

Ubiquinone Contents of Liver Homogenates
and Mitochondria in White Rats in the
Process of Developing A-avitaminosis,
by G. V. Donchenko.
UKRAINIAN, per, Ukr Biokhim Zhur, Vol XXXVI,
1964, No 4, pp 483-491.
HEW NIH No 4-34-66
CFSTI TT-66-61477

Sci - B/M
May 66

301,372

The Chemical Composition of the Urea-Extractable
Components of the Plague Virus EV, by L. S. Olenicheva,
7 pp.
UKRAINIAN, per, Ukrayins'kyy Biokhim Zhur, Vol XXXVI,
No 4, 1964, pp 492-497.
JPRS 26858

Sci - B & M
Dec 64

269,864

Diurnal Dynamics of Photosynthesis Factors in
the Fruit Tree Crown, by Y. D. Romasko.
RUSSIAN, per, Ukrains 'Kii Botanichnii Zhurnal,
No 20, 1963, pp 56-65
NRC/Ref C- 4910

Sci -

Jul 67

334,974

The Normal Coordinates and Natural Frequencies of KCl,
Calculated With Allowance for Ion Deformation, by K. B.
Toipygo, et I. G. Zaslavskaya, 25 pp.
RUSSIAN, per, Ukrayin Fiz Zhur, Vol IV, 1953, pp 71-92.
9219342

AERE-XHarwell-Tr-972

Sci-Phys
Mar 64

251,266

Interrrelation of Ordering and Magnetization Phenomena of Ferromagnetic Alloys With Hexagonal Densely Packed Lattices, by D. R. Risly'yanets'kiy, 12 pp.

UKRAINIAN, per, Ukrayins'kyi Fizychnyy Zhur, Vol IX, No 3, 1964, pp 309-317.

9696378

FTD-TT-65-133

Sci - M/M
Apr 65

277,857

The Emission and Absorption of Light in Molecular
Crystals Caused by the Formation of Local Excitations,
by A. S. Davydov, A. P. Lubchenko, 15 pp.

RUSSIAN, per, Ukrain Fiz Zhur SSSR, Vol 1, No 1, 1956,
pp 5-13.

SLA 59-10329

Sci - Phys
Sep 59
Vol 2, No 1

97,787

Physical Phenomena During the Operation of an
Arc Discharge Cathode in Cesium ~~Vapors~~ Vapors,
by N. D. Morgulis, P. M. Marchuk, 23 pp.

UKRAINIAN, per, ~~Ukrainkiy Fiz Zhur~~ No 1:
1956, pp 60-70. 9670087

FTO
ATTC MCL-823/1

Sci - Phys

4 Aug 61

162,834

Source of Protons With Thermal Dissociation of
Hydrogen Molecules, by M. D. Gabovich, Z. P. Fedorus,
13 pp.
UKRAINIAN, per, Ukrain's'ky Fyzichnyi Zhur, Vol I,
No 2, 1956, pp 158-169. 9693241
FTD-TT-64-522

Sci - Phys
Jul 64

263,739

The Eigenvibration Spectrum of NaCl Taking Ion Deformation,
Into Account, by K. B. Tolpyho, I. H. Zaslav'ska, 13 pp.
RUSSIAN, per, Ukrayin Fiz Zhur, Vol 1, No 3, 1956,
pp 226-244. 9219338

AERE-Harwell-Tr-971

Sci-Phys
Mar 64

251,264

Theory of Electronic Processes in Metal Ammonia
Solutions, by M. F. Deigen, Yu. A. Tsvirko,

RM UKRAINIAN, per, Ukrain Fiz Zhur, Vol I, 1956, ^{No 3}
pp 245-259. ↑

*AEC

Sci - Phys
Aug 60

The Thermal Conductivity of an Oxide Cathode,
by Ya. P. Zingerman. UNCL

RUSSIAN, per, Ukrainskiy Fiz Zhur, Vol I, 1956,
No 3, pp 308-311.

DSIR LLJ RTS 1030

10s. Od.

Sci - Chem; Phys
Sep 59

95,834

Calculation of the Specific Heat of the NaCl Crystal, by
I. H. Zaslav'ska, 6 pp.
RUSSIAN, per, Ukryn Fiz Zhur, Vol I, No 4, 1956,
pp 366-370. 9219335

AERE-Harwell-Tr-970

Sci-Phys
Mar 64

251,260

Table of Contents only of:

RUSSIAN, per, Ukrain Fiz Zhurnal, Vol I, No 2, 1957.

CIA/FDD X-2536

(Morris D. Friedman)

Sep 57

The Theory of Electrical Resistance of Ordered
Alloys of Transition and non-Transition Metals,
by Z. Matysina, A. Smirnov.

RUSSIAN, per, Ukrain Fiz Zhur, Vol II, No 1,
1957, pp 14-18.

CSIRO 3920

Sci - Min/Met
Aug 62

2/1, 2/7

Table of Contents of:

Ukrain Fiz Zhur, Vol II, No 2 and Supplement, 1957.

