

Physics of Shock Waves and High-
Temperature Hydrodynamic Phenomena,
by Ye. B. Zel'dovich, Yu. P. Rayzer,
1975, p. 1.

MESSIAH, bk, Fizika Ularnykh Voln i
Vysokotemperaturnykh Gidrodinamicheskikh
Yavleniy, Moscow, 1963, pp 1-632. 9698607
EIT-1-64-514

C O O ? ?

Sci - Biol & Med Sci; Phys
Nov 63

291,817

Physics of an Explosion, by F. A. Baum.

RUSSIAN, bk, Fizika Vozryva, 18 Chapters I-IX,
1959.

ERDL, Pt X Balvoir T-1488

62 - 354 30 - (1-7)

Sci - Phys
Aug 62

211, 419

Physics of an Explosion, by F. A. Baum. et al. ~~1959~~

RUSSIAN, bk, Fizika Vzyva, Chapters X-IV, Moscow,
1959,

ENCL, Ft Belvoir T-1488

62-32430(10-15)

Sci - Phys
Jan 68

220,7a

62-32430-3

Baum, F. A., Stanyukovich, K. P., and Shekhter, B. I.
PHYSICS OF AN EXPLOSION, CHAP. X: COMBUSTION
OF EXPLOSIVES. [1962] [87]p. 13 refs. AERDL
T-1488 (J); RIS E-875.
Order from OTS or SLA \$8.10

62-32430-3

Partial trans. of mono. [Fizika Vzryva, Moscow,
1959; 800p.].
Another trans. is available from OTS \$7.60 as
AD-278 133, STL Trans-66.

DESCRIPTORS: *Explosives, *Combustion, Physics,
*Explosions, Ignition, Gases, Flames, Explosive
gases, Detonation, Pressure, Theory, Fulminates,
TNT, TETN, RDX, Tetryl, Powders, Benzenes,
Nitro radicals, Organic azides.

Contents: Basic characteristics of combustion processes
of explosives; Combustion of gaseous explosive systems
(Physics, (T) v. 9, no. 8) (over)

- I. Baum, F. A.
- II. Stanyukovich, K. P.
- III. Shekhter, B. I.
- IV. Title: Combustion...
- V. AERDL T-1488 (J)
- VI. RIS E-875
- VII. Army Engineer
Research and Develop-
ment Labs., Fort
Belvoir, Va.
- VIII. Research Information
Service, New York
- IX. 62-32430-4 canceled.
Included in 62-32430-3

Office of Technical Services

62-32430-5

Baum, P. A., Stanyukovich, K. P. and
Shekhter, B. I.
PHYSICS OF AN EXPLOSION, CHAP. XI. BRISANCE
OF EXPLOSIVES. CHAP. XII. CUMULATION. [1962]
[163]p. AERDL T-1488 (k-1).
Order from OTS or SLA \$12.00 62-32430-5

Partial trans. of mono. [Fizika Vzryuva, Moscow,
1959, 800p.].
Another trans. of v. 12 is available from OTS \$9.60
as AD-266 215, PRL TN-94.

DESCRIPTORS: Physics, *Explosions, *Explosion ef-
fects, Damage, *Shock waves, Fragmentation,
*Shaped charges, *Cavity liners, Jet flames.

See also 62-32430-3

(Physics, TT, v. 9, no. 8)

- I. Title: Brisance
- I. Baum, P. A.
- II. Stanyukovich, K. P.
- III. Shekhter, B. I.
- IV. Title: Brisance ...
- V. Title: Cumulation
- VI. AERDL T-1488 (k-1)
- VII. Army Engineer Research
and Development Labs.,
Fort Belvoir, Va.
- VIII. Research Information
Service, New York

Office of Technical Services

62-32430-6

Baum, F. A., Stanyukovich, K. P., and Shekhter, B. I.
PHYSICS OF AN EXPLOSION, CHAP. XIII: EXPLOSION IN AIR. [1962] [135]p. AFRDL T-1488 (m).
Order from OTS or SLA 51G. 50 62-32430-6

Partial trans. of mono. [Fizika Vzryva, Moscow, 1959, 80pp.].

DESCRIPTORS: Physics. *Explosions, Air, Explosion effects, Damage. *Shock waves, Detonation waves, Fragmentation, Projectiles, Velocity.

Contents:
Fundamental physical effects originating as a result of an explosion
One-dimensional dispersion of detonation products
Dispersion of detonation products for an inclined section
(Physics TT, v. 9, no. 8) (over)

- I. Baum, F. A.
- II. Stanyukovich, K. P.
- III. Shekhter, B. I.
- IV. Title: Explosion ...
- V. AFRDL T-1488 (m)
- VI. Army Engineer Research and Development Labs., Fort Belvoir, Va.
- VII. Research Information Service, New York

Office of Technical Services

62-32430-7

Baum, F. A., Sanyukovich, K. P., and
Shekhter, B. I.
PHYSICS OF AN EXPLOSION. CHAP. XIV. EXPLOSIONS IN DENSE MEDIA. CHAP. XV. SYMPATHETIC DETONATION. [1962] [147]p. AERDL T-1488 (n-o).
Order from OTS or SLA \$11.00 62-32430-7

Partial trans. of mono. [Fizika Vzryuva, Moscow, 1959, 800p.].

DESCRIPTORS: Physics, *Explosions, *Shock waves, *Wave transmission, Theory, Projectiles, Gases, Water, Solids, Continuous media, Soils, *Meteorites, Impact shock, *Detonations.

