. geofiz. no.5:742-746 My '64. (MIRA 17:6)

APPROVED FOR RELEASE: 03/13/2001 CIA-RDP86-00513R000927910012-0"

"APPROVED FOR RELEASE: 03/13/2001 CIA-RDP86-00513R000927910012-0

FA 16/49T49

USSR/Engineering Jul 48
Peat Industry
Peat - Production

"Let Us Consolidate the First Commendable Achievements in the Gathering of Chunk Peat," N. F. Kutasov Glavtorf MES, 3 pp

"Torf Prom" No 7

Preparedness of most peat enterprises for 1948 season has enabled them to take advantage of favorable weather and commence hydropeat operations ahead of schedule. Tabulates percent increases in output of various plants. However, these successes

[redacted] 16/49T49

USSR/Engineering (Contd) Jul 48

must be consolidated by sustained efforts. Stresses importance of ensuring efficient drying of unusually large supplies of peat.

[redacted] 16/49T49

KUTASOV, N. F.

APPROVED FOR RELEASE: 03/13/2001 CIA-RDP86-00513R000927910012-0"

"APPROVED FOR RELEASE: 03/13/2001 CIA-RDP86-00513R000927910012-0

KUTASOV, N. YU.
25535

Zakrepit' Pervye Uspekhi Po
Dobyche Kuskovogo Torfa. Torfl.
Prom-Stb. 1948, No. 7, S. 1-3

SO: LETOPIS NO. 30, 1948

APPROVED FOR RELEASE: 03/13/2001 CIA-RDP86-00513R000927910012-0"

"APPROVED FOR RELEASE: 03/13/2001 CIA-RDP86-00513R000927910012-0

BREKHOV, V.V.; NAZARENKO, V.R.; KUTASOV, R.F.

Molding the nave of a gear wheel according to a segmental pattern. (MIRA 14:5)
Lit. proizv. no. 5:43-44 My '61.
(Molding (Founding))

APPROVED FOR RELEASE: 03/13/2001 CIA-RDP86-00513R000927910012-0"

"APPROVED FOR RELEASE: 03/13/2001 CIA-RDP86-00513R000927910012-0

67384

SOV/181-1-9-2/31

24.775

Pa(3)

AUTHORS: Vinogradova, M. N., Golikova, O. A., Yefimova, V. A., Kutasov, V. A., Stavitskaya, T. S., Stil'bans, L. S., Sysoyeva, L. M.

TITLE: Investigation of the Scattering Mechanism of Carriers in Some Semimetals

PERIODICAL: Fizika tverdogo tela, 1959, Vol 1, Nr 9, pp 1535 - 1544 (USSR)

ABSTRACT: The above investigations were conducted on lead tellurides and bismuth, and aimed at the following: 1) with electrons scattering on thermal vibrations of the crystal lattice, the dependence of the time τ required for the traveling of the free pathlength on the intensity of thermal vibrations and on the energy of electrons should be determined. 2) In the scattering on the ionized impurity atoms one finds the dependence of τ on the concentration of the impurities and also on the energy of the electrons. A qualitative picture of these phenomena should then be determined on the basis of the quantitative ratios thus determined. The investigations were mainly conducted on polycrystalline samples produced by powder metallurgy. The dependence of τ on the energy ε of the electron and also on the intensity of the thermal vibrations is still unclear; these

Card 1/4

dependences, however, can be separated from one another by appropriate investigations. Among other things, the following holds for lead telluride: $u \sim T^{-5/2}$ holds throughout the temperature range investigated for the mobility of a sample with the concentration of $5.7 \cdot 10^{17}$. In the case of concentrations of $2.4 \cdot 10^{18}$ and $1.5 \cdot 10^{19}$ $u \sim T^{-5/2}$ holds in the range of high temperatures, and in the case of low temperatures $u \sim T^{-3/2}$ holds. The latter sample is already partially degenerated at low temperatures, and this degeneration becomes stronger with increasing concentration of the carriers. The two-phonon processes are likely to play the principal part at higher temperatures. The temperature dependence of the mobility of degenerated and non-degenerated samples is characterized by the factor T^{m}. In this connection $m = -1/2$ holds, which corresponds to the electron scattering on the acoustic branch of the atom lattice. The dependences of the thermoelectromotive force on the temperature and on the

Card 2/4

concentration of the carriers are in satisfactory agreement with the theory. Also in the case of n-types Bi_2Te_3 and Bi_2Se_3 the dependence of the thermoelectromotive force on the concentration of the carriers is in good agreement with the theory. This also holds for the temperature dependence of mobility in Bi_2Te_3 with low thermoelectromotive forces and with low temperatures. The temperature-dependence of mobility is steeper with weakly degenerated samples of PbTe and Bi_2Te_3 than in the case of the strongly degenerated ones. Precisely the contrary, however, holds for bismuth sulfide. Next, the authors investigate the scattering of electrons on the ions of an impurity for the alloy 80% Bi_2Te_3 + 20% Bi_2Se_3 on pressed samples of the n-type. Cu^{5} (donor) [illegible] ceptor) were selected as impurities. Mobility d[illegible] iably with increasing number of ions. In bismuth [illegible], with scattering on the ions of the impurity, th[illegible] uired by the electrons for traveling through the fr[illegible] alength does not depend on energy. Results obtained in the investigation under

Card 3/4

review agree with Arginsoy's theory (Ref 5). For Bi_2Te_3 $\frac{1}{u(n)} = \frac{1}{u_0(n)} + S_i n^{1/2}$ holds. Here u_0 denotes the theoretical dependence of u on n for $n = 1/2$, where n denotes the number of electrons (and ions) and S_i is the transversal cross section of the ion. A similar relation also holds for the dependence of the motion on temperature. There are 19 figures and 6 references, 4 of which are Soviet.

ASSOCIATION: Institut poluprovodnikov AN SSSR Leningrad (Institute of Semiconductors of the AS USSR, Leningrad)

SUBMITTED: May 19, 1958

APPROVED FOR RELEASE: 03/13/2001 CIA-RDP86-00513R000927910012-0"

"APPROVED FOR RELEASE: 03/13/2001 CIA-RDP86-00513R000927910012-0

L 51546-65 EWT(1)/EPA(s)-2/EWT(m)/EPF(n)-2/EWG(v)/EWG(m)/EPR/EWP(t)/EWP(b)/
EWA(1) Pe-5/Ps-4/Pt-7/Pu-4 IJP(c) RDW/JD/WW

ACCESSION NR: AP5010738 UR/0181/65/007/004/1221/1227

AUTHOR: Gurieva, Ye. A.; Zaslavskiy, A. I.; Kutasov, V. A.; Smirnov, I. A.

TITLE: Thermal conductivity of solid solutions based on bismuth telluride

SOURCE: Fizika tverdogo tela, v. 7, no. 4, 1965, 1221-1227

TOPIC TAGS: bismuth compound, thermal conductivity, solid solution, ordered solution, covalent radius

ABSTRACT: This is a continuation of an earlier investigation of solid solutions on the basis of Bi_2Te_3 in the region where there is no ordering. In the present study, the authors consider the behavior of the thermal resistance of complicated solid solutions in the ordering region. The test objects were solid solutions of bismuth sulfide and antimony sulfide, in which partial ordering is observed. The samples were prepared by directional crystallization from a melt of stoichiometric composition. The solid solutions up to 15% in steps of 1 mol.% were prepared. The apparatus was described elsewhere (FTT v. 2, 738, 1960). The measurements were carried out in the temperature interval 80--120K to eliminate the contribution made to the thermal conductivity by bipolar diffusion of electrons and holes. Both systems of

Card 1/2

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ACCESSION NR: AP5010738

solid solutions display a kink in the linear dependence of the additional thermal resistivity on the concentration of the second component. This kink is attributed to the occurrence of partial ordering in the layers of tellurium. An analysis of the ratio of the additional thermal resistivities varies in the case of all the solid solutions like the ratio of the differences of the covalent radii of the substituted and substituting atoms. The presence of partial ordering was confirmed by x-ray diffraction investigations of the changes in the lattice parameters and of the interplanar distances. The procedure for the measurement of the lattice parameters is analyzed in some detail in an appendix. Orig. art. has: 4 figures, 4 formulas, and 2 tables.

