

Crystals and Crystallization, by V. D. Kuznetsov.

RUSSIAN, no per, Uspekhi Fiz Nauk, Vol LXII,
No 2, 1957, pp 187.

*AEC under PL 480

27 May 59

The Growth of Crystals, by G. Buckley.

RUSSIAN, mo per, Uspekhi Fiz Nauk, Vol LXII,
No 2, 1957, pp 191-196.

*AEC under PL 480

27 May 59

Reference to: "Semi-Conducting Bolometers", by
I. S. Konozenko's.

RUSSIAN, mo per, Uspekhi Fiz Nauk, Vol LXII,
No 2, 1957, pp 197-199.

*AEC under PL 480

27 May 59

Yaroslavskiy, N. G.
METHODS AND APPARATUS FOR LONG WAVE
INFRARED SPECTROSCOPY [Metodika i Apparatura
Dlinnovolnovoy Infrazernoy Spektroskopii]. 14 July 60,
60p. 102 refs. Lincoln Lab. 81G-0021; LL Tr-102.
Order from LC or SLA mi\$3.60, ph\$9.30 61-15104

Trans. of Uspekhi Fizicheskikh Nauk (USSR) 1957
[v. 62] no. 2, p. 159-186.

A survey is made to systematize the information re-
lated to the methods of longwave infrared spectroscopy
and to recent Soviet and non-Soviet apparatus for ob-
taining and recording spectra for wavelengths up to
1600 μ . A table gives the basic characteristics of labo-
ratory type spectrometers for obtaining and recording
longwave infrared spectra which have been constructed
from 1932 through 1956.

(Physics--Spectroscopy, TT, v. 5, no. 11)

61-15104

1. Infrared spectroscopy--
Instrumentation
2. Infrared spectroscopy--
USSR
3. Title: Longwave
spectroscopy
1. Yaroslavskiy, N. G.
- II. LL 81G-0021
- III. LL Trans-102
- IV. Lincoln Lab., Mass.
Inst. of Tech.,
Lexington
- V. Contract AF 19(604)5200

160976

Office of Technical Services

The Hydrogen Bond, by N. D. Sokolov.

RUSSIAN, per, Uspekhi Fiz. Nauk, Vol LXII, No 2,
1955, pp 205-270.

1957

DSIR LLJ RPS 1488

Sci - Chem

128,841

Oct 60

Theory of the Vavilov-Cherenkov Effect, Part 1, by
B. M. Poletovskiy.

RUSSIAE, per, Uspekh Fiz Nauk, Vol LXII, No 3, 1957,
p 201.

May 2011/T-57

Sci - Physics
Feb 59

81,163

Recent International Works on Metrology, by G. D.
Burdun, 15 pp.

RUSSIAN, per, Uspekhi Fiz Nauk, Vol LXII, No 3, 1957,
pp 357-365.

ABC tr-3972
PL-480

159,444

Sci - Phys

PST No 111

May 61

~~The International Geophysical Year, by A. Kh. Khrgian.~~
~~A. G. Britanov, 12 pp.~~

Recollections of Professor P. Ehrenfest, by
G. E. Yulenbek.

RUSSIAN, mo per, Uspekhi Fiz Nauk, Vol LXII,
No 3, 1957, pp 367-370.

*AEC under PL 480

27 May 59

Addition to: "Recollections of Professor P. Ehrenfest" by G. E. Yulenberg, by A. F. Joffe.

RUSSIAN, mo per, Uspekhi Fiz Nauk, Vol LXII,
No 3, 1957, pp 371-372.

*AEC under PL 480

27 May 59

Semi-Conducting Thermo-Couples, A. F. Yoffe, et al.,
Thermo-Electrical Cooling, by A. F. Yoffe.

RUSSIAN, no per, Uspekhi Fiz Nauk, Vol LXII,
No 3, 1957, pp 373-376.

*AEC under PL 480

27 May 59

When Does Weak Interaction Become Strong, ~~6 pp~~ by
D. Blokhintsev, 6 pp.

RUSSIAN, no per, Uspekhi Fiz. Nauk, Vol LXII, 1957,
pp 381-383.

AEC Tr 3025

Sci - Physics
Oct 57

SVH 54, 280
R-2769

A. S. Britayev, 12 pp.

(SEE BELOW)

RUSSIAN, per, Uspekhi Fiz Nauk, Vol LXII, No 4, 1957,
pp 475-483.AEC tr-3972
PL-480

Sci - Geophys

PST No 111

May 61

The International Geophysical Year, by A. Kh. Khargian,
A. S. Britayev, 12 pp.