See also 62-32430-6

(Physics, JT, v. 9, no. 8)

- I. Title: Sympathetic detonation
- I. Baum, F. A.
- II. Sanyukovich, K. P.
- III. Shekhter, B. I.
- IV. Title: Explosions ...
- V. Title: Sympathetic ...
- VI. AERDL T-1488 (n-o)
- VII. Army Engineer Research and Development Labs., Fort Belvoir, Va.
- VIII. Research Information Service, New York

Office of Technical Services

Baum, P. A., Stanyukovich, K. P., and Shekhter, B. I.

PHYSICS OF AN EXPLOSION, SUPPLEMENT: TOWARD THE THEORY OF CUMULATION OF GASES. [1962] 15p. AERDL T-1488 (p); RIS E-881.
Order from OTS or SLA \$1.60 62-32430-8

Partial trans. of mono. [Fizika Vzryuva, Moscow, 1959, 40p.].

DESCRIPTORS: Physics, *Explosions, *Shock waves, Gases, Dynamics, Theory.

(See also 62-32430-7)

(Physics, TT, v. 9, no. 8)

62-32430-8

- I. Baum, P. A.
- II. Stanyukovich, K. P.
- III. Shekhter, B. I.
- IV. Title: Toward ...
- V. AERDL T-1488 (p)
- VI. RIS E-881
- VII. Army Engineer Research and Development Labs., Fort Belvoir, Va.
- VIII. Research Information Service, New York

Office of Technical Services

62-32430-9

Baum, F. A., Stanyukovich, K. P., and Shekhter,
B. I.
PHYSICS OF AN EXPLOSION: CONTENTS [AND]
SUBJECT INDEX. 1962 [8]p. AFRDL T-1488 (q).
Order from GTS of SIA \$1.10 62-32430-9

Partial trans. of mater. [Pliska Vozvaya, Moscow,
1959, 80p.].

DESCRIPTION: Physics, *Explosions, Indexes.

(See also 62-32430-8)

(Physics, T., v. 9, pp. 8)

- I. Baum, F. A.
- II. Stanyukovich, K. P.
- III. Shekhter, B. I.
- IV. AFRDL T-1488 (q)
- V. Army Engineer Research
and Development Lab.,
Fort Belvoir, Va.
- VI. Research Information
Service, New York

Office of Technical Services

S-487/63

Physics of Earthquakes and Explosion Seismology,
by I. L. Hersesov. (DC-3627)

RUSSIAN, bk, Fizika Zemletryaseniy i Seysmika
Varyvov, ~~Fizika i Seysmika~~ ~~Fizika i Seysmika~~
Q. ~~Journal~~, No 25 (192), 1962, pp 3-360.

JPRS 20,465

Sci - Earth Sci

May 63

Physical and Geographic Mapping, Part III,
 by A. G. Isachenko, 189 pp.
 USSR, bk. Fiziko-Geograficheskoye
Kartirovaniye, Chast' III, 1961, 253 pp.

NCST I-2569

ID 2235111

U. D. 2204019866-V

USSR
 Geo
 Mar 66

296,426

Physiographic Provinces, by N. I. Mikhaylov,
47 pp.

RUSSIAN, par. Fiziko-Geograficheskiy Obozr.
1956, 10 (abstracts from entire ~~SEE~~ publication).
(CALL NO 08219, 45 163, 1956, 1 Tr)

ANS

170,459

USAR
Geog
Oct 61

(DC-6751)

Distribution of Tree Belts in Severely Dissected
Terrains, by D. L. Armand, 7 pp.

RUSSIAN, bk. Историко-географические Основы
Проектирования Зели Polarashchitayka "Историко-географические Основы"
Ленинград: 1961, pp 305-309.

JPRS 13525

193,667

Sci - Biol
May 62

R-73/62

Physical and Geographical Division into Rayons, by
N. I. Mikheylov, (DC-6696)

RUSSIAN, in: Fiziko-Geograficheskoye Rayonirovaniye,
1960, pp 16-17.

*JPRS

USSR
Econ
12 Apr 62

Principles of Geomorphological Zoning,
by Chou Ting-ju, 26 pp.

^{bk}
RUSSIAN, ~~bk~~, Fiziko-Geograficheskoye
Rayonirovaniye Kitaya, 1957, pp 46-64.
(Call No GB316, P96, Vol 1, B Tr)

AMS

171,563

MSR
Geog
Oct 61

Project of Hydrological Zoning of China, 26 pp.

RUSSIAN, bk, Fiziko-Geograficheskoye Rayonirovaniye
Kitaya, Vol. I, Moscow, 1957, pp 88-103. Call No
GB 316, C572.

AMS

PR - China
Geo
Nov 58

100,809

62-34298

Levich, V. G.
MOVEMENT OF DROPS AND BUBBLES IN LIQUID
MEDLA Jan 62, 12p. 34 refs.
Order from ICE in v. 2, no. 1, \$15.00/year

Partial trans. of mono. [Fiziko-Khimicheskaya
Gidrodinamika] (Physicochemical Hydrodynamics)
[2d ed] Moscow, 1959.

DESCRIPTORS: Hydrodynamics, *Bubbles, Absorp-
tion, Velocity, Viscosity, Resistance, Diffusion,
Mathematical analysis, *Drops.

(Mechanics--Hydrodynamics, TT, v. 8, no. 10)

I. Levich, V. G.
II. Title: Physicochemical ...
III. International Chemical
Engineering, New York

Office of Technical Services

63-12790

Levich, V. G.
PHYSICOCHEMICAL HYDRODYNAMICS, 2D ED
REV. 1962, 1v, 700p.
Order from Prentice-Hall, Inc., Englewood Cliffs, N. J.
\$20.00

- I. Levich, V. G.
- II. Prentice-Hall, Inc.,
Englewood Cliffs, N. J.
- III. Scripta Technica, Inc.,
Washington, D. C.