FDD X 2624

FDD X - 2897 (Yicz only)

Variation of Semiconductor Magnetoresistance α in
a Polar Model, by O. M. Muzichuk, 13 pp.

RUSSIAN, per, Ukrain Fiz Zhur, Vol II, No 1, 1957,
pp 43-52.

SLA R-3129

Sci

Morris D. Friedman

Jul59

91,323

The Influence of the Products of Evaporation
of Thermionic-Cathode Material, in Particular
Barium, on the ~~Sxxx~~ Transformations Which
Take Place in the Oxides of Metals During
Their Electron Bombardment, by G. S. Mikhaylov.
UNCL

RUSSIAN, per, Ukrainskiy Fiz Zhur, Vol II, No 1,
1957, pp 95, 96.

DSIR LIU RTS 1029

2s. 6d. anywhere

99, 463

Sci - Min/Met
Oct 50

Karlykov, D. M.
X-RAY INVESTIGATION OF THE SHORT DISTANCE
ORDER OF LIQUID CADMIUM AMALGAMS. [1961]
[10]p. 9 refs.
Order from OTS or SLA \$1.10

62-13393

Trans. of Ukrayins'kyi Fizychnyi Zhurnal (USSR) 1957,
v. 2, no. 2, p. 43-48.

DESCRIPTORS: Liquids, *Cadmium, *Mercury alloys,
Alloys, X-ray diffraction analysis.

An X-ray investigation was made of liquid solutions of
cadmium in mercury. The X-ray photographs were ob-
tained in copper radiation, monochromatized by means
of a curved quartz crystal. The photographs were made
from the free surface of the liquid alloy in a vacuum
chamber with a radius of 38 mm. During the exposure
of the photograph the temperature of the sample was
(Metallurgy, TT, v. 7, no. 1)

(over)

62-13393

I. Karlykov, D. M.
II. Translations, New York

Office of Technical Services

Radial Distribution of Charged Particle Concentrations
in a Magnetic Ion Source, by M. D. Gabovich,
Yu. B. Yermolovich, 11 pp.
UKRAINIAN, per, Ukrain'skiy Fiz Zhur, Vol II, No 2,
1957, pp 165-173. 9695837
FTD-TT-64-442

Sci - Phys
Feb 65

274,083

A Hydrogen Condensation Pump, by B. G. Lazarev,
E. S. Borovik, M. F. Fedorova, N. M. Taya, 11 pp.
UNCLASSIFIED

UKRAINIAN, no per, Ukrain'skiy Fiz Zhur, Vol II,
No 2, Kiev, 1957, pp 175-182.

US JPRS/NY-L-203

Sci - Engr
Jun 58

64,399

On Some Processes in an Oxide-Coated Thermocathode
During Prolonged Operation, by Ya. P. Zingerman.
URCL

RUSSIAN, per, Ukrainskiy Fiz Zhur, No 2, 1957,
pp 183-188.

DSIR LIU RTS 1028

Sci - Chem
Jul 59

90,693

Theory of the Electrical Resistance of
Alloys, by A. Smirnov.

RUSSIAN, per, Ukrain Fiz Zhur, Vol II, No 3,
1977, pp 211-215.

CSIRO 3919

Sci - Min/Met
Aug 62

211, 227

1819-N

Experimental Investigations and Certain Questions in
the Theory of Caserton Filters, by B. Ya. Braude,
A. V. Men', O. H. Lebedeva, 18 pp.

UKRAINIAN, per, Ukrains'kyy Pysychnyy Zhurnal, Vol II,
No 3, Kiev, 1957, pp 274-291.

US JPRS Tr L-613-N

Sci - Electronics
Jan 59

79,693

ON THE ORIGIN OF X-RAY SATELLITES, BY
S. M. KARL'NYK, S. B. NYZHNYK.

RUSSIAN, PER, UKRAIN FIZ ZHUR, VOL 11, NO 4,
1957, PP 333-337.

OFFICE OF AEROSPACE RES
UNITED STATES AIR FORCE

SCI-SPACE/RES
SEPT 62
(MEMO 25 SEPT 62)

On the Structure of Molten Au-Sn Compounds,
by A. P. Skyshevskiy. **UECL**

RUSSIAN, per, Ukrain Fiz Zhur, Vol XI, No 4,
1957, pp 363-368.

DSIR LLU (loan) M.371

SLA 59-28440

Sci - Chem
Jul 59

90, 147

Conversion of Thermal Energy Into Electric Energy
by Use of Thermionic Emission, by M. D. Mergulis,
P. M. Marchuk, 3 pp.

UKRAINIAN, per, Ukrain Fis Zhur, Vol II, No 4, 1957,
pp 379, 380.