ASSOCIATION: Institut poluprovodnikov AN SSSR, Leningrad (Institute of Semiconductors, AN SSSR)

SUBMITTED: 29Oct64 ENCL: 00 SUB CODE: SS, TD

NR REF SOV: 008 OTHER: 005

Card 2/2

APPROVED FOR RELEASE: 03/13/2001 CIA-RDP86-00513R000927910012-0"

"APPROVED FOR RELEASE: 03/13/2001 CIA-RDP86-00513R000927910012-0

29689
S/181/61/003/010/013/036
B111/B138

26.2532

AUTHORS: Goletskaya, A. D., Kutasov, V. A., and Popova, Ye. A.

TITLE: Production and examination of thermoelectric materials on Bi-Sb-Te base

PERIODICAL: Fizika tverdogo tela, v. 3, no. 10, 1961, 3002 - 3006

TEXT: Thermoelectric n- and p-type materials were produced by the method of oriented crystallization, and their thermoelectric properties were examined. Commercial Bi (99.97), twice vacuum-sublimed Te^{10}, and Sb of the type Cy-000 (Su-000) were used as starting materials. Zonal purification was carried out for better reproducibility of measured values. The specimens, Bi_2Te_3 (n-type) and a solid solution of 75 mole% of Sb_2Te_3 + 25 mole% of Bi_2Te_3 (p-type), were prepared by fusing at 600 - 700°C. Maximum efficiencies were $2.4 \cdot 10^{-3}$ and $3 \cdot 10^{-4}$ deg^{-1}, respectively. Maximum temperature difference at the thermocouple was ΔT_{max} = 70°C (with

Card 1/3

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"APPROVED FOR RELEASE: 03/13/2001 CIA-RDP86-00513R000927910012-0

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Production and examination of...

a temperature of +30°C at the hot junction). Thermo-emf α, electrical conductivity σ, specific heat conductivity $\varkappa$, and efficiency z were measured separately by a method proposed by T. C. Harman et al. (Ref. 17: J. Appl. Phys., 30, 1351, 1959). For Bi_2Te_3 it was established that $\varkappa = \varkappa_l + \varkappa_e$ (l = lattice, e = electron) if there is no diffusion of electron-hole pairs. $\varkappa_e$ may be determined as a function of σ by applying the Wiedemann-Franz law. $\varkappa_l$ drops with a rise of conductivity. The scattering cross section of phonons by impurity atoms was calculated using a formula supplied by A. V. Ioffe and A. F. Ioffe (Ref. 16: DAN SSSR, 96, 757, 1954). Compared with scattering cross sections by other atomic impurities, as for example in PbTe, a very high value S = [illegible] is found, where the scattering cross section $S = \beta a^6$, a being the lattice constant. The carrier concentration ranged between $(3.5 - 5)10^{[illegible]}$ cm^{-3}. $z_{max} = 2.4 \cdot 10^{-3}$ deg^{-1}. α, σ, $\varkappa$, and z were likewise measured for

Card 2/4 3

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B111/B138

Production and examination...

Bi-Sb-Te. $z_{max} = 3.0\ deg^{-1}$. The thermoelectric characteristics of the specimens are collected in Table 1. S. V. Ayrapetyants is thanked for advice and discussions. There are 3 figures, 2 tables, and 20 references: 12 Soviet and 8 non-Soviet. The three most recent references to English-language publications read as follows: R. W. Ure et al., Properties of Elemental and Compound Semiconductors. N. J., Interscience Publ., 1960. - D. A. Wright, Electronics, 32, 25, 1959. - T. C. Harman et al., J. Appl. Phys., 30, 1351, 1959.

ASSOCIATION: Institut poluprovodnikov AN SSSR Leningrad (Institute of Semiconductors AS USSR Leningrad)

SUBMITTED: May 11, 1961

Table 1. Thermoelectric characteristics of the four specimens. Legend: (1) Number of the element, (2) side of thermocouple and no. of specimen, (3) α, $\mu v/deg$, (4) σ, $ohm^{-1}.cm^{-1}$, (5) $\varkappa.10^3$, cal/cm.deg.sec, (6) $T_{hot\ junction}$ °C, (7) $T_{cold\ junction}$, °C, (8) ΔT_{max}, °C,

Card 3/4 3

APPROVED FOR RELEASE: 03/13/2001 CIA-RDP86-00513R000927910012-0"

"APPROVED FOR RELEASE: 03/13/2001 CIA-RDP86-00513R000927910012-0

KUTASOV, V.A., otv. red.; BEREZIN, A.B., red.izd-va; BOCHEVER, V.T., tekhn. red.

[Thermoelectric properties of semiconductors] Termoelektricheskie svoistva poluprovodnikov; sbornik trudov I i II soveshchaniia po termoelektrichestvu. Moskva, Izd-vo AN SSSR, 1963. 153 p. (MIRA 16:8)

1. Akademiya nauk SSSR. Institut poluprovodnikov.
(Semiconductors) (Transistors)

APPROVED FOR RELEASE: 03/13/2001 CIA-RDP86-00513R000927910012-0"

"APPROVED FOR RELEASE: 03/13/2001 CIA-RDP86-00513R000927910012-0

S/0181/64/006/008/2453/2456

ACCESSION NR: AP4043370

AUTHORS: Guriyeva, Ye. A.; Kutasov, V. A.; Smirnov, I. A.

TITLE: Thermal conductivity of crystalline lattice of solid solutions based on bismuth telluride

SOURCE: Fizika tverdogo tela, v. 6, no. 8, 1964, 2453-2456

TOPIC TAGS: solid solution, bismuth telluride, crystal lattice, crystal growth, directional crystallization, thermal conductivity

ABSTRACT: It is pointed out that earlier experiments were made only at room temperature and failed to allow for the influence of many extraneous factors. To correct these shortcomings and to increase the number of investigated solid solutions, the authors measured the thermal conductivity of Bi_2Te_3 and of solid solutions on its basis in the temperature interval 80--120K. The solid solu-

Card 1/5

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"APPROVED FOR RELEASE: 03/13/2001 CIA-RDP86-00513R000927910012-0

ACCESSION NR: AP4043370

tions investigated were $(Bi-Sb)_2Te_3$, $Bi_2(Te-Se)_3$, $Bi_2(Te-S)_3$, $(Bi-In)_2Te_3$, $(Bi-Sb)_2(Te-Se)_3$, $(Bi-Sb)_2(Te-S)_3$, and $Bi_2(Te-Se-S)_3$. The Bi_2Te_3 crystals and the solid solutions were obtained by directional crystallization from a melt with stoichiometric composition of the components. It is shown that if the added compound crystallizes in the same type of lattice as the host matrix (isomorphic substitution), then the crystal lattice distortion around the impurity atom, and consequently also the phonon scattering, will be smaller than in the case of heteromorphic substitution. It is observed also that at low concentration of the introduced second component in the solid solutions, the total additional thermal resistance is the sum of the resistances of the individual components. "The authors thank Ye. D. Devyatkov for a discussion of the results." Orig. art. has: 5 figures and 1 table.