Trans. of mono. Fiziko-Khimicheskaya Gidrodinamika,
2d ed. rev., Moscow, 1959, 699p.

DESCRIPTORS: *Physical chemistry, *Hydrodynamics,
Chemistry.

(Chemistry--Physical, TT, v. 9, no. 8)

Office of Technical Services

Physicochemical Hydrodynamics, by ~~YANZHEN~~ Veniamin
G. Levich, 716 pp.

RUSSIAN, bk, Fiziko-Khimiicheskaya Gidrodinamika,
Moscow, 1959. pp 1-699.

ABC-Tr-9575

Sci - Phys

Abstract - 601

Jan 63

232,407

Mass Spectrometric Methods of Determining Small
Quantities of Impurities, by S.Ye. Kupriyev.

37 p.

RUSSIAN, Ser. Fiziko-Khimicheskiy Institut.
Problemy Fizicheskoy Khimii, No 3, 1963,

pp 51-75. P100017666

FTI-IR-63-226

Sci/Physics
Sep 66

309,379

Double Mass Spectrometer for the Investigation
of Dissociation of Ions During Collision with
Atoms and Molecules of Different Gases, by
S. Ye. Kuzriyanov. 37 pp.
RUSSIAN, per, Fiziko-Khimicheskiy Institut.
Problemy Fizicheskoy Khimii, No 3, 1963,
pp 76-85. FI00017686
FIC-IT-65-226

Sci/Physics
Sep 66

309,380

Table of Contents and Review of:
Physical and Chemical Studies of Austenitic Alloys,
10 pp.

RUSSIAN, bk, Fiziko-Khimicheskiye Issledovaniya
Austenitnykh Splavov, Tsentral'nyy Nauchno Issledovatel-
skiy Institut Tekhnologii i Mashinostroyeniya, Moscow,
1957, 258 pp.

B-269
Head, Lib Sv Sec
Air Info Div
Lib of Congress

Annotation and T/C of

Physical-Chemical Investigations of Austenite Alloys, 3 p

RUSSIAN, bk, Fiziko-Khimicheskie Issledovaniya
Austenitnykh Splavov, Moscow, 260 pp.

Engr Res and Devel Lab
Ft Belvoir, Va

Apparatus for Measuring Magnetic Susceptibility
of Austenitic Alloys, S. D. EWING.

RUSSIAN, *Tr. Fiziko-Khimicheskie Issledovaniya*
Austenitnykh Spлавov, 1957.

*BISI E 2100

Sci

Journal

Electromagnetic Apparatus for Determining Ferrite
in Weld Seams in Austenitic Steels, by S. D. INTIN,
and V. Ya. KOZLOV.

FUSSEAN, Bk., Fiziko-Khimicheskie Issledovaniya
Austenitnykh Splavov, 1957

*BISI E 2200

Sci

Jan 61

Physicochemical Investigation of Sedimentary Iron
and Manganese Ores and Enclosing Rocks (Oxidation-
Reduction and Basic-Acid Properties of Sedimentary Ore-
Bearing Complexes, by B. I. Sokolova.

RUSSIAN, mono, Fiziko-Khimicheskie Issledovaniya
Osedlochnykh Zheleznykh i Margantsevykh Rud i
Vneschayshchikh Ikh Porod, Moscow, 1962, 214 pp.

IPST 2062
Also TT-65-22473

Sci
Jul 63

DC - 6033).

Physico-Chemical Investigations on Barium and
Iron Titanates, by N. I. Shchepochkin,

RUSSIAN, monograph, Fiziko-khimicheskiye
Issledovaniya Titanatov Bariya i Zheleza,
1958, pp 1-62.

*JERS

Sci - Min/Met

13 Mar 61

Physical-Chemical Mechanics of Metals -
~~Amor~~ Absorption Phenomena and Fracture
Processes, by V. I. Likhtman, et al. *24/29*

RUSSIAN, mono, Fiziko-Khimicheskaya Mekhanika
Metalloy; Adsorbtsionnyye Yavleniya v
Protsessakh Deformatsii i Razrusheniya, 1962,

302 *PL*

PL-480

Sci.

OT S 64-11000

Mar 63

Physicochemical Basis of the Analysis of the
Paragenesis of Minerals, by D. S. Khrushinskiy, 180 pp

RUSSIAN, in, Fiziko Khimicheskiye Osnovy Analiza
Parageneticheskoy Mineralov, 1977, 180-pp. HEC Jan-
Feb 1979.

Consultants Bureau

\$7.50

Sci - Min/Int

80,634

Effect of Vacuum Degassing on Casting Properties of Alloys, by Yu. A. Baklanov, 36 pp.
RUSSIAN, Metallurgicheskiy Obozretel
Metallurgicheskiy Obozretel, 1964, pp. 266-277.

IMS 3812

ISSR
Sci.-Met./Met
Aug 65

280,135

The Physico-chemical Principles of
Metallurgical Processes.
RUSSIAN, bk (Symposium of Articles),
Fiziko-Khimicheskiye Osnovy Metallurgicheskikh
Protsessov, 1964, 411 pp.
NLI RTS 31405 (On Loan)

Aug 65

287,214

The Physicochemical Principles of Igneous Petrology,
by A. N. Zavaritskii and V. S. Sobolov, 220 p.
RUSSIAN, mono, Fiziko-Khimicheskie Osnovy Petrografii
Izverzhennykh Gornykh Porod, 1961.
IPST-2056

Sci-Bar Sci
Jun 66

303,723

Oxidation of Chromium and Phosphorus
During Oxygen Top Blowing of Steel,
by N. P. Ievenets, et al.