150,445

In Memory of G. S. Gorelik, by S. M. Rytov.

RUSSIAN, mo per, Uspekhi Fiz Nauk, Vol LXII,
No. 4, 1957, pp 485-496.

*AEC under PL 480

27 May 59

Cathode-Ray Tubes for the Recording of High Speed Processes, by V. I. Voznesenskiy, N. V. Korotkikh, A. V. Chernetskiy, 38 pp.

RUSSIAN, per, Uspekhi Fiz Nauk, Vol LXII, No 4, 1957, pp 497-522.

AEC tr-3972
PL-480

Sci - Phys

PST No 111

May 61

150,092

The Science of Physics in Italy, by D. D. Ivanenko,
28 pp.

RUSSIAN, per, Uspekhi Fiz Nauk, Vol LXII, No 4, 1957,
pp 523-535.

AEC tr-3972
PL-480

Sci - Phys

PST No 111

May 61

150,093

Determination of the Lifetime of an Artificial
Earth Satellite and an Investigation of Secular
Perturbations of Its Orbit, by D. Ye. Okhotsimskiy
T. M. Enyeyev, G. P. Tamatynova, 22 pp.
(ID 2060605)

RUSSIAN, per, Uspekhi Fiz Nauk, Vol LXIII, No 1a,
Chap II, Sep 1957, pp 33-50.

CIA/FDD X-2551

Sci Mus LIB 58/1764

DRB, Canada T 270 R

Sci - Space Res
Mar 59

216-58-50082, 263

Silicaon Solar Batteries as Sources of Electrical
Power for Artificial Earth Satellites, by V. S.
Vavilov, V. M. Malovetskaya, G. N. Galkin, S.A. P.
Landsman.

RUSSIAN, per, Uspekhi Fiz Nauk, Vol LXIII, No 1a,
Sep 1957, pp 123-130.

Navy 1821/JH T 6

FDD X-2551

AEC-Tr-3773 - P1-770

Sci - Electron

Aug 58

OTS 62-32645 67, 770

The Investigation of the Composition of Primary Cosmic
Radiation, by S. N. Vernov, V. L. Ginzburg, L. V.
Kurnosova, 21 pp.

RUSSIAN, per, Uspekhi Fiz Nauk, Vol LXIII, No 1, 1957,
pp 131-148.

AEC-tr-3973
PL-480

Nuclear
Sci - Phys

Aug 61

PST 112

163,062

Studies of Cosmic Radiation Variations, by S. N.
Vernov, Yu. I. Logache, A. E. Chudakov, 18 pp.

RUSSIAN, per, Uspekhi Fiz Nauk, Vol LXIII, No 1, 1957,
pp 149-162.

AEC-tr-3973
PL-480

Sci - Nuclear Phys

Aug 61

PST 112

163,064

TABLE OF CONTENTS of

RUSSIAN, per, Uspekhi Fiz Nauk, Vol LXIII, No 16,
Sep 1957, Moscow.

CIA X-3052

Investigation of Shortwave Ultraviolet Solar
Radiation, by S. L. Mandelshtam, A. I. Efremov,
34 pp.

RUSSIAN, per, Uspekhi Fiz Nauk, Vol LXIII, No 1b,
1957. pp 163-180

IC or SLA 59-12205

AEC-tr-3973

PL-480

Sci - Physics
Feb 59

3.00 mms
630 photo

81,654

High-altitude Rocket Investigations of the
Composition of the Atmosphere, by B. A.
Mirtov, 26 pp.

RUSSIAN, per, Uspekhi Fiz Nauk, Vol LXIII,
1957, pp 181-196.

Sai - Geophysics

Jan 60

Amer Meteorol Soc
AF Cambridge Res Center
AEC-42-3973

PL-480

106,264

Problem of the Measurement of Pressure and Density
of the Upper Layers of the Atmosphere With the Aid
of an Artificial Earth Satellite, by B. S. Danilin,
V. V. Mikhnevich, A. I. Repnev, Ye. S. Shvidkovskiy,
20 pp

RUSSIAN, per, Uspekhi Fiz Nauk, Vol LXIII, No 1,
Sept 1957, pp 205-225

Jul 58

(MIT Lin Lab)
CIA/FDD X-2753
SLA 59-16756
AEC Tr-3973
PL-480
PST-112

Study of the Ion Composition of the Ionized
Layers of the Atmosphere, by B. A. Mirtov,
V. G. Istomin, 23 pp.

RUSSIAN, per, Uspekhi Fiz Nauk, Vol LXIII,
1957, pp 227-238.