ASSOCIATION: Institut poluprovodnikov AN SSSR, Leningrad (Institute

Card 2/5

APPROVED FOR RELEASE: 03/13/2001 CIA-RDP86-00513R000927910012-0"

"APPROVED FOR RELEASE: 03/13/2001 CIA-RDP86-00513R000927910012-0

ACCESSION NR: AP4043370

of Semiconductors, AN SSSR)

SUBMITTED: 06Mar64

SUB CODE: SS

NR REF SOV: 004

ENCL: 02

OTHER: 012

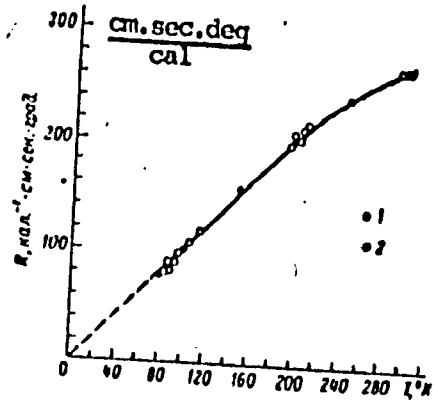
Card 3/5

APPROVED FOR RELEASE: 03/13/2001 CIA-RDP86-00513R000927910012-0"

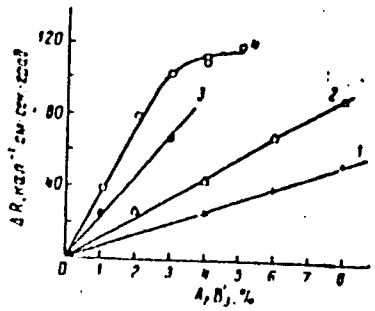
"APPROVED FOR RELEASE: 03/13/2001 CIA-RDP86-00513R000927910012-0

ACCESSION NR: AP4043370

ENCLOSURE: 01



Dependence of thermal resistivity of Bi_2Te_3 crystal lattice on the temperature. 1 - data by others, 2 - present data



Dependence of change in thermal resistivity on the concentration of the second component at 100C. 1 - $(Bi-Sb)_2Te_3$, 2 - $Bi_a(Te-Se)_3$, 3 - $(Bi-In)_2Te_3$, 4 - $Bi_2(Te-S)_3$

Card 4/5

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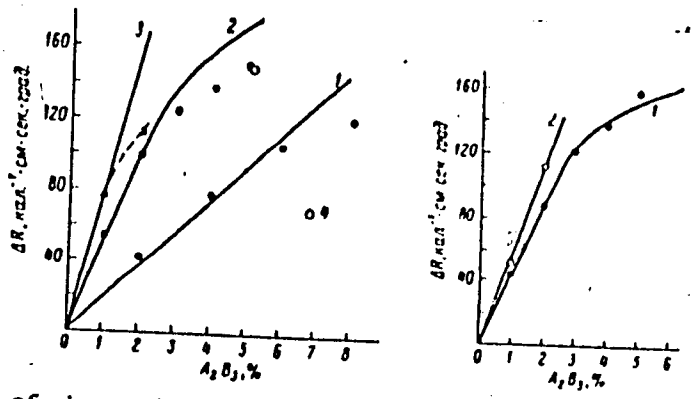
ACCESSION NR: AP4043370

ENCLOSURE: 02



Dependence of change in temperature resistivity on the concentration of the second component. Left: 1 - $(Bi-Sb)_2(Te-Se)_3$, 2 - $Bi_2(Te-S-Se)_3$, 3 - Bi_2Te_3 - In_2Te_3-Sb_2Te_3-Bi_2Se_3-Bi_2S_3, 4 - specimen obtained at slower crystallization rate. Right: 1 - $(bi-Sb)_2(Te-S)_3$, 2 - Bi_2Te_3-Bi_2Se_3-Bi_2S_3-Sb_2Te_3.

Card 5/5

APPROVED FOR RELEASE: 03/13/2001 CIA-RDP86-00513R000927910012-0"

"APPROVED FOR RELEASE: 03/13/2001 CIA-RDP86-00513R000927910012-0

[illegible], [illegible]; [illegible]; [illegible]
[illegible], A.[illegible]; [illegible]
[illegible], T.Ye., otv. [illegible]; [illegible]

[illegible] and materials [illegible]
conferences published [illegible]
materialy [illegible]
nye za [illegible]
[illegible], [illegible]. [illegible] p.

1. Akademiya nauk [illegible].

APPROVED FOR RELEASE: 03/13/2001 CIA-RDP86-00513R000927910012-0"

"APPROVED FOR RELEASE: 03/13/2001 CIA-RDP86-00513R000927910012-0

GALUNOVA, Z.P.; GUDANOVA, N.P.; LABETSKAYA, I.G.; BARZAKOVSKIY, V.P., doktor khim. nauk, red.; KUTASOVA, E.I., red.

[Bibliographical index of the work of the research co-workers of the I.V.Grebenshchikov Institute of the Chemistry of Silicates of the Academy of Sciences of the U.S.S.R., 1948-1961] Bibliograficheskii ukazatel' rabot nauchnykh sotrudnikov Instituta khimii silikatov im. I.V. Grebenshchikova AN SSSR 1948-1961 gg. Leningrad, AN SSSR 1963. 168 p. (MIRA 17:1)

1. Akademiya nauk SSSR. Institut khimii silikatov.

APPROVED FOR RELEASE: 03/13/2001 CIA-RDP86-00513R000927910012-0"

"APPROVED FOR RELEASE: 03/13/2001 CIA-RDP86-00513R000927910012-0

VILENSKAYA, Raisa Markovna; FRENKEL', S.Ya., doktor fiz.-mat. nauk, red.; ALEKSEYEVA, V.P., red.; KUTAKOVA, [illegible], red.

[High-molecular compounds; Bibliographic index of Soviet and foreign books, 1930-1963] Vysokomolekuliarnye soedineniia; bibliograficheskii ukazatel' otechestvennykh i zarubezhnykh knig 1930-1963. Leningrad, 1965. 3[illegible] p. (MIRA 18:10)

1. Akademiya nauk SSSR. Biblioteka.

APPROVED FOR RELEASE: 03/13/2001 CIA-RDP86-00513R000927910012-0"

"APPROVED FOR RELEASE: 03/13/2001 CIA-RDP86-00513R000927910012-0

KUTASSY, Benedek, okleveles gepeszmernok

Code transmitting counter. Meres automat 12 no. 1: 31-32 '64.

1. Mechanikai Meromuszerek Gyara.

APPROVED FOR RELEASE: 03/13/2001 CIA-RDP86-00513R000927910012-0"

"APPROVED FOR RELEASE: 03/13/2001 CIA-RDP86-00513R000927910012-0

KUTASSY, Benedek

Development of airplane equipment. Jarmu mezo gep 5 no.1: 14-19 Mr '58.

APPROVED FOR RELEASE: 03/13/2001 CIA-RDP86-00513R000927910012-0"

"APPROVED FOR RELEASE: 03/13/2001 CIA-RDP86-00513R000927910012-0

L 01107-66 EPF(c)/EWP(j)

ACCESSION NR: AT5022326 HU/2502/64/041/003/0265/0268

AUTHOR: Medzihradszky-Schweiger, Hedvig (Budapest); Kutassy, Sara (Budapest)

TITLE: Contributions to the microdetermination of phosphorus in phosphorus-containing organic compounds

SOURCE: Academia scientiarum hungaricae. Acta chimica, v. 41, no. 3, 1964, 265-268

TOPIC TAGS: phosphorus, organic phosphorus compound, microchemical analysis

Abstract: [German article] The method described for the microdetermination of phosphorus in organophosphorus compounds such as nucleotids and phosphoric acid esters is based on incinerating the sample in the wet state and titrating the resulting material (containing all phorphorus in the form of orthophosphate ions) with a cerium trichloride solution. The combustion was complete and the results correlated well with those obtained by the methods involving sample incineration in an oxygen atmosphere. Orig. art. has 1 figure and 1 table.