RUSSIAN, ~~MM~~, rpt, Fiz-Khim Osnovy ~~MM~~
Proiz, 1961, pp 237-244.

HB 5361

Sci - Chem

Jan 62

178, 322

Refining of Rimmed Steel by Removal of High
Melting Inclusions, by S. I. Popel, G. F. Konovlov.
RUSSIAN, rpt. Eliz-Khim Gornyy Proizvod Stali,
1961, pp 325-330.
•DISI 3751

Sci & Engg M/M
Jun 64

Effect of Carbon on the Permeability
of Steels to Hydrogen, by P. V. Gel'd,
R. A. Ryabov.

RUSSIAN, rpt, Fiz-Khim Osnovy Proiz Stali,
1961, pp 457-460.

HB 5360

Sci - Chem

Jan 62

178, 313

Physicochemical Process of Chemical Deposition
of Nickel, by K. M. Gorbunova, A. A. Nikiforeva.

RUSSIAN, monograph, Fiziko-Khimicheskiye
Osnovy Protsessa Khimicheskogo Nikelirovaniya,
Moscow, 1960, 207 pp.

2/
*PL-480

075 62-1003

Sci
14 Feb 63
Vol VIII, No 11

TT-64-15098

Thompson, J. B.
MINERAL FACIES OF PELITIC SCHISTS
Ivan Mitten, tr. 1968 [37p] 3-refs
Order from CTS, S.I., or ETC \$3.60 TT-64-15098

I. Thompson, J. B.
II. Title: Physico-Chemical...
III. Geological Survey,
Denver, Colo.

Trans. of nono. Fiziko-Khimicheskie Problemy
Formirovaniya Gorn. K. Eksp. I. Rud (Physico-Chemical
Problems of Formation of Rocks and Ores) Moscow,
1961, p. 313-325.

(Earth Sciences--Mineralogy, TT, v. 11, no. 11)

Office of Technical Services

Pressure-Temperature Diagram of Part of the
 $\text{SiO}_2\text{-H}_2\text{O}$ System, by I. A. Ostrovskiy and G. P.
Mishina, et al.
RUSSIAN, per. Fiziko-khimicheskie Problemy
formirovaniya Gornykh Porod, Vol I,
1961, pp 641-646. 100031466
AFCLR T-R-628

Sci-Phys
Sept 66

310,583

Forward, by G. M. Frank,

RUSSIAN, Dr. F. I. Zhuravskiy's i Struktura
Geny Biologicheskii (Geny), 1960, pp 3-6.

RUSSIA

Sci - *Med*
Aug 61

62-13476

Vol'kenshtein, M. V.
LARGE MOLECULES AND BIOLOGY (Bol'shie
Molekuly i Biologiya). 20 Oct 61. 8p. Trans. A-1300.
Order from OIS or SLA \$1.10 62-13476

I. Vol'kenshtein, M. V.
II. Trans-A-1300

Trans. of mono. Fiziko-Khimicheskie i Strukturne
Osnovy Biologicheskikh Yavlenii, Moscow, 1960,
p. 7-11.

DESCRIPTOR: *Molecular structure, *Polymers,
Blood plasma, Proteins, Stereochemistry, Molecular
isomerism, *Electrolytes (Physiology), Bioelectronics,
Mitosis, *Biochemical genetics.

A discussion is presented of the reason why organisms
are formed, in the main, from high molecular com-
pounds, why life does not use material constructed
from small molecules, such as, for instance, metals
and semiconductors? The answer to this question is
connected with the examination of the characters that
distinguish macromolecules from small molecules.

(Biological Sciences, TT, v. 7,
no. 10)

Office of Technical Services

62-13475

Kitsigorodskii, A. I.
TASKS OF STRUCTURAL INVESTIGATIONS IN THE
FIELD OF HIGH POLYMERIC AND HIGH MOLECU-
LAR SUBSTANCES (Zadachi Strukturykh Issledovani
v Oblasdi Vysokopolimernykh i Vysokomolekulyarnykh
Veshchestv). 20 Oct 61, 11p. 4 refs. Trans. A-1301.
Order from OTS or SLA \$1.60 62-13475

I. Kitsigorodskii, A. I.
II. Trans-A-1301

Trans. of mono. Fiziko-Khimicheskie i Strukturne
Osnovy Biologicheskikh Yavlenii, Moscow, 1960,
p. 12-17.

DESCRIPTORS: *Polymers, *Organic compounds,
Molecules, *Molecular structure, Molecular beams,
Ribonucleas.

(Physics--Molecular, IT, v. 7, no. 9)

Office of Technical Services

62-13474

Dubinin, N. P., Sidorov, B. N., and Sokolov, N. N.
RADIOGENETIC EFFECT OF VISIBLE LIGHT IN
PROVOKING CHROMOSOMAL REARRANGEMENTS
(Radiogeneticheskiy Effekt Vidimogo Sveta pri
Vyzyvaniy Khromosomnykh Perestroek). 25 Oct. 61,
22p. 44 refs. Trans. A-1302. 62-13474
Order from OTS or SLA \$2.60

- I. Dubinin, N. P.
- II. Sidorov, B. N.
- III. Sokolov, N. N.
- IV. Trans-A-1302

Trans. of mono. Fiziko-Khimicheskie i Strukturne
Osnovy Biologicheskikh Yavleniy, Moscow, 1960,
p. 142-153.

DESCRIPTORS: *Chromosomes, Cells (Biology),
Photochemistry, Mitosis, Chemical reactions,
Genetics, *Light Visibility, Radiation effects.