Amer Meteorol Soc
AF Cambridge Res Center

AEC-tr-3973

PL-480

Sci - Geophysics

Jan 60

106,265

AEC-tr-3973(Pt.I)(p.321-39) Unc1.

MEASUREMENT OF THE POSITIVE ION CONCENTRATION
ALONG THE ORBIT OF ARTIFICIAL EARTH SATELLITES.
K. I. Gringauz and M. Kh. Zelikman.
Translated from Uspekhi Fiz. Nauk, 63:
239-52(Sept.-Oct. 1957).

C-34 P NSA

N-4

Investigation of Solid Components of Interplanetary
Matter by Means of Rockets and Artificial Earth
Satellites, by S. M. Poloskov, T. N. Nazarova, 18 pp.

RUSSIAN, per, Uspekh Fiz Nauk, Vol LXIII, No 1b,
Chap XVI, Sep 1957, pp 253-265.

CIA/FDD X-2551
CIA/FDD X-2753

SIA 59-16764
HEC-4r-3973
PL-480

Measurement of Electrostatic Fields in the
Earth's Upper Atmosphere, by I. M. Imyanitov.
22 pp.

RUSSIAN, per, Uspekhi Fizicheskikh Nauk, Moscow,
Vol 63, No 1, Sept 1957, pp 267-282.
JPRS 48618

Sci-Phys
Aug 69

390,594

Present-Day Ideas Concerning the Mechanism of
Electrical Breakdown in High Vacuum, by L. V.
Tarasova, 35 pp.

RUSSIAN, per, Uspekhi Fiz Nauk, Vol LVIII, No 24
2, 1956, pp 321-346.

NASA TT F-42

Sci - Physics
Nov 60

132,268

In Memory of G. S. Landsberg, by I. E. Tamm, 3 pp.

RUSSIAN, per, Uspekhi Fiz Nauk, Vol LXIII, No 2, 1957,
pp 287-288.

AEC-tr-3973
PL-480

USSR

Biog

Aug 61

PST 112

162,412

A Short Outline of the Life and Work of Academician
G. S. Landsberg, by S. L. Mandel'shtam, 13 pp.

RUSSIAN, per, Uspekhi Fiz Nauk, Vol LXIII, No 2, 1957,
pp 289-299.

AEC-tr-3973
PL-480

USER

Blog

Aug 61

PST 112

162,414

Applications of Combination Scattering of Light in the
Study of the Composition and Structure of Matter,
by M. M. Sushchinskiy, P. A. Bashulin, 31 pp.

RUSSIAN, per, Uspekhi Fiz Nauk, Vol LXIII, No 2, 1957,
pp 301-321.

AEC-tr-3973
PL-480

Sci - Phys

Aug 61

PST 112

162,418

Investigation of the Hydrogen Bond by Spectroscopic
Methods, by V. I. Malyshev, 44 pp.

RUSSIAN, per, Uspekhi Fiz Nauk, Vol LXIII, No 2, 1957,
pp 323-353.

AEC-tr-3973
PL-480

Sci - Phys

Aug 61

PST 112

162,420

Certain Problems of Molecular Scattering of Light
in Liquids, by I. L. Fabelinskiy, 78 pp.

RUSSIAN, per, Uspekhi Fiz Nauk, Vol LXIII, No 2, 1957,
pp 355-410.

AEC-tr-3973
PL-480

Sci - Phys

Aug 61

PST 112

162,419

Two New Phenomena, During Second-Order Phase
Transitions, by I. A. Yakovlev, T. S. Velichkina,
31 pp.

RUSSIAN, per, Uspekhi Fiz Nauk, Vol LXIII, No 2, 1957,
pp 411-433.

AEC-tr-3973
FL-480

Sci - Phys

Aug 61

PST 112

162,421

A Brief Survey of the Development of the Analysis
of Emission Spectra in the USSR, by V. G. Koritskiy,
V. V. Malimov, V. V. Nedler, 28 pp.

RUSSIAN, per, Uspekhi Fiz Nauk, Vol LXIII, No 2, 1957,
pp 435-454.

AEC-tr-3973
FL-480

Sci - Phys

Aug 61

RST 112

162,897

G. S. Landsberg as an Author and Editor of Textbooks
in Physics, by V. A. Fabrikant, 10 pp.

RUSSIAN, per, Uspekhi Fiz Nauk, Vol LXIII, No 2, 1957,
pp 455-460.

AEC-tr-3973
PL-480

Sci - Phys

Aug 61

PST 112

162,898

Forty Years of Soviet Physics, by E. V. Shpol'skiy,
53 pp.