ASSOCIATION: Institut fur Organische Chemie der L. Eotvos Universitat, Budapest (Institute of Organic Chemistry, L. Eotvos University)

Card 1/2

APPROVED FOR RELEASE: 03/13/2001 CIA-RDP86-00513R000927910012-0"

"APPROVED FOR RELEASE: 03/13/2001 CIA-RDP86-00513R000927910012-0

L 01107-66

ACCESSION NR: AT5022326

SUBMITTED: 14Jan64 ENCL: 00 SUB CODE: OC, GC

NO REF SOV: 000 OTHER: 008 JPRS

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APPROVED FOR RELEASE: 03/13/2001 CIA-RDP86-00513R000927910012-0"

"APPROVED FOR RELEASE: 03/13/2001 CIA-RDP86-00513R000927910012-0

KUTASY, Lajos, Kossuth-díjas

Significance of applying stressed concrete sleepers from the point of view of the national economy. Vasut 13 no.7:3-4 Jl '63.

APPROVED FOR RELEASE: 03/13/2001 CIA-RDP86-00513R000927910012-0"

"APPROVED FOR RELEASE: 03/13/2001 CIA-RDP86-00513R000927910012-0

ASKEROVA, R.K.; AKHUNDOV, G.F.; ISAYEV, Ya.M.; KARYAGIN, I.I.; PRILIPKO, L.I.; SOFIYEVA, R.M. Prinimali uchastiye: KUTATELADZE, A.; MANDENOVA, I.P.; LINCHEVSKIY, I.A.; POBEDIMOVA, Ye.G.; POYARKOVA, A.I.; FEDOROV, An.A.; KHARADZE, A.L.; YUKSIP, A.Ya.; VARUNTSYAN, I., red. izd-va; POGOSOV, V., tekhn. red.

[Flora of Azerbaijan] Flora Azerbaidzhana. Baku, Izd-vo Akad. nauk Azerbaidzhanskoi SSR. Vol.8. Rubiaceae - Compositae. 1961. 688 p. (MIRA 14:11)

(Azerbaijan - Dicotyledons)

APPROVED FOR RELEASE: 03/13/2001 CIA-RDP86-00513R000927910012-0"

"APPROVED FOR RELEASE: 03/13/2001 CIA-RDP86-00513R000927910012-0

circuits containing

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"APPROVED FOR RELEASE: 03/13/2001 CIA-RDP86-00513R000927910012-0

SOV/124-57-8 8846

Translation from: Referativnyy zhurnal, Mekhanika, 1957, Nr 8, p 40 (USSR)

AUTHORS: Dzidziguri, A. A., Kutateladze, A. A.

TITLE: Some Problems of the In-series Operation of Mine Ventilators (Nekotoryye voprosy posledovatel'noy raboty shakhtnykh ventilyatorov)

PERIODICAL: Tr. Gruz. politekhn. in-ta, 1954, Nr 32, pp 109-122

ABSTRACT: An analysis of the comparative effectiveness of various mine-ventilator arrangements. The greatest stability of operation and highest efficiency is afforded by an arrangement which permits switching the ventilators to individual, in-series, and parallel operation depending on changes in the equivalent opening of the mine shaft and the resistance offered by the ventilation-flow route. Bibliography: 3 references.

V. D. Sokolov

Card 1/1

APPROVED FOR RELEASE: 03/13/2001 CIA-RDP86-00513R000927910012-0"

"APPROVED FOR RELEASE: 03/13/2001 CIA-RDP86-00513R000927910012-0

DZIDZIGURI, Archil Amvrosiyevich; MUSKHELISHVILI, Vakhtang Levanovich; KUTATELADZE, Aslan Aleksandrovich; ONIANI, Shurman Il'ich; Prinimali uchastiye: MATIKASHVILI, T.I.; DURMISHIDZE, N.Sh.; KERSTEN, I.O., otv. red.; D'YAKOVA, G.B., red.izd-va; LOMILINA, L.N., tekhn. red.

[Simultaneous operation of mine ventilators] Sovmestnaia rabota shakhtnykh ventiliatorov. Moskva, Gos. nauchno-tekhn. izd-vo lit-ry po gornomu delu, 1961. 182 p. (MIRA 15:2)

(Fans, Mechanical) (Mine ventilation)

APPROVED FOR RELEASE: 03/13/2001 CIA-RDP86-00513R000927910012-0"

"APPROVED FOR RELEASE: 03/13/2001 CIA-RDP86-00513R000927910012-0

[illegible]TATELADZE, A. I.

Endemic plants of Imeretian limestones. Zam. po sist. i geog. rast. no.22:35-42 [illegible]. (MIRA 14:7)
(Imeretia--Botany)

APPROVED FOR RELEASE: 03/13/2001 CIA-RDP86-00513R000927910012-0"

"APPROVED FOR RELEASE: 03/13/2001 CIA-RDP86-00513R000927910012-0

KUTATELADZE, A.I.

Endemic plants of Georgia among the limestone flora of Imeretiya. Vest. Bot. ob-va Gruz. SSR. no.1:21-39 '62. (MIRA 17:1)

APPROVED FOR RELEASE: 03/13/2001 CIA-RDP86-00513R000927910012-0"

"APPROVED FOR RELEASE: 03/13/2001 CIA-RDP86-00513R000927910012-0

KUTATELADZE, G.I.

Pathomacromorphological changes in stenoses caused by ulcers. Soob. AN Gruz. SSR 20 no.6:737-740 Je '58. (MIRA 11:10)

1.Tbilisskiy gosudarstvennyy meditsinskiy institut. Predstavleno akademikom K.D. Eristavi.
(PYLORIC STENOSIS) (DUODENUM--ULCERS)

APPROVED FOR RELEASE: 03/13/2001 CIA-RDP86-00513R000927910012-0"

"APPROVED FOR RELEASE: 03/13/2001 CIA-RDP86-00513R000927910012-0

KUTATELADZE, I. G.

27

Making tannins from smoke tree and sumac. I. G. Kutateladze and K. S. Mudzhiri. *Farmatsiya* 9, No. 5, 1-7(1946). Yield of tannin has been raised 75% over the method of Ya. G. Mazover (*Introducing tannin production from smoke tree and sumac in the Batum caffeine mill in 1940* (in Russian)). A battery of diffusers is employed (batch size 100 kg. leaf and 400 l. water) at 20-22°. Each diffuser yields 225 l. of liquor, to 675 l. of liquor 50 kg. NaCl and 3.5 kg. active carbon are added. After filtering through a Cu screen the filtrate is evapd. in vacuum, then treated with 40 l. BuOH and 165 l. BuOAc. Emulsification occurs in 30-40 min.; the emulsion may be broken by standing overnight or by centrifuging. The yield is approx. 3.5% of tannin, calcd. on leaf wt., as against 2% in the Mazover process. Greater speed and other savings multiply output 8-10 times; the product is superior in stability, water soly., and freedom from thermal degradation. It meets Soviet Pharmacopeia requirements. Julian F. Smith

APPROVED FOR RELEASE: 03/13/2001 CIA-RDP86-00513R000927910012-0"

"APPROVED FOR RELEASE: 03/13/2001 CIA-RDP86-00513R000927910012-0

KUTATELADZE, I. G.

27

Solvents for tannin from smoke tree and sumac. I. G. Kutateladze and K. S. Mudzhiri. *Farmatsiya* 9, No. 5, 7-10(1946).—Either EtOAc or BuOH-BuOAc blends will ext. tannin (I) from Chinese oak galls. With EtOAc, I is superior to that imported from America; this ext. is also superior to the BuOH-BuOAc ext. A domestic factor favoring EtOAc as solvent is the Soviet Pharmacopeia requirement that I must be wholly sol. in EtOAc. Two 1-hr. extns. with EtOAc yield 4.1% of I, calcd. on wt. of leaf. Julian F. Smith

APPROVED FOR RELEASE: 03/13/2001 CIA-RDP86-00513R000927910012-0"

"APPROVED FOR RELEASE: 03/13/2001 CIA-RDP86-00513R000927910012-0

KUTATELADZE I. G.