The photodynamic action of rivanol in relation to
chromosome rearrangements in the cells of onion
roots was demonstrated. Photons, even with energy
as low as that of visible light, in penetrating into the
(Nuclear Physics--Radioactivity, TT, v. 8, no. 1)(over)

Office of Technical Services

Importance of Histo-Chemical Characteristics of
Electrolytic Points of Binding-Proteins of Cell
Typology of the Animal Organism in the Theory of
Basic Biological Reactivity, by A. L. Shabadash, 26 pp

EGHSHIAN, H., Electrochemicals & Structure
Geny. Biokhimiya, 1960, no 19-168.

RUSSIA A-1303

Sci -
14 Aug 61

62-13470

Breslavets, L. P. and Mileshko, Z. F.
IMPORTANCE OF POLYPLOIDY IN THE PROTECTION OF PLANTS AGAINST IONIZING RADIATION
(Znacheniye Poliploidii v Zashchite Rastenii ot Ioniziruyaschikh Izlucheniy). 24 Oct 61. 10p. 4 refs.
Trans. A-1304.
Order from OTS or SLA \$1.10 62-13470

I. Breslavets, L. P.
II. Mileshko, Z. F.
III. Trans-A-1304

Trans. of inst. Fiziko-Khimicheskoye Strukturne
Osnovy Biologicheskikh Yavlenii, Moscow, 1960,
p. 165-174

DESCRIPTORS: *Chromosomes, *Radiation damage,
Countermeasures, Growth, Seeds, Nucleic acids,
Pollen, Gamma rays, Neutrons, *Plants.

Office of Technical Services

Experiments in protection of plants against radiation
with the aid of chemical action produce successful
results which can be explained by a decrease of
chromosome aberrations. But such protection has an
(Nuclear Physics - Radioaktivny, TT, v. 8, no. 2)
(over)

Physico-Chemical Basis of the Process of Gluing
and Adhesion, by N. I. Moskvina.
RUSSIAN, in, Fiziko-khimiicheskie osnovy protsessov
skleivaniya i prilipaniya -- Moskva, Legnaya
Prosvetlennost', 1964, 248 pp.
*CPSII TT 68-50368

Sci/Chem
Feb 68

Physico-Chemical Properties of the Elements,
by G. V. Samsonov,
RUSSIAN, bk, Fiziko-Khimicheskie Svoistva
Elementov, 1965.

*CB
fourth quarter 1966

May 66

Physicochemical Properties of Individual Hydrocarbons, by V. M. Tatevskiy, (edited by).

RUSSIAN, bk, Fiziko-Khimicheskie Svoista Individual'nykh Ugleodorodov, 1961.

*ATS

Sci - Chem

Oct 62

*when reported as
"Rekomendatsiya
Fiziko-Khimicheskie Svoista Individual'nykh Ugleodorodov"*

PHYSICOCHEMICAL PROPERTIES OF GLASS FIBER, BY
A. F. ZAK, 282 PP.

RUSSIAN, BK, FIZIKO-KHIMICHESKIYE SVOYSTVA
STEKLYANOGO VOLOKNA, MOSCOW, 1962, PP 1-224.

JPRS 19122

SCI-CHEM
MAY 63

229,931

61-23146

Urusovskaya, A. A.
FORMATION OF REGIONS WITH REORIENTATED
LATTICE DURING THE DEFORMATION OF SINGLE
AND POLYCRYSTALLINE METALS AND MINERALS
(Obrazovanie Oblastei s Pereorientirovannoi Reshetkoi
pri Deformatsii Metallov i Polikristallov). May 61 [32]p.
47 refs. RTS 1772.
Order from OTS or SLA \$3.60 61-23146

- I. Urusovskaya, A. A.
- II. RTS-1772
- III. Department of Scientific and Industrial Research (Gt. Brit.)

Trans. of Izv. Akad. Nauk SSSR, Fiziko-Matematicheskie Nauki (USSR) 1960, v. 3, p. 75-116.

DESCRIPTORS: *Metallic crystals, Lattices, Minerals, Crystal structure.

A historical review is given of studies on deformation arising from the rotation of crystal lattices under the influence of mechanical forces. Topics include: rotation bands in minerals; kink-band formation in metal crystals on deformation by compression; kinks in metal (Physics - Solid State, TT, v. 6, no. 8) (over)

195177

Office of Technical Services

63-11002

Ostroumov, G. A.
THEORY OF MAGNETIC MIXING OF MELTS, by
Z. Lerman. 1963, 4 p. 9 refs. PL-480 Comm.
Order from OTS \$0.50 63-11002

I. Ostroumov, G. A.
II. PL-480 Comm (63-11002)
III. National Science
Foundation,
Washington, D. C.

Trans. of mono. Fiziko-Matematicheskie Osnovy
Magnitnogo Peremeshivaniya Rasplavov, Moscow, 1960
(63 p.)

DESCRIPTORS: *Electroforming, *Liquid metals,
Mixtures, *Hydrodynamics, Metallurgy, Theory,
Electromagnetic waves, Propagation,
Magnetohydrodynamics.

This book contains an electrodynamic part, where the
propagation of a travelling wave in a half-space and in
a finite conductor are discussed and the distribution of
electrodynamic body forces is derived; a hydrodynamic
part, dealing with the optimization of anator current
(Metallurgy, IT, v. 10, no. 3) (over)

Office of Technical Services

Physico-Mathematical Fundamentals for Magnetic
Mixing of Melts, by G. A. Ostroumov.

RUSSIAN, monograph, Fiziko-Matematicheskkiye
Osvovy Magnitnogo Peremeshivaniya Rasplavov,
Moscow, 1960, 63 pp.