RUSSIAN, per, Uspekhi Fiz Nauk, Vol LXIII, No 3,
Nov 1957, pp 461-501.

US JPRS/NT-L-395

Sci - Physics

~~EC-4~~
AEC-Tr-3973
PL-480 (PST-112)
75, 850

S-4306

(NY-1696).

Institute of Physics imeni P. M. Lebedev Academy of
Sciences USSR, by D. V. Shobel'tsyn, I. M. Frank,
34 pp.

RUSSIAN, no per, Uspekhi Fiz Nauk, Vol LXIII, No 3,
Nov 1957, pp 503-525.

US JPRS/L-396

NY-

Sci - Physics

HEC-41-3773

Nov 1958

PL-480

PST-ND

76,515

An Investigation on Semiconductors in the Soviet
Union, by A. F. Yoffe. UNCLASSIFIED

RUSSIAN, per, Uspekhi Fiz Nauk, Vol LXIII, No 3,
1957, pp 527-532.

Sci - Electronics
Jun 58

TIL Tr 4862

REC-4 - 3723

PL-4810

PST-110

64,500

Electron Paramagnetic Resonance, by S. A. Altshuler,
R. M. Kozlov, 61 pp.

RUSSIAN, per, Uspekhi Fiz. Nauk, Vol LXIII, No 3,
1957, pp 533-573.

AEC-44-5973
PL-480

Sci - ~~Electron~~ *Phys*

172, 610

Nov 61

PST 112

The Excitation Spectrum of Excitons in a Crystal
Lattice, by H. P. Gross, 52 pp.

RUSSIAN, per, Uspehi Fiz Nauk, Vol LXIII, No 3,
1957, pp 575-611.

AEC-tr-3973
PL-480

172, 611

Sci - Phys

Nov 61

EST 112

(NY-1486)

Large-Amplitude Shock Waves in Gases, by Ya. B.
Zel'dovich, 58 pp.

RUSSIAN, no per, Uspekhi Fiz Nauk, Vol LXIII, No 3,
Moscow, Nov 57, pp 613-641.

USSR

Physical Sciences - Physics, Shock Waves

US JPRS/NY-1-86

TIL No 4863

NAVY 2258/T-153

REC-41-3973

PL-480

REF-112

63,433

Correlation Theory of Electric Fluctuations and
Thermal Radiation, by N. M. Rylov, 22 pp.

RUSSIAN, per, Voprosy Fiz Nauk, Vol LXIII, No 4, 1957,
pp 657-672.

AEC-tr-3973
PL-480

Sci - Phys

172.612

No. 61

PSI 112

The Origin of the Hydroxyl System in the Radiation of
the Night Sky, by V. I. Kravtsov, 20 pp.

RUSSIAN, per, Uspekhi Fiz Nauk, Vol LXIII, No 4, 1957,
pp 613-631.

AEC-tr-3973
21-460

Sci - Phys

Nov 61

172,613

Electronic Methods for Ultrashort Pulse Generation,
by A. S. Korogskiy, A. V. Chernavskiy, N. V.
Korotkiy, 17 pp.

RUSSIAN, per, Uspekhi Fiz. Nauk, Vol LXIII, No 4,
1957, pp 601-612.

AEC-tr-3973
PL-480

Phys
Sci - ~~Electron~~

112, 614

Nov 61

BSU 112

Some Demonstration Experiments for a Course of
General Physics, by M. A. Gerasimov, V. S. Egorov,
10 pp.

RUSSIAN, per, Uspekhi Fiz Nauk, Vol LXIII, No 4,
1957, pp 613-616.

AEC-tr-3973
PL-480

Sci - Phys

172,615

Nov 61

PST 112

Lecture Demonstrations of Ferroelectricity for a
Course of General Physics, by K. H. Karman, 8 pp.

RUSSIAN, per; Uspekhi Fiz Nauk, Vol LXIII, No 4, 1957,
pp 819-823.

AEC-tr-3973
PL-480

Sci - Phys

Nov 61

PST 112

172, 616

Electron Microscopy in Japan, by G. O. Danyalents, 35 pp.

RUSSIAN, per, Uspekh Fiz Nauk, Vol LXIII, No 4, 1957, pp 824-845.

AEC-tr-3973
PL-480

Sci - Electron

172, 617

Nov 61

PST 112

A Trip of a Delegation of the Academy of Sciences of
the USSR to the USA to Attend a Gordon Conference on
Nuclear Chemistry, by V. I. Gol'danskiy, 31 pp.

RUSSIAN, per, Uspekhi Fiz Nauk, Vol. LXIX, 1957, pp 84;
857.