[illegible] : [illegible]

[illegible] : [illegible]macology, [illegible]

[illegible] : [illegible], No. 12 [illegible]8. No. 56[illegible]

[illegible]

ORIG. PUB. : [illegible]

[illegible]

APPROVED FOR RELEASE: 03/13/2001 CIA-RDP86-00513R000927910012-0"

"APPROVED FOR RELEASE: 03/13/2001 CIA-RDP86-00513R000927910012-0

KUTATELADZE, I.G.

Cardiacs obtained from plants in the Georgian S.S.R. Med.prom. 11 no.6:28-32 Je '57. (MLRA 10:8)

1. Tbilisskiy nauchno-issledovatel'skiy khimiko-farmatsevticheskiy institut
(CARDIAC GLYCOSIDES) (GEORGIA--BOTANY, MEDICAL)

APPROVED FOR RELEASE: 03/13/2001 CIA-RDP86-00513R000927910012-0"

"APPROVED FOR RELEASE: 03/13/2001 CIA-RDP86-00513R000927910012-0

KUTATELADZE, I.G.

Apparatus for washing ampules. Khim. i med. no. 12:131-136 '59. (MIRA 13:10)

(DRUG INDUSTRY—EQUIPMENT AND SUPPLIES)

APPROVED FOR RELEASE: 03/13/2001 CIA-RDP86-00513R000927910012-0"

"APPROVED FOR RELEASE: 03/13/2001 CIA-RDP86-00513R000927910012-0

TARKHANOV, I.R.[deceased]; SAAKASHVILI, M.G., prof.; GEDEVANISHVILI, D.M., prof., zasl. deyatel' nauki, otv. red.; ASATIANI, V.S., red.; ZHGENTI, V.K., red.; ZURABASHVILI, A.D., red.; KAVTARADZE, P.P., red.; ERISTAVI, K.D., akademik, prof., red.; TSULUKIDZE, A.P., red.; TATISHVILI, I.Ya., red.; KUTATELADZE, I.G., red.; VANIDZE, TS.V., red. izd-va; KHUNDADZE, Z., tekhn. red.

[Selected writings] Izbrannye sochineniia. Tbilisi, Gos. izd-vo "Sabchota Sakartvelo," 1961. 393 p. (MIRA 15:6)

1. Chlen-korrespondent Akademii nauk Gruzinskoy SSR (for Gedevanishvili). 2. Akademiya nauk Gruzinskoy SSR (for Eristavi).
(Physiology)

APPROVED FOR RELEASE: 03/13/2001 CIA-RDP86-00513R000927910012-0"

"APPROVED FOR RELEASE: 03/13/2001 CIA-RDP86-00513R000927910012-0

DIASSAMIDZE, L.N.; KUTATELADZE, K.A.

Cave waters as water-supply sources in the Georgian S.S.R.
Trudy GPI no.6:77-84 '56. (MIRA 11:2)

1.Kafedra vodosnabzheniya i kanalizatsii Gruzinskogo politekhnicheskogo instituta im. S.M. Kirova, Tbilisi.
(Georgia--Water, Underground)

APPROVED FOR RELEASE: 03/13/2001 CIA-RDP86-00513R000927910012-0"

"APPROVED FOR RELEASE: 03/13/2001 CIA-RDP86-00513R000927910012-0

KUTATELADZE, K. S.

Kutateladze, K. S. - "The investigation of clay for the production of brick and tile in various areas of the Georgian SSR," A commemorative collection of transactions dedicated to the 25th anniversary of the Institute, (Gruz. politekhn. in-t im. Kirova, No 17), Tbilisi, 1948, p. 455-67, (Resume in Georgian)

SO: U-5240, 17, Dec. 53, (Letopis 'Zhurnal 'nykh Statey, No. 25, 1949).

APPROVED FOR RELEASE: 03/13/2001 CIA-RDP86-00513R000927910012-0"

"APPROVED FOR RELEASE: 03/13/2001 CIA-RDP86-00513R000927910012-0

KUTATELADZE K.S.

The corrosion resistance of grog bricks to furnace gases. K. S. Kutateladze and M. Ya. Alasaniya. *Trudy Inst. Metallu i Gornogo Dela, Akad. Nauk Gruzin. S.S.R.* 3, 217-31(1949)(Russian summary).—Oxygen, H_2O, and forced N_2 increase the corrosion action of Na_2CO_3 and Na_2SO_4. CO_2 decreases the corrosion of Na_2CO_3 owing to the decrease of the dissocn. of Na_2CO_3. By simultaneous action of Na_2SO_4 and CO_2, the corrosion increases because of mech. action. M. Charmandarian

MT

1

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"APPROVED FOR RELEASE: 03/13/2001 CIA-RDP86-00513R000927910012-0

KUTATELADZE, K.S.

AVGUSTINIK, A.I.; KUTATELADZE, K.S.

Technological testing of grog for the refractory plant of the Transcaucasian Metallurgical Industry [microfilm]. Trudy Inst. met. i gor. dela AN Gruz. SSR 2:281-287 '49. (MIRA 11:1)

(Refractory materials--Testing)

(Transcaucasia--Metallurgical plants)

APPROVED FOR RELEASE: 03/13/2001 CIA-RDP86-00513R000927910012-0"

"APPROVED FOR RELEASE: 03/13/2001 CIA-RDP86-00513R000927910012-0

KUTATELADZE, K.S.; GAMSAKHURDIYA, T.R.; KAKABADZE, N.A.

Georgian quartz sand as a casting material. Soobshcheniya Akad. Nauk Gruzin. S.S.R. 10, 223-9 '49.
(CA 47 no.22:12171 '53)

1. Georgia Branch All-Union Inst. Mineral Raw Materials, Tiflis.

APPROVED FOR RELEASE: 03/13/2001 CIA-RDP86-00513R000927910012-0"

"APPROVED FOR RELEASE: 03/13/2001 CIA-RDP86-00513R000927910012-0

KUTATELADZE, K. S.

"Problem of the Formation of Silicates of Magnesium in the Solid Phase."

SO: Ogneupory, No. 11, 1949. Cand. Tech. Sci., -c1949-.

APPROVED FOR RELEASE: 03/13/2001 CIA-RDP86-00513R000927910012-0"

"APPROVED FOR RELEASE: 03/13/2001 CIA-RDP86-00513R000927910012-0

C A

Formation of magnesium silicates in the solid phase. K. S. Kutateladze and V. I. Lutsenko. *Огнеупоры* 14, 499–508(1949).—$2MgO + SiO_2$, $10MgO + SiO_2$, and $MgO + 10SiO_2$ mixts. were fired at 900–1500°, the mineralogical compns. of fired mixts. were detd. with a microscope, and the phase compns. by selective soln. in dil. HCl. Successive reactions in the formation of Mg silicates in the solid phase appear to be (a) $2MgO + SiO_2 = Mg_2SiO_4$ and (b) $Mg_2SiO_4 + SiO_2 = 2MgSiO_3$. Regardless of the ratio of the components in the mixt., the formation of analytically determinable amts. of clinoenstatite commenced at 1200°, and of forsterite at 900°. The larger the excess of SiO_2 over the stoichiometric amt. required for forsterite, the lower the temp. and the shorter the time interval for the appearance of initial amts. of clinoenstatite. The forsterite mixt. and mixts. close to it were very easily affected by unequal mixing of the components; an excess of SiO_2 in sep. sections of the mixt. caused the formation of clinoenstatite above 1300°. An increase in the "mobility" (with rising temp.) of the structural particles of solid phases is the general condition for the rapid development of reactions and accompanying processes such as diffusion, polymorphic changes, and recrystn.