CIA/FID XX-832
NOT RELEASABLE TO FOREIGN NATIONALS

Sci - Phys
May 60

115,146

Production of Vanadium, Niobium, and Tantalum
Folts, by L. I. Kovalenko.
RUSSIAN, per, Ukrains'kyi Fizichnyi Zhurnal,
Vol 2, (Year ?), pp 924-925.
*ARC SCL-T-67-251

Sci - Materials
Jun 67

Investigation of Atomic Mobility at High-Temperature
Axial Compression in Ferrite Type Alloys, by
I. Ya. Kekhtyar.
UKRAINIAN, per, Ukr Fiz Zh, Vol 3, 1958, pp 516-520.
*CFSTI TT 70-59088

Sci- *phys*
June 70

Effect of Volume Pressure on the Self-diffusion
of Fe in Fe Alloys with Small Additions of Al,
by S. D. Gersteriken.

UKRAINIAN, per, Ukr Fiz Zh, Vol 3, 1958, pp 651-
658.

*CFSTI TT 70-59070

Sci- *phys*
June 70

On the Movement of Atoms in Metals in the Region
of the Temperature Recrystallization, by
L. N. Larikov.

UKRAINIAN, per, Ukr Fiz Zh, Vol 3, 1958, pp 668-
671.

*CFSTI TT 70-59077

Sci- *hugo*
June 70

Exchange of Charge Between Cesium Ions and Atoms,
by R. M. Kushnir.

UKRAINIAN, per, Ukrainskiy Fiz Zhur, Vol III, 1958,
pp 788-794. CIA 654344

ATIC MCE-114/V

REC-AP-6-1-58

119,382

Sci - Phys

May 59

Telecom 41070

Morgulis, N. D. and Marchuk, P. M.
INVESTIGATION OF A CESIUM ARC RECTIFIER.
[1963] [17]p. (figs. omitted) 11 refs.
Order from OTS or SLA \$1.60

63-18439

Trans. of Ukrayins'kyi Fizychnyi Zhurnal.(USSR) 1958,
v. 3, no. 1, p. 95-103.

DESCRIPTORS: *Cesium electron tubes, *Rectifiers,
Electron tubes, Cathodes (Electron tubes), Nickel,
Tungsten, Design, Operation.

Results are presented of an investigation carried out
on the various properties of a cesium arc rectifier. A
special feature of this rectifier is that it makes it
possible to obtain a very high discharge current density
on the cathode J_0 with a rather small potential drop U_a .
This is connected with the formation of an active cesium
film on the surface of cathode, as well as with the easy
(Engineering--Electronic, TT, v. 10, no. 9) (over)

63-18439

I. Morgulis, N. D.
II. Marchuk, P. M.

Office of Technical Services

The Migration of Solid Metal Solution Components
in a Constant Electric Field, by I. M. Frantsevych,
D. F. Kalynovych, 35 pp.

RUSSIAN, per, Ukrain Fiz Zhur, Vol III, No 1,
1958, pp 124-134. 9091174

AERE, Harwell
Tr-889

Sci - Min/Nat
Sep 62

211, 309

On the Thermoelectromotive Force of Certain
Metallic Borides and Carbides in Combination with
Copper, by G. V. Samsonov, N. S. Strel'nikova,
5 pp. UNCLASSIFIED

UKRAINIAN,
~~RUSSIAN~~, per, Ukrainskiy Fizichnyi Zhurnal, Vol. III,
No. 1, Jan-Feb, 1958, pp 135-138 *U 279-231*

ATIC F-TS-9800/V

Sci - Phy

Jun 59

89,448

On the Theory of Semiconductor Resistance in
Strong Magnetic Fields, by A. Yu. Glauberman, O. M.
Muzichuk, 10 pp.

RUSSIAN, per, Ukr Fiz Zhur, Vol III, No 2, 1958,
pp 178-184.

SIA 59-10239

Sci
Nov 59
Vol 2, No 3

101,719

S-5039

(NY-2407)

Propagation of Ultrashort Waves in a Mountainous
Locality, by S. Ya. Braude, 9 pp.

UKRAINIAN, per, Ukrain'skiy Fizichnyi Zhur,
Vol III, No 2, Kiev, 1958, pp 246-253.

JPRS 1562-W

Sci - Electronics
May 59

87,931

Self Diffusion of Fe and Diffusion in Fe Con-
taining Small Amounts of Al, by S.B. Gertsriken,
et al, 9 pp.

RUSSIAN, per, Ukrain. Fiz. Zhur. Vol. 3, No. 2
1958, pp. 255-263

*CFSTI TT 70-57058

Sci/phys
Feb 70

The Effect of Geometrical Distortions of the
Crystal Lattice on X-Ray and Thermal Neutron
Scattering by Multiconstituent Unordered Solid
Solutions, by N.A. Krivoglaz, E.A. Tikhonova.
UKRAINIAN, per, Ukrainskii Fizichnyi Zhurnal,
Vol 3, No 2, 1958, pp 297-312. P91116966
AEC BNL-tr-104

Sci/Physics
Jan67

317,570

Karlykov, D. N.
X-RAY INVESTIGATION OF THE SHORT DISTANCE
ORDER OF LIQUID ZINC-IN-MERCURY SOLUTIONS.
[1961] [6]p. 7 refs.

Order from OTS or SLA \$1.10

61-28172

Trans. of Ukrayins'kyi Fizychnyi Zhurnal (USSR)
1958, v. 3, no. 3, p. 370-374.