CIA/EBB X-3030

" " X-3434

Sci - Physics
Aug 58

HEC-11-3773

PL-480

PEI-12

73,430

Benjamin Franklin; Experiments and Observations on
Electricity, by Ya. G. Dorfman.

RUSSIAN, mo per, Uspekhi Fiz Nauk, Vol LXIII,
No 4, 1957, pp 859-860.

~~*AEC under PL 480~~
b AEC-tr 3973
PL-480
PST-112

27 May 59

R. Paierls. The Quantum Theory of Solid Bodies,
by A. G. Samoilovich.

RUSSIAN, mo per, Uspekhi Fiz Nauk, Vol LXIII,
No 4, 1957, pp 860-864.

~~*AEC under PL 480~~
6 AEC-tr-3973
PL-480
PST-112

27 May 59

Table of Contents

Vol LXIV

RUSSIAN, per, Uspekhi Fiz Nauk, No 1, k 1958.

Amer Meteor Soc for
Geophys Res Dir ASTIA

Method of Investigating the Ionosphere Using
an Artificial Earth Satellite, by Ya. I L.
Al'pert, 15 pp. UNCLASSIFIED

RUSSIAN, no per, Uspekhi Fiz Nauk, Vol LXIV,
No 1, Moscow, Jan 1958, pp 3-14.

ADD
US JPRS/NY-627

(NY-1607)

Sci - Geophys
Aug 58

70,129

Fain, V. M.
QUANTUM PHENOMENA IN THE RADIO FRE-
QUENCY RANGE. [1962] 65p. 77 refs.
Order from OTS or SLA \$6.60 62-14846

Trans. of Usp[ekhi] Fiz[icheskikh] Nauk (USSR) 1959,
v. 64, no. 2, p. 273-313.

DESCRIPTORS: *Quantum mechanics, *Radiofrequency,
*Microwave spectroscopy, *Molecular spectroscopy,
Electrons, Motion, Electromagnetic fields, Electro-
magnetic waves, Electronics, Radio waves,
Molecules.

Consideration is given to the question of quantum
effects when free electrons interact with high fre-
quency fields. Essentially, quantum effects in this
case are negligible. However in principle it is possi-
ble to measure certain of these effects. Also certain
quantum effects, generally speaking, are not negligi-

Physics, TT, v. 8, no. 7)

(over)

62-14846

I. Fain, V. M.

Office of Technical Services

Study of the Solar Corpuscular Radiation
by Means of Artificial Satellites,
by V. I. Krasovskiy, Yu. M. Kushnir.
RUSSIAN, per, Uspekhi Fizicheskikh Nauk,
Vol 64, No 3, 1958, pp 425-434.
OTS TT-64-71370

CSIRO Tr 4222

Sci-E Sci
Jul 66

306,431

T/c

RUSSIAN, per, Uspekhi Fiz Nauk, Vol LXIV, No 3, 1958

CIA/FDD X-2987

High Speed Spectrometry, by O. D. Dmitriyevskiy,
et al.

RUSSIAN, per, Uspekhi Fiz Nauk, No 3, 1958,
pp 447-492.

Infosearch Ltd.

Sci - Phys
Sep 59

96,403

Modern Theory of Superconductivity, by A. Abrikosov,
I. Khalatnikov, 58 pp.

RUSSIAN, ^{per} ~~the~~ Uspekhi Fiz Nauk, Vol LXV, No 4, 1958,
pp 551-591. 653529

ATIC MCL-12/V

Sci - Phys
Dec 59

103,919

Interference of Electron Waves, by V. I. Milyutin,
42 p.

RUSSIAN, per, Uspekhi Fizicheskikh Nauk, 1958,
Vol LXV, No 4, pp 665-688.

SLA 59-20280

Sci
Mar 60
Vol 2, No 12

109,244

Irregularities of Plastic Deformations of Crystals,
by V. N. Rozhanskiy.

RUSSIAN, per, Uspekhi Fiz Nauk, No 3, 1958,
pp 387-406.

Infosearch Ltd.

Sci - Phys
Sep 59

96,412

Stratification of Solutions of Liquid Helium Isotopes
at Very Low Temperatures, by R. Chentsov, 3 pp.

RUSSIAN, per, Uspekhi Fiz Nauk, Vol LXIV, 1958,
pp 195-196.

AEC tr-3683

Sci - ~~HEP~~ Phys
Feb 60

107,205

Optical Observations of Artificial Satellites,
by I. S. Shkalovskiy, P. V. Shcheglov.
UNCLASSIFIED *Shcheglov*

No 3,
RUSSIAN, per, Uspekhi Fiz Nauk, Vol LXIV, Mar
1958, Encl to ~~IR-786-58~~, AA, London.