PL-430

OTS

Sci
14 Feb 63
Vol. VIII, No 11

Physical and Mechanical Properties of
Electrolytic Coatings, by A. Vagramyan,
Yu. Petrova, 158 pp.

RUSSIAN, bk, Fiziko-Mekhanicheskie Svoista
Elektroliticheskikh. (1960)

es
XCB
p
pas
XPL/70
7/11/61

Sci - Engr

Jul 61

Physical and Mechanical Properties of Rocks,
152 pp.
RUSSIAN, bk, Fiziko-Mekhanicheskie Svoystva
Gornyh Porod, 1964.
OSTI ID 67-51256

Sci/DM
Jan 68

346,405

Burnishrova, Maria Fedorovna, et al

Physical-Mechanical Properties of Agricultural Crops.

2.50/50

RUSSIAN, ¹⁹⁵⁶ Fiziko-mekhanicheskie svoystva sel'skokhoziaistvennykh rastenii. Moskva, Gosudarstvennoe izdatel'stvo sel'skohnoziaistvennoi literatury, 1956, pp. 188.

*E1 433
OEB 62-1136
A 85

Dec 61

R-5242-D

Physical and Mechanical Properties and
Processes of Formation of the Snow-Firn Cover
of Eastern Antarctica, by S. N. Kartashov,
RUSSIAN, bk, Fiziko-Mekhanicheskiye Svoystva i
Protsessy Formirovaniya Snezhno-Firnovoto
Pokrova Vostochnoy Antarktity, Moscow, 1962,
pp 3-108.

*JPRS/Army CRREL

Apr 65

Agency: Nat. Bu. of Standards
P.O.No. S-172390-69

R-10126-D
13 Feb. 1969

Title: Calculation of the Energy of the Electronic
Affinity of Cyan by the Method of Surface
Ionization of KCN and KCNS Molecules

Author: I.N. Bakulina, and N.I. Ionov

Source: Fizik-Technical Institute of Leningrad. 1954 No.6

Language: Russian

2pp

Special Instruction: Please translate and type 1 copy only

REQUEST TR CHECK

BR70-0810

Physico-statistical technique of long-range
weather forecasting

Yudin, M.I.

Russ non: Fiziko-statisticheskii metod dolgosro-
chnykh prognozov pogody, 1968, 28 pgs.

In process as

MT-24-137-70

Investigation of the Microstructure
of Copper Deformed in an Ultrasonic Field
by V. P. Seversenko, V. V. Klubovich, 6 pp.
RUSSIAN, rpt, Fiziko-Tekhnicheskiy Institut,
Sbornik Nauchnykh Trudov, Izd-Vo Nauka i
Tekhnika, AN BSSR, 1964, pp 124-128.

PI0006067

FID TT 65-1408

Sci-Materials

Mar 67

320,738

A Stand to Test Materials for Creep in
an Ultrasonic Field, by Ye. G. Konovalov,
E. I. Kemizovskiy, 6 pp.
RUSSIAN, rpt, Fiziko-Tekhnicheskiy Institut,
Sbornik Nauchnykh Trudov, Ind-Vo Nauka i
Tekhnika, AN BSSR, 1964, pp 128-133.

FID0068067

FTD TT 65-1008

Sci-Materials
Mar 67

320,739

SOVIET BOOK ON HUMAN ENGINEERING, BY
OREST ALEKSANDROVICH SIDOROV, 15 PP.

RUSSIAN, BK, FIZIOLOGICHESKIYE FAKTORY CHELOVEKA
OPREDELYAYUSHCHIYE KOMPONOVKU POSTA UPRAVLENIYA
MASHINOY, MOSCOW, 1962, PP 3-12, 360-363.

JPRS 18772

SCI - BIOL - MED SCI

APR 63

228,416

Human Physiological Factors Determining the Arrangement of a Machine Control Position, by O. A. Sidorov, 228 pp.

RUSSIAN, bk, Fiziologicheskiye Faktory Ghalovka, Opredeleyayushchiye Kharaktery Kipsta Upravleniya Mashinoy, Moscow, 1962, pp 19-39; 88-247; 289-359.

ACSI 1-5670
ID 2204044564

Sci - B & M Sci
Jan 65

270,806

Conclusions and Table of Contents From
'Physiological Mechanisms of Malignant Tumor
Growth, by L. V. Latmanizova, 20 pp.

physiol. i biologichesk. i Mekhanizmy.
RUSSIAN. ~~Fiz.~~ *Fiz.* ~~Mezh~~ *Mezh* Zlokachestvennogo Opukhele-
voogo Rosta, Moscow, 1962, pp 63-72, 79.

JPRS 15260

212,716

Sci - Med

Oct 62

Quantitative Fluorescence Method of the
Determination of Traces of Oxygen in Water, by
M. A. Konstantinova-Shlezinger, V. S. Krasnova.

RUSSIAN, per, Fizicheskie Metody Issledovaniya,
Vol XI, No 6, 1945, pp 567-569.

ILL M. 3294

Sci - Chem

191,910

Apr 62

Data for the Study of Fatigue Processes Under Static
Stress, by N. K. Vereshchagin, V. V. Rosenblat,
18 pp.

RUSSIAN, par, Pizial. Narvnykh Professov, 1955, pp
377-386.

SLA R-3558

Sci

Aug 59

95,073

The Major Causes of Fatigue in Patients in the
Initial Stage of Hypertension, by F. Y. Frank,
12 pp.

RUSSIAN, per, Flotel Burroughs Professor, 1955,
pp 309-327.

SLA R-1776

Sci

Aug 59

95,072

Changes in Various Physiological and Biochemical Processes Under the Influence of Heavy Muscular Stress, by G. G. Didenko, A. G. Filippova, 11 pp.