DESCRIPTORS: X-rays, *Liquid metals, *Zinc,
*Mercury, Solutions, X-ray diffraction analysis.

An analysis of the diffraction pattern that is observed
in scattered X-radiation of liquid amalgams of zinc
indicates that they belong to the group of physical
solutions.

(Chemistry--Physical, TT, v. 7, no. 7)

61-28172

I. Karlykov, D. N.
II. Translations, New York

Office of Technical Services

Lashko, O. S. and Romanova, O. V.
THE STRUCTURE OF CERTAIN LIQUID METAL
ALLOYS. [1961] [15]p. 9 refs.
Order from OTS or SLA \$1. 60

61-28171

Trans. of Ukrayins'kyi Fizychnyi Zhurnal (USSR)
1958, v. 3, no. 3, p. 375-384.

DESCRIPTORS: *Liquid metals, *Alloys, X-rays,
Liquids, Bismuth alloys, Tin alloys, Lead alloys,
Zinc alloys, Aluminum alloys, Silver alloys, Molyb-
denum, Polarization, Absorption, Crystallization, Ra-
diation effects, Ionization, *Atomic structure

The results of X-ray investigations of liquid alloys are
given: Bi-Sn, Bi-Pb, Sn-Zn and a liquid solution of
Al-Ag. Analysis of the atomic distribution curves of
the investigated liquid alloys of eutectic concentration
indicates the existence of small regions, consisting
(Metallurgy, TT, v. 7, no. 9) (over)

61-28171

I. Lashko, O. S.
II. Romanova, O. V.
III. Translations, New York

Office of Technical Services

A Study of Structural Change of Nickel in Creep,
by G. Ya. Kozers'skiy, V. A. Kononenko, P. M.
Okrainets', 11 pp.

UKRAINIAN, per, Ukrainskiy Fiz Zhur. Vol III,
No 3, 1958, pp 391-395.

SLA 66-17116
ATTC F-78-9802/V

Sci - Physics
Nov 59

ATTC 66-17116

102,424

On the Problem of Determining the Distribution by
Concentration for Alloys of Heterogeneous Metal
Powders, by O. I. Raychenko, 19 pp.

UKRAINIAN, per, Ukrainskiy Fiz Zhur, Vol III, No 3,
1958, pp 408-417.

Physics
Sci - Minerals/Metals
Nov 59

ATTC F-TS-9802/V

Handwritten: 102,429

102,429

Simple Waves in Magnetohydrodynamics, by A. I.
Akhiyezer, G. Ya. Lyubarskiy, R. V. Polovin, 6 pp.

RUSSIAN, per, Ukr Fiz Zhur, Vol III, No 4, 1958,
pp 433-438.

MDF A-139

Sci - Electron

Sep 59

Vol 2, No 1

97,758

The Thermally Excited Current in GAs
Monocrystals, by A. P. Trofimenko, G. A.
Fedotus. UNCL

UKRAINIAN, per, Ukrains'kiy Fiz Zhur, Vol III,
No 4, 1958, pp 468-473.

DSIR LLU RTS 1270

(15s. od.)

Sci - Chem
Nov 59

100,782

Migration of Silver on Passage of Direct Current
Through It, by P. Kuz'menko, E. Khar'kov.

UKRAINIAN, per, Ukrains'kii Fizichnyi Zhurnal,
Vol III, No 4, 1958, pp 528-535.

CSIRO Tr 5036
61-15307

Sci - Phys

Jun 61

157,803

THE MIGRATION OF SOLID METAL SOLUTION
COMPONENTS IN A CONSTANT ELECTRIC FIELD, BY
I. M. FRANTSEVYCH, ET AL.

UKRAINIAN, PER, UKRAIN FIZ ZHUR, VOL III, NO 1,
PP 64-67, NO 4, 1958, PP 552-559.

NLL M. 6357

SCI - PHYS

OCT 62

214,763

Single Magnetoacoustic waves, by G. Ya. Lyubarskiy, R.
V. Polovin, 4 pp.

RUSSIAN, per, Ukr Fiz Zhur USSR, Vol III, No 5,
1953, pp 567-570.

MDF L-123

Sci - Electron

Sep 59

Vol 2, No 1

97,760

On the Impossibility of Rarefaction Shockwaves in
Magnetohydrodynamics, by R. V. Polovin, G. Ya.
Lyubarskiy, 3 pp.

~~RUSSIAN~~ RUSSIAN, per, Ukr Fiz Zhur USSR, Vol III,
No XI 5, 1958, pp 571-575.

MDF P-134

Sci - Electron
Sep 59
Vol 2, No 1

97,761

Absorption of Barium Atoms and Barium Oxide
Molecules on Tungsten, by Yu. S. Vedula,
V. M. Gavriilyuk.

UKRANIUM, per, Ukrainskiy Fiz Zhur, Vol III,
No 5, 1958, pp 646-658. 9662610

ATIC MCL-39/1

Sci - Chemistry

Telecom 40697

Jul 61

159,282

On the Form of Existence of Metal Film
Cathodes, by N. D. Morgulis.