AF 1180513

Shcheglov
Ch. 1
T 297 K

Sci - Space Res
Jul 58

66,676.

Ratzer, M. D. and Shpigel', I. S.
ETUDE DU PLASMA A L'AIDE DE MICRO-ONDES
(Study of Plasma Using Microwaves) tr. by Fedorovsky.
6 May 60 [55]p. 53 refs. CEA Trans. no. R 895 (text
in French).

Order from OTS or SLA \$5.60

61-15761

Trans. in French of Usp[ekhi] Fiz[icheskikh] Nauk
(USSR) 1958, v. 64, no. 4, p. 641-667.
Translations in English available from LC or SLA
ml\$3.30, ph\$7.80 as AEC-tr-3594 [1959] [44]p. and
ml\$3.60, ph\$9.30 as 59-20279 [1959] 53p.

DESCRIPTORS: Plasma physics, *Gas discharges,
*Microwaves, Dielectric properties

For abstract see Technical Translations 2: 858, 1959.

AEC TR 3594

(Physics--Electronics, TT, v. 6, no. 6)

61-15761

I. Ratzer, M. D.
II. Shpigel', I. S.
III. CEA-tr-R895
IV. Commissariat à l'Énergie
Atomique (France)

176518

Office of Technical Services

Optical Observations Of Artificial Earth Satellites
by I.S. Shklovski and P.V. Shcheglov.

RUSSIAN, per, Uspekhi Fizicheskikh Nauk, Vol LXIV,
No 3, 1958, pp 417-424.

CSIRO

Oct. 62

The Eleventh Conference on Spectroscopy - Part III -
Solid State Spectroscopy, by N. Kaliteykhly.
UNCLASSIFIED

RUSSIAN, per, Uspekhi Fiz Nauk, No 1, May 1958.

Navy Tr 1853/JH T-22

" " 1733 " "

Sci - Physics
Sep 58

73,628

Kolesnikov, V. N. and Leskov, L. V.
OPTICAL TRANSITION PROBABILITIES FOR ATOMS
AND DIATOMIC MOLECULES [Veroyatnosti
Opticheskikh Perekhodov dlya Atomov i Dvukhatomnykh
Molekul]. [1962] 51p. 370 refs.
Order from OTS or SLA \$5.60 63-10744

Trans. of Usp[ekhi] Fiz[icheskikh] Nauk (USSR) 1958,
v. 65, no. 1, p. 3-38.

DESCRIPTORS: *Atoms, *Molecules, *Electron
transitions, Probability, Optics, Measure theory,
Harmonic analysis, Perturbation theory,
*Bibliographies.

(Physics--Molecular, TT, v. 9, no. 11)

63-10744

1. Title: Transition prob-
ability
2. Title: Diatomic molecules
I. Kolesnikov, V. N.
II. Leskov, L. V.

Office of Technical Services

The Phenomenon of Spin Echoes and Its Application,
by N. M. Pomerantsev, 43 p.

RUSSIAN, per, Uspekhi Fizicheskikh Nauk, 1958,
Vol LXV, No 1, pp 87-110.

SLA 59-20278

Sci
Mar 60
Vol 2, No 12

109,246

Some Possibilities of Using Polarized Thermal
Neutrons Related to the Nonconservation of
Parity in β -decay, *by F. L. Shapiro.*

RUSSIAN, per, Uspekhi Fiz Nauk, Vol LXV, No 1,
1958, pp 133-140.

Sci - Physics
Jan 61

NRCC - 77-857
HEC-Tr-3765

136,409

(DC-2550-D/1)

Anatoliy Boleslavovich Mlodzeyevskiy, (On His
75th Birthday), by S. N. Rzheyekin, 3 pp.

RUSSIAN, per, Uspekhi Fizicheskikh Nauk, No 1,
1958, pp 145-146.

JPRS-L-1813-D

USSR
Biog
Sci - Misc
Aug 59

On Certain Results of Determining the Electron
Concentration of the Outer Regions of the Ionosphere
by Means of Observations of Radio Signals From the
First Artificial Satellite, by Ya. L. Alpert,
E. F. Chudansenko, B. S. Shapiro, 26 pp.

RUSSIAN, par, Uspekhi Fiz Nauk, Vol LXV, 1958,
pp 161-174.

Sci - Spec Res

Nov 58

CSIRO Jn 4217
AEC/EP 152
ATS RJ-1715
R-5195

76, #60

Belov, K. P.