B. Z. Kamish

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"APPROVED FOR RELEASE: 03/13/2001 CIA-RDP86-00513R000927910012-0

KUTATELADZE, K. S.

27145. AVGUSTINIK. A. I., KUTATELADZE, K. S. , KAKABADZE, N. A. - Izucheniye dolomitov. Abano s tselyo polucheniya dolomitovogo poroshka dlya navarki dna martenovskikh pechey. Trudy (Gruz. Politekhn. In-t im. Kirova), No. 13, 1949, s.17[illegible]-[illegible].--Rezyume na gruz. Yaz. -Bibliogr: 6 Nazv.

SO: Letopis' Zhurnal'nykh Statey, Vol. 36, 1949

APPROVED FOR RELEASE: 03/13/2001 CIA-RDP86-00513R000927910012-0"

"APPROVED FOR RELEASE: 03/13/2001 CIA-RDP86-00513R000927910012-0

KUTATELADZE, V. S.

Investigation of Tkvibuli refractory clays for glass furnace refractories. A. I. AVGUSTINIK AND K. S. KUTATELADZE. *Soob. shcheniya Akad. Nauk Gruzinskoi S.S.R.* 11 [10] 613-17 (1950). Tests were made with Tkvibuli clay slate, Dzekh flint clay, and Tsekhlauri clay. Tkvibuli slate can be used without a bond for making refractory shapes without calcining to grog. The slate should be sorted to remove pyrite, particle size should not exceed 3 mm., and the firing should be done at 1400° to 1420° C. Tsekhlauri clay can be used as 15% bond for critical refractories. Only the DS grade of Dzekh clay is suitable for critical refractories. To obtain a strong body, DS material is mixed with 8 to 10% Tsekhlauri plastic clay and fired at 1400° to 1420°. For wall blocks, 45% 0.0 to 0.5 mm. and 55% 1 to 1.5 mm. is used, and for bottom blocks, 45% 0 to 0.5 mm. and 55% 1.5 to 2.5 mm. The shapes are formed by ramming. For feeder refractories, DS material (same size as for wall blocks) is cast in gypsum molds. The slip composition is flint clay 100, water 26 to 28, and calcined soda 0.2 part. The cast product is fired at 1320° to 1340°.

7-13-54

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"APPROVED FOR RELEASE: 03/13/2001 CIA-RDP86-00513R000927910012-0

PROCESSES AND PROPERTIES INDEX

Initial extent of contact of substances reacting in the solid phase. K. S. KUTATELADZE AND V. I. LUTSENKO. *Ogneupory*, 15 [1] 39-43 (1950).—In connection with previous experimental work (*Ceram. Abstracts*, 1950, April, p. 85c), "initial extent of contact of reacting substances" is defined as the ratio of the originally contacting moles to the stoichiometric moles in the mixture. By means of this concept, reaction rate in the above work is explained. It is concluded that rate of reaction is directly proportional to magnitude of initial extent of contact of reacting substances. The greater the difference in grain size of the components, the greater will a change in the ratio of the components affect the magnitude of the initial extent of contact (and also rate of reaction in the solid phase), provided all other conditions are equal. Further study is required to determine the possibility of calculating the initial extent of contact and using it for the mathematical interpretation of kinetic laws. B. Z. K.

Refractory clays of Kandar Section of Sbroshinsk deposit. K. S. KUTATELADZE, R. N. ZHIGINIDZE, AND V. N. SHAPAKIDZE. *Ogneupory*, 15 [12] 555-63 (1950). Extensive data are given on the physicochemical and ceramic characteristics of the clay. It is of low plasticity and suitable for making class B and C refractories. It can be used as grog by firing at 1000° or 1300°C. and as a bonding component provided it is ground fine. It can also be used alone and especially with Dzekhsk clay, added as a substitute for grog, to make grog free refractories with low shrinkage and satisfactory properties. Shapes can be made by plastic molding or by semidry pressing. Commercial scale tests are necessary. B. Z. K.

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"APPROVED FOR RELEASE: 03/13/2001 CIA-RDP86-00513R000927910012-0

KUTATELADZE, K. S.

PA 196T100

USSR/Metals - Foundry, Materials Jul 51

"Influence of Iron Compounds on Sand Capacity for Scorched Loam Formation," T. R. Gemsakhurdiya, Cand Tech Sci, K. S. Kutateladze, Cand Tech Sci, Tbilisi Polytech Inst

"Litey Proizvod" No 7, pp 26-28

Investigated capacity of quartz sand to form a scorched crust, sticking to steel castings, when sand has such admixts as magnetite, hematite, hydrated ferric oxide - limonite and pyrite. Pyrite is most harmful admixt, and

196T100

USSR/Metals - Foundry, Materials Jul 51
(Contd)

its content in sand should be limited to 0.15%. Least harmful admixt is ferric oxide which is permissible in sand up to 1.5%.

196T100

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"APPROVED FOR RELEASE: 03/13/2001 CIA-RDP86-00513R000927910012-0

USSR/Metals - Foundry, Materials Mar 52

"Influence of Mica and Feldspar on Sand Scorching," T. R. Gamsakhurdia, Engr, K. S. Kutateladze, Cand Tech Sci, Tbilisi Polytech Inst

"Litey Proizvod" No 3, p 28

Investigates effect of feldspar and mica on capability of sand to form a scorched crust on steel castings. Harmful effect of feldspar and mica is attributed to their low mp. They act as fluxing materials decreasing mp of molding mix. In addn,

212T94

Na_2O - Fe_2O_3 - SiO_2 ternary systems produce several eutectic compds with low mp. Max permissible amt of harmful admixts in molding mixt was established as 3% for mica and 7% for feldspar.

212T94

KUTATELADZE, K. S.

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"APPROVED FOR RELEASE: 03/13/2001 CIA-RDP86-00513R000927910012-0

KUTATELADZE, K. S., SHAPAKIDZE, V. N. ENG.

Portland Cement

Use of metallurgical high-content manganese slags in the manufacture of slag-portland cement. TSement 18 No. 4, 1952.

9. Monthly List of Russian Accessions, Library of Congress, December 1952, Uncl.

APPROVED FOR RELEASE: 03/13/2001 CIA-RDP86-00513R000927910012-0"

"APPROVED FOR RELEASE: 03/13/2001 CIA-RDP86-00513R000927910012-0

KUTATELADZE, K. S,

(3)

Chem Abs V48
1-25-54
Building Materials

Alunite cement. K. S. Kutateladze, O. P. Mchedlov-Petrosyan, and Kh. I. Gogicheva. *Doklady Akad. Nauk S.S.S.R.* 86, 1179-82(1952); *Silikattech* 4, 221-2(1953).—A rapidly hardening cement is produced from a mixt. of natural alunite and lime, or limestone. The raw material is an alunite-rich schist from Saghk. The alunite reacts with CaO at 900° to form Ca aluminates; the alkalies are volatilized at 1000 to 1200°C. The mix is only sintered, not fused to form an aluminate cementlike material. A mix of 1-2 parts alunite + 1 part CaO shows in the thermal-differential curve a strong endothermic effect at 500°, but endothermic effects at 621-650°, 810° and about 1150° (aluminate formation). $3CaO \cdot 3Al_2O_3$, $3CaO \cdot Al_2O_3$, $Na_2O \cdot Al_2O_3$, $3CaO \cdot SiO_2$ are identified by x-ray powder diagrams. The hydrated products show $Ca(OH)_2$, $Al_2O_3 \cdot H_2O$ and Ca aluminate and Ca silicate hydrates, and some Ca sulfate aluminate hydrate observed in microscopic samples. The chem. analyses of the sintered alunite cement show about SiO_2 12.3; Al_2O_3 16.7; CaO 15.8; SO_3 17.2; alkalies 1.3; Fe_2O_3 2; and ignition loss 1.5%. The mech. strengths of standard samples are satisfactory, the spontaneous heat evolution by hydration is distinctly similar to that of aluminate cements, with a rapid hardening beginning after 5 min., and setting ends after 10 to 15 min. The caloric effect was found to be about 80 cal./g. after 225 min. Retarding effects are observed if a 0.25% soln. of pine (tannin) ext. is added. W. Fitel

Inst. Metals & Mining, Acad Sci. Geo SSR

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"APPROVED FOR RELEASE: 03/13/2001 CIA-RDP86-00513R000927910012-0

KUTATELADZE, K. S.