RUSSIAN, per, Fiziol. Nazvnykh Professorov, 1955, pp 429-437.

81A R-3560

Sci

Aug 59

95,062

The Physiological Justification for the Thinning
of Forests, by A. V. Savina, 91 pp.

RUSSIAN, bk, *Fiziologicheskoe Obosnovanie Razok Ukhoda,*
1956, 74 pp.

OIS 60-51130
FL-480

139,804

Sci - Biol
Pub 61
PWT No. 171

Physiological Basis of Physical Culture and Sport, by
N. V. Zimkin, A. V. Karobkov, Ya. B. Lekhtman,
Ya. A. Egolinsky, A. I. Karotsky, 483 pp.

RUSSIAN, bk. Fiziologicheskie Osnovy Fizicheskoy
Kul'tury i Sporta, 1955.

5
ACSI E-719

USER

Sec

May 60

115,616

Physiological Bases for Increased Endurance
of People Under Intense Thermal Conditions
by S. A. Iosel'son, 111 pp.

RUSSIAN, bk. Fiziologicheskiye Osnovy
Povysheniya Vyazilivosti Lyudey K
Intensivnym Teplovym Vozdeystviyam, 1963,
pp 1-88.

FTD MT 65-493

Sci-Report #4
Jun 67

327,308

Physiological Principles of a Sojourn of a
Human in Conditions of Raised Pressure of the
Gaseous Medium, by G. L. Zal'tsman,
RUSSIAN, bk, Fiziologicheskiye Osnovy Preby-
vaniya Cheloveka v Usloviyakh Povyshennogo
Davleniya Gazovoy Sredy, 1961, 111pp88.

PH0021467-V
FTD-MT-6S-245

1-127

Sci-B&H
Aug 67

335,495

The Physiological Bases of Man's Survival
Under Conditions of Increased Pressures in
a Gas Medium, by G. L. Zal'tsman, 37 pp.

RUSSIAN, bk, Fiziologicheskiye Osnovy
Prebyvaniya Cheloveka v Usloviyakh Povyshennogo
Davleniya Gazovoy Sredy, 1961, pp 92-95, 113-119,
125-131, 159-166.

JPRS 12309

Sci - Med
Feb 62

182,176

ENR: Physiological Foundations of the Salt Resistance
of Plants, With ~~XX~~ Regard to Different Types of Soil
Salination, by B. P. Stroganov.

RUSSIAN, one mono, Fiziologicheskiye Osnovy Solenostoi-
ivestih Ras Tsvetn, Moscow, 1962, 588 pp.

*IPST

U 1
Jul 63

Physiological Principles of Training With Pro-
tective Gas Masks, by V. K. Solov'yev, 87 pp.
(ID 2112775)

RUSSIAN, bk, Fiziologicheskiye Osnovy Treirovki
v Protivogazakh, Moscow, 1958,

ACSI, H-4458

Sci -Med

Exp 59

97,814

61-31038

Stroganov, N. S.
PHYSIOLOGICAL ADAPTABILITY OF FISH TO THE
TEMPERATURE OF THE SURROUNDING MEDIUM.

tr. by M. Doublev, 1962, 108p, 165 refs.

PL-480 Int.

Order form OTS \$1.00

61-31038

Trans. of mono. *Biologicheskaya Priposoblyaemost*
Ryb k Temperaturu Sredy, Moscow, 1956 [156]p.

DESCRIPTORS: *Fish, *Adaptation (Physiology),
*Hypothermia, *Hyperthermia, Metabolism, Age
Factors, *Growth, Reproduction.

Contents:

Materials and methods

Displacement of the temperature adaptation zone

Development of the process of adaptability Rapid

changes in temperature

The theoretical concept of thermal death of organisms

(Biological Sciences - Zoology, IT, v. 8, no. 11)

(over)

I. Stroganov, N. S.
II. PL-480 Int (61-31038)
III. National Science Foundation,
Washington, D. C.

Office of Technical Services

Fiziologiya Rasteniy, Vol 8, No 6, Nov-Dec 1961,
pp 619-745.

Full text by The American Institute of Biological Sci
Vol 8, No 6, May-June 1962

Available at Ly Serials

June 70

Conference on Measurement of Visible Radiation in plant
Physiology Agrometeorology and Ecology April 20-21, 1960,
by A.A. Nichiporovich.
RUSSIAN, per, Riziol Rastenii Akad Nauk SSSR, Vol 7, No 5,
1960, pp 7-744
NRC/Ref C-3996

Sci -
Aug 67

335,073

Physiological Reactions of the Human Organism to Transverse Accelerations and Means of Raising the Resistance to Such Forces: Paper Presented at the Fifteenth International Astronautical Congress Held in Warsaw on 7-12 September 1964, by A. S. Barer, et al., 14 pp.

RUSSIAN, rpt. Fiziologicheskiye Reaktsii Organizma Cheloveka na Poperechno Napravlyennyye Uskoreniya i K Nekorotkiye Pudi Povysheniya Ustoychivosti k Etim Vozdeystviyam, Warsaw, 7-12 Sep 1964. 9225815
NASA TT F-278

Sci-Eiol & Med
Dec 64

269,880

The Physiological Role of Acetylcholine and the Search
for New Medicinal Drugs, by M. Ya. Michel'son, 656 pp.
RUSSIAN, in: *Fiziologicheskaya Rol' Asetilkholina i
Izyskaniye Novykh Lekarsvennykh Veshchestv*, Leningrad,
1967, pp 1-462.
JPRS 24236

Sci-Med
Apr 64

254,688

61-28831

Mikhel'son, M. Ya., Savateev, N. V. and others.
THE PHYSIOLOGICAL SIGNIFICANCE OF ACETYL-
CHOLINE IN THE CENTRAL NERVOUS ACTIVITY
OF MAN AND ANIMALS: THE ROLE OF ACETYL-
CHOLINE IN CENTRAL NERVOUS ACTIVITY. [1961]

9p.
Order from OTS or SLA \$1.10

61-28831

Trans. of mono. *Fiziologicheskaya Rol' Asetilkholina
i Izyakanie Novykh Lekarnyennykh Veshchestv* (The
Physiological Role of Acetylcholine and the Search for
New Drugs) Leningrad, 1957, p. 25-33.