FERROMAGNÉTIQUE ET ANTIFERROMAGNÉTIQUES
AU VOISINAGE DU POINT DE CURIE [Ferromagnetika
i Antiferromagnetiki Vblizi Tochki Kyuri] [Ferro-
magnetic and Antiferromagnetic Materials Near Curie
Point] tr. by Sokolovsky. 29 June 60 [102]p. 107 refs.
CEA Trans. no. R 959 (text in French).
Order from OTS or SLA \$9.10

61-15753

Trans. in French of *Uspekhi Fizicheskikh Nauk*
(USSR) 1958, v. 65, no. 2, p. 207-256.

DESCRIPTORS: *Ferromagnetic materials, *Anti-
ferromagnetism, Thermodynamics, Phase transitions.

Recently much experimental material has accumulated
with respect to various physical phenomena in metals,
alloys, ferrites, sulfides as well as ferromagnetic and
antiferromagnetic materials. It was the aim of the
present paper to sort out and to arrange this material
systematically.

(Physics--Magnetism, TT, v. 6, no. 7)

61-15753

- I. Belov, K. P.
- II. CEA-tr-R959
- III. Commissariat à l'Énergie
Atomique (France)

Office of Technical Services

Negative Ions, by M. S. Buchel'nikova, 1 58 pp.

RUSSIAN, per, Uspekh Fiz Nauk, -Vol LXV, 1958,
pp 351-385.

AEC Tr 3637

Sci - Phys

May 59

87,958

New Measurements of Atomic Masses, by V. A.
Krautsov, 58 pp.

RUSSIAN, per, :Uspekhi Fiz Nauk , Vol LXV,
1958, pp 451-488.

AEC TT-809

Sci - Nuc Phys

Oct 59

99,540

USPEKHI FIZICHESKIH NAUK
(Soviet Physics - Uspekhi - bimonthly)
Translation begins with 1958, Vol. 66
Lag time: ca. 6 months
Order from: American Institute of Physics
335 East 45th Street
New York, N.Y. 10017
1971: \$ 45.00/year USA and Canada
\$ 49.00/elsewhere
\$ 8.00 single current or back issues
USA and elsewhere
(Prepayment required - surface mail postage
is included)

*Run
rel*

Plank Celebrations in Berlin and Leipzig, by
D. D. Ivanenko, 11 pp.

RUSSIAN, per, Uspekhi Fiz Nauk, Vol LXVI, No 3,
1958, pp 523-.

AIP
Sov Phys-Uspekhi
Vol 1(66), No 2

Sci

132, 131

Nov 60

The Creative Path of M. Planck, by E. V. Shpol'skiy,
6 pp.

RUSSIAN, per, Uspekhi Fiz Nauk, Vol LXVI, No 3,
1959, pp 535-.

AIP

Sov Phys-Uspekhi
Vol I (66), No 2

Sci
Nov 60

Research on Controlled Thermonuclear Reactions
in the U.S.S.R., by L. S. Artsimovich, 17 pp.

RUSSIAN, per, Uspekhi Fiz Nauk, Vol LXVI, No 4,
1958, pp 545.

AIP
Sov Phys-Uspekhi
Vol 1(66), No 2

Sci

132,126

Nov 60

Remarks on Bohr's Article on His Discussions With
Einstein, by V. A. Fock, 3 pp.

RUSSIAN, per, Uspekhi Fiz Nauk, Vol LXVI, No 4,
1958, pp 599-602.

AIP
Sov Phys-Uspekhi
Vol 1(66), No 2

Sci

132, 127

Nov 60

Forbidden Lines in Atomic Spectra, by L. A.
Borisoglebskiy, 34 pp.

RUSSIAN, per, Uspekhi Fiz Nauk, Vol LXVI, No 4,
1958, pp 603-.

AIP
Sov Phys-Uspekhi
Vol 1(66), No 2

Sci

132, 128

Nov 60

Life and Physical Discoveries of Torricelli,
by Ya. G. Dorfman, 11 pp.

RUSSIAN, per, Uspekhi Fiz Nauk, Vol LXVI, No 4,
1958, pp 653-.

AIP
Sov Phys-Uspekhi
Vol 1(66), No 2

Sci

132, 130

Nov 60

Fourth All-Union Acoustics Conference, by V. D.
Tartakovskiy, 23 pp.

RUSSIAN, per, Uspekhi Fiz Nauk, Vol LXVI, No 4,
1958, pp 671-694.

AIP
Sov Phys-Uspekhi
Vol 1(66), No 2

Sci

132, 132

Nov 60

Vladimir Aleksandrovich Fock (on His Sixtieth
Birthday, by M. G. Veselov, 5 pp.