(2) 3

Operation of feeders with high-alumina glassmelt. K. S. KUTATELADZE AND V. D. DEMCHENKO. *Steklo i Keram.*, 10 [illegible] 11–15 (1953).—In the Soviet Union, feeders have been operating with glassmelts of SiO_2 67 to 73.3, TiO_2 0 to 0.15, Al_2O_3 0.6 to 4.0, Fe_2O_3 0.3 to 1.8, CaO 8.0 to 10.7, MgO 0.2 to 2.5, K_2O 0 to 1.4, and Na_2O 13.5 to 16.4%. In 1947, feeders were installed at one plant and operated satisfactorily with glassmelts of SiO_2 67.5 to 68.4, Al_2O_3 5.9 to 7.5, Fe_2O_3 0.98 to 1.25, CaO 6.05 to 8.65, MgO 0.2 to 0.4, and R_2O 14.9 to 15.4%. Special studies undertaken with melts of various Al_2O_3 contents have shown that Al_2O_3 can be increased to 9.5% with a certain rise in alkali content (to 17.5 to 18%). B. Z. K.

APPROVED FOR RELEASE: 03/13/2001 CIA-RDP86-00513R000927910012-0"

"APPROVED FOR RELEASE: 03/13/2001 CIA-RDP86-00513R000927910012-0

KUTATELIDZE, K.S.; ZEDGENIDZE, Ye.N.; KHATIASHVILI, E.O.

Lightweight refractories from screenings and ashes of liptobiolith shale. Ogneupory 18 no.8:361-367 '53. (MIRA 11:10)

1. Institut metalla gornogo dela AN GruzSSR.
(Refractory materials) (Shale)

APPROVED FOR RELEASE: 03/13/2001 CIA-RDP86-00513R000927910012-0"

"APPROVED FOR RELEASE: 03/13/2001 CIA-RDP86-00513R000927910012-0

J. of Am. Ce. Soc.
I Feb. 1954
Cements, Limes
+ Plaster

Expanding cement from Portland cement and gazha. K. S. KUTATELADZE AND M. YA. ALASANIYA. *Tsement*, 19 [3] 18-19 (1953).—The addition of gazha (a clay-gypsum rock found mostly in Central Asia and the Caucasus) causes expansion of cement, depending on the amount and the temperature of burning. The linear expansion of gazha is 0.03 to 0.17%, but as the gypsum content in gazha increases, expansion increases. Expanding cement can be obtained by adding 15 to 20% gazha to Portland cement clinker. The resulting cement has a strength equal to that of the original Portland cement. Either raw or calcined gazha can be used. B.Z.K.

APPROVED FOR RELEASE: 03/13/2001 CIA-RDP86-00513R000927910012-0"

"APPROVED FOR RELEASE: 03/13/2001 CIA-RDP86-00513R000927910012-0

KUTATELADZE, K.S.; TAVADZE, F.N., redaktor; KAKABADZE, E.D., redaktor; TODUA, A.R., tekhnicheskiy redaktor

[Composition, properties, and use of gaize] Soutav, svoistva i primenenie gazhi. Tbilisi, Izd-vo Akad. nauk Gruzinskoi SSR, 1954. 202 p. (MLRA 8:10)
(Sandstone)

APPROVED FOR RELEASE: 03/13/2001 CIA-RDP86-00513R000927910012-0"

"APPROVED FOR RELEASE: 03/13/2001 CIA-RDP86-00513R000927910012-0

KUTATELADZE, K.S.; MCHEDLISHVILI-PETROSYAN, O.P.; GOGICHEVA, Kh.I.

Using gaize in making slag cement. Soob.AN Gruz.SSR 16 no.2:125-131 '55. (MLRA 9:2)

1.Akademiya nauk Gruzinskoy SSR, Institut metalla i gornogo dela, Tbilisi.Predstavleno chlenom-korrespondentom Akademii G.K.Gedevanishvili.

(Slag cement) (Gypsum)

APPROVED FOR RELEASE: 03/13/2001 CIA-RDP86-00513R000927910012-0"

"APPROVED FOR RELEASE: 03/13/2001 CIA-RDP86-00513R000927910012-0

15-57-3-3363

Translation from: Referativnyy zhurnal, Geologiya, 1957, Nr 3, p 131 (USSR)

AUTHORS: Kutateladze, K. S., Shapakidze, V. N.

TITLE: Sulfate Resistance in High-Manganese Slag-Cements and the Role of Manganese Sulfide in the Hardening of These Cements (Sul'fatostoykost' vysokomarganetsovykh shlakotsementov i rol' sul'fida marganetsa pri tverdenii etikh tsementov)

PERIODICAL: Tr. In-ta metalla i gorn. dela. AN GruzSSR, 1956, Nr 7, pp 231-238

ABSTRACT: The authors have shown that the dilution of Portland cement by high-manganese slags (especially silico-manganese) increases the sulfate resistance.

Card 1/1

no initials

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"APPROVED FOR RELEASE: 03/13/2001 CIA-RDP86-00513R000927910012-0

15-57-3-3377

Translation from: Referativnyy zhurnal, Geologiya, 1957, Nr 3, p 133 (USSR)

AUTHORS: Kutateladze, K. S., Zedginidze, Ye. N.

TITLE: Bzyba Dolomite--the Raw Material for Manufacturing Dolomitic Bricks (Bzybskiy dolomit-syr'ye dlya proizvodstva dolomitovogo kirpicha)

PERIODICAL: Soob. AN GruzSSR, 1956, Vol 17, Nr 2, pp 127-134

ABSTRACT: The most important deposits of Georgian dolomite for manufacturing dolomitic refractories are those in the Abkhazia and the Yugo-Osetinskaya oblast' (the Tkvarcheli, Bzyba, and Abano deposits). Tsnelisa serpentine was used as a stabilizer during preparation of the dolomitic bricks. The chemical compositions of the dolomite and of the serpentine are given in the Table (in percents). As seen in the Table, the dolomite contains small quantities of the sesquioxides and one percent SiO_2. The microscope shows the rock to consist of a fine-grained aggregate of idiomorphic crystals of dolomite. Under

Card 1/2

"APPROVED FOR RELEASE: 03/13/2001 CIA-RDP86-00513R000927910012-0

Kutateladze, K. S.