UKRAINIAN, per, Ukrain Fiz Zhur, Vol III,
No 5, 1958, pp 688-689. 9662610

ATIC MCI-39/1

Sci - Phys, Chem

Telecom 40697

159, 283

Jul 61

Utilizing the Action of a Magnetic Field on
Penetrating Plasma When Obtaining Intense
Ionic Geans, by M. D. Gabovich.

UKRAINIAN, per, Ukrain Fiz Zhur, Vol III, No 5,
1958, pp 693, 694. 9662610

ATIC MCL-39/1

Sci - Phys

Telecom 40697

159,285

Jul 61

Eigenfrequencies and Amplitudes and Specific Heat of
KBr, by O. A. Demidenko Z. O. Demidenko, et al, 7 pp.
RUSSIAN, per, Ukrayin Fiz Zhur, Vol III, No 6, 1958,
pp 728-741. 9219339

AERE-Harwell-Tr-974

Sci-Phys
Mar 64

251,265

Characteristics of Curves of the Intensity of X-Ray Scattering
and Curves of the Atomic Distribution of Liquid Metals,
by I. V. Radchenko, I. M. Shapovalov, 15 pp.
~~RUSSIAN~~ UKRAINIAN, per, Ukrayin Fiz Zhur, Vol IV, No 1,
1959, pp 5-16.

JPRS 23510

Sci-Mat & Met
Mar 64

251,528

Forces of Ion Interaction and Equations of Ion Lattice
Vibrations, Found by Means of a Multi-Electron Treatment
of Ion States and an Adiabatic Approximation, by K. B.
Tolpyho, 22 32 pp.
RUSSIAN, per, Ukrayin Fiz Zhur, Vol IV, No 1, 1959,
pp 72-91. 9219337

AERE-Harwell-Tr-9275

Sci-Phys
Mar 64

251,261

On the Question Regarding the Sign of
Electroconductivity of Evaporated Germanium Films,
by Yu. G. Ptushinskiy, Yu. A. Lupan, 2 pp.

~~RUSSIA~~ UKRAINIAN, per, Ukrain Fiz Zhur, Vol IV, No 1,
1959, p 125. *9671134*

Navy Tr 3156/NRL 890

Sci

IT 100-18092

Jun 62

On Thermal Vacancies in Metals and alloys, by
S. D. Gertsiken,
UKRAINIAN, per, Ukr Fiz Zh, Vol 4, 1959, pp 137-
149.

*CFSTI TT 70-59090

Sci- *phys*
June 70

On the Statistical Theory of Ionic Systems, by
I. R. Yukhnovskiy, 13 pp.

UKRAINIAN, per, Ukrain Fiz Zhur, Vol IV,
1959, pp 167-176. 9080660

AEC UCRL-Trans-670(L)

Sci
Sep 61

167,850

Electrotransport in Hard Aluminum, by
P.P. Kuzmenko, et al.
RUSSIAN, per, Ukrain, Fiz. Zhur. No. 4,
1959, pp. 401-402
*CFSTI TT 70-57069

Sci/phys
Feb 70

Baranski, P. I.
EINE NICHTKALORIMETRISCHE METHODE ZUR
MESSUNG DER RELATIVEN WERTE DES PELTIER-
KOEFFIZIENTEN AN DEN GRENZEN METALL-
METALL UND METALL-HALBLEITER (A Non-
calorimetric Method to Measure the Relative Values of
the Peltier-Coefficient on the Boundaries Metal-Metal
and Metal-Semiconductor).
Order from TIB \$1.55

Trans. in German of Ukrayins'kyl Fizychnyl Zhurnal
(USSR) 1959, v. 4 [no. 4] p. 472-476.

DESCRIPTORS: *Calorimeters, Measurement,
*Metals, *Semiconductors, Thermoelectricity.

(Physics--Solid State, TT, v. 9, no. 11)

62-27249

I. Baranski, P. I.
II. Technische Informations-
bibliothek, Hannover
(West Germany)

Office of Technical Services

Electrodiffusion in Cd and Zn, by P. P. Kuz'menko.
UKRAINIAN, per, Ukr Fiz Zh, Vol 4, 1959, pp 537-539.
*CFSTI TT 70-59068 1959

Sci-phys
June 70

Blagoi, Yu. P.
DENSITIES OF SOLUTIONS OF CONDENSED GASES
Ar---CH₄, N₂---CH₄. [1963] [19]p. 11 refs.
Order from OIS or SLA \$1.60 63-19976

C.

Trans. of Ukrayins'kyi Fizychnyi Zhurnal (USSR) 1959,
v. 4 [no. 5] p. 577-585.

DESCRIPTORS: *Liquefied gases, Density, *Argon,
*Methanes, *Nitrogen, Molecular association, Volume,
Mathematical analysis, Solutions.