RUSSIAN, per, Uspekhi Fiz Nauk, Vol LXVI, No 4,
1958, pp 695-.

AIP

Sov Phys-Uspekhi
Vol 1(66), No 2

Sci

Nov 60

132, 133

Raman Spectra and Structure of Certain Inorganic
Types of Glass, by Ya. S. Bobovich, T. P. Tulub,
28 pp.

RUSSIAN, per, Uspekhi Fiz Nauk, Vol LXVI, No 1,
1958, pp 3-42.

AIP
Sov Phys-Uspekhi
Vol 1(66), No 1

Sci

132,073

Nov 60

Temperature Dependence of the Internal Friction
of Pure Metals and Alloys, by V. G. Postnikov,
48 pp.

LXVI
RUSSIAN, per, *Doklady Akad. Nauk*, Vol ~~XCVI~~, 1978,
pp 43-77.

ASC Tr 3529

Sci - Min/Met
Feb 59

81,283

Reviews of Nuclear Particle Accelerators, by
V. I. Veksler, 21 pp.

RUSSIAN, per, Uspekhi Fiz Nauk, Vol LXVI, 1958,
pp 99-110.

AEC-tr-3718

Sci - Nuc Phys
Aug 59

94, 721

Diffusion Cloud Chambers, by B. K. Lyapidevskiy,
13 pp.

RUSSIAN, per, Uspekhi Fiz Nauk, Vol LXVI, No 1,
1958, pp 111-.

AIP
Sov Phys-Uspekhi
Vol 1(66), No 1

Sci

132, 078

Nov 60

Physical Methods of Investigation of the Structure
of Molecules, by E. I. Fedin, 9 pp.

RUSSIAN, per, Uspekhi Fiz Nauk, Vol LXVI, No 1,
1958, pp 131-.

AIP
Sov Phys-Uspekhi
Vol 1(66), No 1

132,080

Sci

Nov 60

New Magnetic Materials--Garnet Ferrites, by
K. P. Belov, M. A. Zaitseva, 3 pp.

RUSSIAN, per, Uspekhi Fiz Nauk, Vol LXVI, No 1,
1958, pp 141-156.

AIP
Sov Phys-Uspekhi
Vol 1(66), No 1

Sci

132,074

Nov 60

Anatolii Boleslavovich Mlodzeyevskiy, by S. N.
Rzheyevkin, 2 pp.

RUSSIAN, per, Uspekhi Fiz Nauk, Vol LXVI, No 1,
1959, pp 145-.

AIP
Sov Phys-Uspekhi
Vol I (66), No 1

Sci
Nov 60

Radio Astronomy Investigations by Means
of Artificial Satellites, by G. G. Getmantsev,
V. L. Ginsburg, I. S. Shklovskiy, 9 pp. UNCL

RUSSIAN, per, Uspekh Fiz Nauk, Vol LXVI, No 2,
1958, pp 157-161.

JPRS-730-0
AF 1212615

Sci- Space Res
Mar 59

NAVY T-98

81,925

Theory of the Fermi Fluid (The Properties of
Liquid He^2 at Low Temperatures), by A. A.
Abrikosov, I. M. Khalatnikov, 23 pp.

RUSSIAN, per, Uspekhi Fiz Nauk, Vol LXVI, No 2,
1958, pp 177-212.

AIP
Sov Phys-Uspekhi
Vol 1(66), No 1

Sci

132,075

Nov 60

Physico-Chemical Phenomena in the Deformation of
Metals, by V. I. Likhtman, E. D. Shchukin, 22 pp.

RUSSIAN, per, Uspekhi Fiz Nauk, Vol LXVI, No 2,
1958, pp 213-.

AIP

Sov Phys-Uspekhi

Vol 1(66), No 1

Sci

132,076

Nov 60

High-Intensity Pulsed Light Sources, by M. P.
Vanyukov, A. A. Mak, 19 pp.

RUSSIAN, per, Uspekhi Fiz Nauk, Vol LXVI, No 2,
1958, pp 301-.

AIP
Sov Phys-Uspekhi
Vol 1(66), No 1

Sci

132,079

Nov 60

Detection of Ion Beams by Electron Multipliers
in Mass Spectrometry and Nuclear Physics, by
A. I. Akishin, 11 pp.

RUSSIAN, per, Uspekhi Fiz Nauk, Vol LXVI, No 2,
1958, pp 331-.

AIP
Sov Phys-Uspekhi
Vol 1(66), No 1

Sci

132, 077

Nov 60