Distr: 4E2c

Preparation of refractory cement from dolomite and alunite. N. G. Dzhincharadze and K. S. Kutateladze (Inst. Metals and Mining, Acad. Sci. Georgian S.S.R., Tiflis). *Soobshchenia Akad. Nauk Gruzin. S.S.R.* 18, No. 1, 31-8(1957).—To replace alumina cement by less expensive and more abundant materials, domestic Caucasian dolomite and alunite were used. The alunites were (1) comparatively pure, (2) average; (3) considerably contaminated. The last is the most promising commercially. Cements were made as follows: (I) from 2 parts by wt. of dolomite and 1 part of alunite (1); (II) from 3.5 parts dolomite and 1 part alunite (2); and (III) from 3-3.5 parts dolomite and 1 part alunite (3). Fine-milled mixts. were sintered at 1100°, 900°, and 1000°, resp., in elec. globar furnaces, with 2-hr. soaking period. The sintered products were fine-milled. I consisted mainly of pentacalcium trialuminate, periclase, and $CaSO_4$; II, of β-dicalcium silicate, $CaSO_4$, and periclase; III was similar to II, but contained less $CaSO_4$. The cements were fast-setting and strong. The strength was max. at 200°, and declined gradually up to 800°. Beyond that, the decline was fast. Concrete on the basis of these cements with chrome-magnesite fillers can be used up to 1700°; under considerable stress, up to 1300-1400°. B. Ryshkewitch

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"APPROVED FOR RELEASE: 03/13/2001 CIA-RDP86-00513R000927910012-0

KUTATELADZE, K.S.; ZEDGINIDZE, Ye.N.; PIRTSKHALAVA, Ye.A.

Kvashava serpentinite as raw material in the production of forsterite refractories. Soob. AN Gruz. SSR 19 no.3:293-299 S '57. (MIRA 11:5)

1. Akademiya nauk Gruzinskoy SSR, Institut metalla i gornogo dela, Tbilisi. Predstavlenc chlenom-korrespondentom Akademii F.N. Tavadze.
(Georgia--Serpentinite)
(Refractory materials)

APPROVED FOR RELEASE: 03/13/2001 CIA-RDP86-00513R000927910012-0"

"APPROVED FOR RELEASE: 03/13/2001 CIA-RDP86-00513R000927910012-0

KUTATELADZE, K.S.; SHAPAKIDZE, V.N.; CHKHIVADZE, I.I.

Investigating serpentinites and talc-carbonates for the preparation of phosphate fertilizers. Trudy Inst.met. AN Gruz. SSR 9:207-212 '58. (MIRA 12:8)

(Phosphates) (Serpentine) (Talc)

APPROVED FOR RELEASE: 03/13/2001 CIA-RDP86-00513R000927910012-0"

"APPROVED FOR RELEASE: 03/13/2001 CIA-RDP86-00513R000927910012-0

KUTATELADZE, K.S.; ZEDGINIDZE, Ye.N.; GOGICHEVA, Kh.I.

High-temperature concrete on a magnesia-aluminate base. Trudy Inst.met. AN Gruz.SSR 9:213-220 '58. (MIRA 12:8)
(Concrete--Testing) (Magnesia cement) (Aluminates)

APPROVED FOR RELEASE: 03/13/2001 CIA-RDP86-00513R000927910012-0"

"APPROVED FOR RELEASE: 03/13/2001 CIA-RDP86-00513R000927910012-0

GOGICHEVA, Kh.I.; KUTATELADZE, K.S.; MCHEDLOV-PETROSYAN, O.P.

Physicochemical properties of some dolomites of the Georgian S.S.R. Soob. AN Gruz. SSR 21 no.1:57-61 Jl '58. (MIRA 11:10)

1. AN GruzSSR, Institut prikladnoy khimii i elektrokhimii, Tbilisi. Predstavlena akademikom R.I. Agladze.
(Georgia--Dolomite)

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KUTATELADZE, K.S.; CHKHIKVADZE, I.I.

Use of Georgian serpentinites in the manufacture of fused magnesia-phosphate fertilizers. Soob.AN Gruz.SSR 21 no.5:539-542 N '58. (MIRA 12:5)

1. AN GruzSSR, Institut metalla i gornogo dela. Predstavleno chlenom-korrespondentom Akademii F.N.Tavadze.
(Khashuri District--Serpentinites)
(Fertilizers and manures)

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KUTATELADZE, K.S.; PIRTSKHALAVA, Ye.A.

Investigating Borzhomi andesites in connection with the manufacture of dark glazes. Soob. AN Gruz.SSR 21 no.6:673-676 D '58. (MIRA 12:4)

1. AN GruzSSR, Institut metallurgii. Predstavleno chlenom-korrespondentom Akademii F.N. Tavadze.
(Borzhomi--Andesites) (Glazes)

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KUTATELADZE, K.S., doktor tekhn.nauk; DZHINCHARADZE, N.G., kand.tekhn.nauk

Local binding materials made with alunite. Stroi.mat. 5 no.7: 36-37 Jl '59. (MIRA 12:10)
(Alunite) (Georgia--Binding materials)

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KUTATELADZE, K.S., doktor tekhn.nauk, prof.; TANDILOVA, K.B., kand.tekhn. nauk

Investigating technological parameters and sands used in producing cement-sand roofing tiles. Stroi. mat. 6 no.7:33-35 Jl '60. (MIRA 13:7)

(Tiles, Roofing) (Sand--Testing)

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KUTATELADZE, K.S.; KURDEVANIDZE, O.K.; KINKLADZE, K.A.

Effect of electrolytes on the adhesive properties of cements. Soob. AN Gruz. SSR 24 no.6:669-675 Je '60. (MIRA 13:9)

1. Gruzinskiy politekhnicheskiy institut im.V.I.Lenina, Tbilisi. Predstavleno chlenom-korrespondentom Akademii F.N.Tavadze.
(Cement)

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KUTATELADZE, K. S., prof., doktor tekhn.nauk; TANDILOVA, K. B., kand.tekhn. nauk; SAVINSKIY, P. P., inzh.; YENUKIDZE, N. Ye., inzh.

Quick hardening slag portland cement from the Rustavi cement plant. Nauch. soob. NIITSementa no.11:14-17 '61. (MIRA 15:2)

1. Nauchno-issledovatel'skiy institut promstroymaterialov sovnarkhoza Gruzinskoy SSR i Rustavskiy tsementnyy zavod.
(Rustavi--Cement)

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"APPROVED FOR RELEASE: 03/13/2001 CIA-RDP86-00513R000927910012-0

KUTATELADZE, K.S.; GERIYEVA, M.Kh.

Cement containing barium and sulfate. Soob.AN Gruz. SSR 26 no.1:27-32 Ja '61. (MIRA 14:3)

1. Gruzinskiy politekhnicheskiy institut imeni V.I. Lenina, Tbilisi. Predstavleno chlenom-korrespondentom Akademii F.N. Tavadze.
(Cement)

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S/081/62/000/002/073/107
B150/B101

AUTHORS: Kutateladze, K. S., Geriyeva, M. Kh.

TITLE: Barium sulphate cement

PERIODICAL: Referativnyy zhurnal. Khimiya, no. 2, 1962, 395, abstract 2K305 (Soobshch. AN Gruz SSR v. 26, no. 1, 1961)

TEXT: Blends of "gazha" with barite and witherite were roasted to obtain barium sulphate cement suitable for plugging petroleum and gas wells when preparing protective concretes and the like [Abstracter's note: "gazha" could not be identified.] Coal (5%) was added to reduce the sulphates. Both mixes acquire binding properties at 1100 - 1200°C. A further rise in temperature does not lead to an increase in strength. In the temperature range of 1100 to 1200°C silica and sesquioxide are combined in an appropriate combination of barium and calcium. Cements based on mixes of "gazha" and barite possess greater strength. The optimum hydraulic activity was shown by mixes of "gazha" and barite with a composition ratio of "gazha" 1 : barium 0.5. In a period of 28 days this cement, in water and air/water setting, reached a compression strength of 622 and 512 kg/cm². Cement from the mix of "gazha" and /...

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Barium sulphate cement

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B150/B10

and barium required less water than normal Portland cement. Barium sulphate cement has increased resistance to the effect of natural mineral waters and also possesses excellent defensive properties against the action of X-rays and gamma-rays. [Abstracter's note: Complete translation.]

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