The densities of solutions of condensed gases Ar--CH₄
and N₂--CH₄ were measured. The volumes of these
solutions were found to be nonadditive. A correlation
was established between the excess volume of mixing,
on the one hand, and the energy of mixing and com-
pressibility of the solution, on the other. The experi-
mental results were compared with theoretical values,
satisfactory agreement being achieved. (Author)
(Chemistry--Physical, TT, v. 10, no. 9)

63-19976

I. Blagoi, Yu. P.
II. Department of the Interior
Washington, D. C.

DEPT of INTERIOR
TNT EST No. 702

Office of Technical Services

On the Theory of Electrodifffusion in Metals and
other Solids, by M. D. Glinchuk.
UKRAINIAN, per, Ukr Fiz Zh, Vol 4, 1959, pp 684-
685.
*CFSTI TT 70-59072

Sci- *g hys*
June 70

Adsorption of Barium Atoms and Barium Oxide
Molecules on Tungsten, II. by V. M. Gavriilyuk.
RUSSIAN, per, Ukr Fiz Zh, Vol IV, No 6,
1959, pp 734-749.
NASA TT F-10,275

Sci-JPhys
Oct 66

312,247

THE TITANIUM PUMP, BY I. O. GRISHAYEV, ET AL.

UKRAINIAN, PER, UKRAIN FIZ ZHUR, VOL IV,
NO 6, 1959, PP 750-754.

NLL RTS 2060

SCI - CHEM

OCT 62

214,758

Determination of the Density of Dislocations
Arising During the Deformation of Ni, Ag, Al and
Certain Ag-Alloys, by S. D. Hertzicken, N. N.
Novikov, 29 pp.

UKRAINIAN, per, Ukrainskiy Fiz, Zhur, Vol III, No 6,
1958, pp 802-814.

AFIC MCL-141/V

Sci - Chemistry
Nov 59

OTS 62-1234²

102,392

Study of the Atom Position in Solid Alloys of Fe-Al
by the Method of Electro-transport, by

S. D. Gertsriken.

UKRAINIAN, per, Ukr Fiz Zh, Vol ⁵ 6, 1960, pp 79-85.

*CFSTI TT 70-59075

Sci- *plus*
June 70

28

(DC-3917)

Fourth All-Union Conference on the Liquid State
of Matter, by H. P. Roshchyna, 12 pp.

UKRAINIAN, per, Ukrain Fiz Zhur, Vol V, No 1,
Jan/Feb 1960, pp 125-130.

JPRS 6144

Sci - Phys

Oct 60

130,812

Theory of X-Ray Scattering by Multicomponent
Ordered Solutions, by N.O. Krivoglaz,
O.A. Tikhonova.
UKRAINIAN, per, Ukrainskii Fizichnii Zhurnal,
Vol 5, No 2, 1960, pp 158-173. P911169966
AEC BNL-tr-103

Sci/Physics
Jan 67

317,569

Theory of X-Ray Scattering by Interstitial
Solid Solutions, by M. A. Krivoglas, E. A.
Tikhonova, 34 pp.

RUSSIAN, per, Ukrainskiy Fizichnyi Zhurnal,
Vol 5, No 2, 1960, pp 174-199. F911156067
AEC BNL Tr-121

189

326,446

Sci - Physics
May 67

Study of the Fundamental Edge of K Absorption of
Iron and Vanadium X-Rays in Their Alloys in Two
Modifications, by L. G. Nikolayeva, S. M. Karal'nik.

UKRAINIAN, per, Ukrain Fis Zhur, Vol V, No 2, 1960,
pp 231-234.

BIBI 2459

Sci - Phys

189,075

Mar 62

list 126

... ..
Data on the Intensity Distribution of Radarechoes
With Height, by M. L. Markovich, V. M. Muchnik,
14 pp.

UKRAINEAN, per, Ukrain Fiz Zhur, Vol V, No 2, 1960,
pp 259-269. 9689073

Amer Meteorol Soc T-U-1

Sci - Phys
Dec 63

243,470

Dobrovols'kyi, V. M.
EFFECT OF A MAGNETIC FIELD ON THE
DIFFUSION OF INJECTED CURRENT CARRIERS.
[1963] 22p. 22 refs.
Free copies available from Boeing Scientific Research
Labs. Library as Boeing Trans. R57. When supply is
exhausted, order from OTS or SLA \$2.60, 63-16550

Trans. of Ukravinskyi Fizychnyi Zhurnal (USSR) 1960,
v. 5, no. 3, p. 333-344.

DESCRIPTORS: *Magnetic fields, *Diffusion, *Electric
currents, Semiconductors, Germanium, Electrons,
Hall effect, Numerical analysis.

The effect of a magnetic field on the diffusion of injected
current carriers is examined in a linear approximation
in terms of the concentration. Analytic expressions are
obtained for quantities characterizing the diffusion of
(Physics--Solid State, TT, v. 10, no. 6) (over)

63-16550

- I. Dobrovols'kyi, V. M.
- II. Boeing Trans-R57
- III. Boeing Scientific
Research Labs.,
Seattle, Wash.