DESCRIPTORS: Physiology, *Acetylcholines, Nervous
system, Man, Animals, Cholines, Spinal cord.

Facts are cited that support the view that there are
cholinergic neurons and cholinergic synapses in those
areas of the brain where higher nervous activity is
(Biological Sciences--Physiology, TT, v. 7, no. 8)
(over)

- I. Mikhel'son, M. Ya.
- II. Savateev, N. V.
- III. Title: Role ...
- IV. Title: Physiological Role ...
- V. Translations, New York

201499

Office of Technical Services

Fish Physiology in Acclimatization and Breeding,
by T. I. Privol'nev, 203 pp.
RUSSIAN, bk. Fiziologiya Ryb V Svyazi S
Aklimatizatsiyei I Razvasheniem, 1964.
NIES IT 70-50063

Sci/B&M
Nov 70

Toxic Effect of High Oxygen Pressures on
the Animal Organism, by I. N. Ivanov,
E. D. Kravchinskiy, et al, 22 pp.
RUSSIA, per, Fiziologicheskoy Zhurnal,
Vol XVII, No 5, 1934, pp 1019-1034.
P100066767
FTD # 65-940

SciOPhys
Mar 67

320,434

Threshold of Galvanic Phosphenes in Light
and Darkness, by L. L. Shik, 17 pp.
RUSSIAN, per, Fisiologicheskii Zhurnal SSSR,
Vol 18, 1935, pp 231-236. P911047368
ADC UCRH-Trans-10194

Sci-B&M
Mar 68

350,704

Theory of the Secondary Electron X-ray Emission of
Metals, by A. E. Koshitshevich, 26 pp.

Full translation.

RUSSIAN, Fiz Zhur, 1940, ~~Vol II~~, No 2,
pp 115-129.

Sci Mus Lib No 52/3253

Scientific - Metals

27 December 1952

(2151-N)

The Role of the Central Nervous System in the
Mechanism of Anaphylaxis, by V. B. Mats-Rosins'ka,
3 pp.

UKRAINIAN, per, Fiziologichnyi Zhurnal, Vol IV,
No 5, 1948, pp 704-705.

JPRS L-645-N

~~SECRET~~
Sci - Med
Mar 59

82,642

Physiological Mechanisms of the Periodic
Activity of the Food Center in the Period
of Breast Feeding, by P. S. Kravitskaya.
RUSSIAN, per, Fiziologicheskii Zhurnal,
Vol 37, No 1, 1951, pp 47-51.
NFC-70-13148-06P

Feb 72

An Apparatus for the Study of Respiratory Gas
Metabolism in Small Animals, by M. D. Ilacaniuk.
RUSSIAN, per, Fiziol Zh (Kiev), Vol 1, No 3,
1955, pp 123-129.

NEW FILE 2-47-66 (On Loan)

ALL FILE 2-47-66 (On Loan) 17 3 000
ETC 69-37808

Sci/BEM
Apr 66

298,470

S-5178

(NY-2622).

Natural Activity of Beta-Radiation in Human
Blood, by A. I. Danilenko, 3 pp.

UKRAINIAN, per, Fiz Zhur, Vol II, No 3, 1956,
pp 155, 156.

JERS-L-874-N

Sci - Med, Radiology, Hematology
Jul 59

92, 958

(2273-N)

Elimination of ^{89}Sr From the Rat Organism Under
Normal Conditions and Under the Influence of
Parathyrocalcitonin, Calcitonin, and Sodium Citrate, by
O. A. Khomutovskiy, 12 pp.

UKRAINIAN, per, *Fiziologichnyi Zhurnal*, Vol IV,
No 2, 1958, pp 249-255.

US JPRS L-640-N

Sci - Biology
Feb 59

81,570

S-1519

(NY-1715).

The Application of Ultra-Sound in Medicine and
Biology, by M. I. Gurevich, 18 pp.

UKRAINE, bino per, Fiziol. Zhur., Vol IV, No 3,
Kiev, May/Jun 1958, pp 406-420

US JPRS/IX-1-340

Sci - Medicine

74, 086

Respiration and Respiratory Exchange in Man Subjected
to Radial Acceleration, 9 pp.

RUBIN, per, Physiol Zhar, Vol IV, No 4, 1958,
pp 342-347.

CIA/VID ~~IX-924~~⁴

Sci - Medicine
Feb 61

139,800

(NY-2365)

Changes in the Functional Condition of the Cardio-
Vascular System During Radiation Sickness, by N. V.
Il'chevich, V. A. Kozak, 7 pp.

Sci
UKRAJINIAN, Fiz Zhur, No IV, No 6, 1958, pp
775-781.

JPRS L-764-N

Sci - Med, radiology
May 59

88,015

(NY-2365)

Effect of B-Complex Vitamins on the Resistance of
the Organism to Radiation Action, by A. N. Liberman,
9 pp.

UKRAINIAN, per, Fiz Zhur, Vol IV, No 6, 1958,
pp 814-820.

JPRS L-765-N

Sci - Med
May 59

88,016