Office of Technical Services

Kantor, P. B., Kisil', O. M., and Pomichov, E. M.
MEASUREMENT OF ENTHALPY AND HEAT
CAPACITY OF SILICON. [1962] [5 p. 6 refs.
Order from OTS or SLA \$1.10 62-33554

Trans. of Ukrain[s'kyi] Fiz[ychnyi] Zhur[na]l (USSR)
1960, v. 5, no. 3, p. 358-362.

DESCRIPTORS: *Silicon, Enthalpy, Specific heat,
Measurement.

The present article gives the results of measurements of the enthalpy of silicon of the highest purity, over the temperature interval 1148-1915°K, in the solid and liquid phases, along with the temperature and the heat of the phase transition. The experimental data obtained in the work are used to find the coefficients of the interpolation for the enthalpy, and the specific heat capacity of silicon in the solid and liquid phases. (Metallurgy, TT, v. 9, no. 8)

62-33554

- I. Kantor, P. B.
- II. Kisil', O. M.
- III. Pomichov, E. M.
- IV. Translations, New York

Office of Technical Services

Electrodiffusion in Sn, Pb, Ag, and Cu, by
P. P. Kuz'menko,
UKRAINIAN, per, Ukr Fiz Zh, Vol 5, 1960, pp 428-
429.
*CFSTI TT 70-59067

Sci- *phys*
June 70

Determination of the Degree of Ionisation of
Atoms in Crystal Lattices by the Electric
Transfer Method, by P. P. Kuz'menko, **XX**
Ye. I. Khar'kov, 3 pp.

UKRAINIAN, per, Ukrain Fiz Zhur, Vol V, No 3,
1960, pp 430-431. 9219336

*AERE - Harwell-Tr-977

Sci - Phys

Apr 63

Magnetometer for the Study of Phase Changes During
Rapid Heating and Cooling, by Yu. Ya. Meshkov.

RUSSIAN, per, Ukrain'skiy Fiz Zhur, Vol V, No 5,
1960, pp 252-258.

HB 5818

Sci-M/M
Mar 63

NCH-200 890

Field 11B

Samsonov, G. V.; Tsebulyn, G. G.
EFFECT OF CARBON AND TITANIUM ADDITIONS ON
THE ELECTRICAL CONDUCTIVITY OF SILICON
NITRIDE Vplyv Dobavok Vugletsyu i Titany Na
Elektroprovodnist Nitridu Kremniyu). 15 Dec 64, 7p.
TLL/T. 5823.
Order from NLL

Trans. of Ukraynskyi Fizychnyi Zhurnal (USSR) v5 n5
p615-9 1960.
Another trans. is available from CFSTI or ETC HC\$1.00,
MF\$0.50 as TT-65-61141.

I. Technical Information
and Library Services,
Ministry of Aviation,
London (England)

On the Theory of Nonstationary Light Scattering,
by I. A. Klimishin.

UKRAINIAN, per, Ukrainskiy Fiz Zhur, Vol V,
No 5, 1960, pp 620-627.

MDF K-249

9092900

189 643

Sci

Nov 61

Absolute Quantum Yield of Photo Luminescence of
Synthetic Ruby at Room Temperature, by
V. N. Vishnevskiy, M. S. Pidzyrailo, 5 pp.

~~RUSSIAN~~

UKRAINIAN, per, Ukrain's'kiy Fiz Zhur, Vol V,
No 5, 1960, pp 629-633.

MDF V-153
9093216

159089

Sci
Nov 61

Dekhtyar, I. Ya. and Shalaev, A. M.
EFFECT OF GAMMA-RADIATION ON CERTAIN
MAGNETIC PROPERTIES OF IRON AND ITS ALLOYS
(V pliv Gamma-Oprominyuvannya na Deyaki Magnitni
Vlastivosti Zaliz i logo Splaviv). 11p. (foreign text
included). 9 refs. DTC-2.
Order from OTS, ETC or DTC \$1.05 62-28789

Trans. of Ukrayins'kyi Fizychnyi Zhurnal (USSR) 1960,
v. 5, no. 5, p. 677-680.

DESCRIPTORS: *Iron, Iron alloys, Nickel alloys,
*Magnetic properties, *Gamma rays.

(Metallurgy, TT, v. 10, no. 2)

62-28789

I. Dekhtyar, I. Ya.
II. Shalaev, A. M.
III. DTC-2
IV. Danish Translations
Centre, Roskilde

Office of Technical Services

Diffusion and Electro-transport in AgZn Alloys,
by P. P. Kuz'menko.
UKRAINIAN, per, Ukr Fiz Zh, Vol 5, 1960, pp 683-
687.
*CFSTI TT 70-59066

Sci- *Phys*
June 70

THE EFFECT OF AGEING ON THE FINE CRYSTAL STRUCTURE
OF A NIMONIC-TYPE ALLOY WITH A LOW TITANIUM
CONTENT, BY V. G. CHORNIY.

UKRAINIAN, PER, UKRAIN FIZ ZHUR, VOL V, NO 5,
1960, PP 687-692.

NLL M. 3774

SCI - MIN/METALS

OCT 62

214,743

Angular Distribution of Neutrons From 14 Million
Electron Volts Energy Which Are Scattered by Atomic
Nuclei, by V. I. Stryzhak, V. V. Bobyr, L. Ya. Grona,
5 pp.

UKRAINIAN, per, Ukrain Fiz Zhur, Vol V, No 5, 1960,
pp 702-704.

CIA/FDD X-4717

Sci - Phys

Sep 61

166,699

Study of the Ionic Charge in Pure Solid Metals
by an Electro-transport Method of Thermal
Vacancies, by P. P. Kuz'menko.
UKRAINIEN, per, Ukr Fiz Zh, Vol 5, 1960, pp 720-722.
*CFSTI TT 70-59065

Sci- *phys*
June 70

(NY-6287)

Electric and Photoelectric Properties of Single
Crystals of Selenide and Sulfide of Antimony.
I. Method of Growing Single Crystals of Sb_2Se_3
and Sb_2S_3 , by A. F. Skubenko, 15 pp.

UKRAINIAN, ~~see~~, ~~Ukrayins'kyi Fiz. Zhur~~, Vol V,
No 6, Nov/Dec 1960, pp 781-790.

JPRS 9288

155,047

Sci - Phys

Jun 61

(NY-6287)

All-Union Conference on the Theory of Elementary
Particles, by Yu. M. Lomsadze, V. I. Lend'el,
8 pp.

RUSSIAN, per, Ukrainskiy Fiz Zhur, Vol V,
No 6, Nov-Dec 1960.

JPRS 9354

Sci - Phys
Jun 61

155, 288

Study of Electrical Transfer in Steels by the
Method of Inert Tags, by S. D. Gertsriken et al.
RUSSIAN, per, Ukrain. Fiz. Zh. 6, 1961, pp. 129-135.
*CFSTI TT 70-57087

Sci/phys
Mar 70

403,282

Investigation of γ -Transitions in the $\text{Co}^{59}(\text{p}, \text{n} \gamma)$
 Ni^{59} Reaction, by A. K. Valter, I. I. Zalyubovsky,
21 pp.
UKRAINIAN, per, Ukr. Fiz. Z., Vol 6, 1961,
pp 318-332. P911387367
AEC-ORNL-TR-1739

Sci-Nuclear Sci & Technology
Dec 67

346,182

On the Possibility of Measuring Polarisation
in Neutron on Neutron Scattering, by
O. G. Sitenko, V. F. Kravchenko, 5 pp.

RUSSIAN, per, Ukrain Fiz Zhur, Vol VI,
No 1, 1961, pp 20-23. ~~9066948~~ 9066948

AEC Tr-5305

Sci - Phys
Oct 62

212,675

Energy Spectrum of an Antiferromagnet in
a Magnetic Field, by V. A. Popov, 9 pp.

RUSSIAN, per, Ukrainskiy Fiz Zhur, Vol VI,
No 1, 1961, pp 25-33.

MDF P-168
9093080

Sci
Nov 61

173,314

On the Stability of a Tangential Discontinuity
in a Rarefied Plasma, by L. D. Pichakhchi, *pp*

RUSSIAN, Ukrain Fiz Zhur, Vol VI, No 1, 1962, *1961?*
pp 36-92. *9669413*

✓ *FTD-TT-63-182

Sci - Phys
21 Feb 63

Determination of the Effective Charge of an Impurity in
a Metal by the Residual Electric Resistance, by P. P.
Kuz'menko, 6 pp.
RUSSIAN, per, Ukrayin Fiz Zhur, Vol VI, No 1, 1961,
pp 116-120. 9219343

ABRE-Harwell-Tr-978

Sci-Phys
Mar 64

251,262

To Determine the Energy of Formation of Vacancies
in Silver, by O. M. Ovcharenko. 488

R UKRAINIAN, per, Ukrain Fiz Zhur, Vol VI, No 1,
1961, pp 139, 140. 90-8357

*FTD-TT-63-124

Sci - Phys, Chem
30 Jan 63

Investigation of Gamma-Transitions in the
Co⁵⁹ (p,n)Ni⁵⁹, by A. K. Valtov, I. I.
Zalyubovskiy, V. A. Klyucharev, V. A. Lustik.
RUSSIAN, per, Ukrainian Fiz. Zhurnal, Vol 6,
No 3, 1961, pp 318-332.
*ARC OBNL Tr-1739

Sci - Physics
Aug 67

Investigation of the Effect of Small Ad-
mixtures Sn and Sb on the Parameters of
the Volumetric and Boundary Diffusion of
These Admixtures into Cu, by
S. D. Gertsriken, et al.
RUSSIAN, per, Ukrain. Fiz. Zh. vol. 6, 1961
pp. 398-407
*CFSTI TT 70-57086

Sci/phys
Mar 70

REFULSION OF ELECTROMAGNETIC WAVES BY PLASMA,
BY V. I. KURILKO, V. I. MIROSHNICHENKO, 4 PP.

RUSSIAN, PER, UKRAIN FIZ ZHUR, VOL VI, NO 3,
1961, PP 415-416. 9666264

FTD-TT-62-336

SCI - PHYS
SEP 62

210,149