

Gridnev, V. N.
HET PROBLEEM VAN HET MECHANISME EN DE
KINETICA VAN DE OMZETTING VAN PERLIET IN
AUSTENIET BIJ HOGE VERWARMINGSSNELHEDEN
(The problem of the mechanism and the kinetics of the
transformation of perlite into austenite at high veloci-
ties of heating) tr. by J. H. van Santen. 18p. (foreign
text included). 10 refs. MTWL: 705. (Text in Dutch).
Order from OHS or ETC: \$1.85 61-17328

Trans. of Zhurnal Tekhnicheskoi Fiziki (USSR) (1951)
v. 21, no. 4, p. 473-481.

DESCRIPTORS: Steel. *Austenite. *Pearlite. Phase
transitions. Heating.

61-17328

I. Gridnev, V. N.
II. MTWL-705
III. Stichting Moelijk
Toegankelijke Wetenschap-
pelijke Literatuur

Office of Technical Services

Electric and Thermoelectric Properties of Partially
Reduced (blue) Titanium Dioxide, by B. I. Boltaks,
F. N. Vasenin, A. E. Galunina, 19 pp.

RUSSIAN, per, Zhur Tekh Fiz, Vol XXI, No 5, 1951.

pp 532-541

Morris D. Friedman B-134
\$9.50

Sci - Electronics
Sci - Chemistry
Mar 59

84,382

On the Calculation of the Propagation of Harmonic
Perturbations in a Liquid Which Fills Serially and
Parallely Connected Pump Aggregate Pipes,
by Yu. N. Grizodub, 12 pp.
RUSSIAN, per, Zhur Tekh Fiz, Vol XXI, 1951,
pp 564-572. 922 3558
AEC-ANL-Tr-24

OTS ANL-Dance-24

Sci-Phys
Sep 64

265,834

Observations of Peak Groups of Electrical Fluctuations,
by V. I. Bunimovich, 14 pp.

Full translation.

RUSSIAN, Zhur Tekh Fiz, 1951, Vol XXI, No 6,
pp 637-646.

Sci Mus Lib No 52/3244

Scientific - Electricity

27 December 1552

On the Mechanism of the Lightning Discharge;
by A. S. Alizade.

RUSSIAN, per, Zhur Tekh Fiz, Vol XXI,
No 6, 1951, pp 652-657.

CSIRO

Sci - Phys
May 62

196, 743

X-Ray Investigation of the Ageing of Aluminium
Alloys. II

RUSSIAN, per, Zhur Tekh Fiz, Vol XXI, No 6, 1951,
pp 658-662.

Fulmer Research Institute, Ltd. Tr 67
OT/1814

Sci - Physics, min/metals

39,928

ASLIB 65337067

An X-Ray Method for the Quantitative
Determination of Molecular Orientation in
Non-Crystallizing Rubbers, by B. V. Lukin,
5 pp.

RUSSIAN, per, Zhur Tekh Fiz, Vol. XXI, No 6,
1951, pp 663-666.

OTS 60-16584

Sci

30 Mar 62

188, 912

Computation of the Generalized Conductivity
of Heterogeneous Systems. I. Matrix Two-Phase
Systems With Nonelongated Inclusions. II.
Statistical Mixtures of Nonelongated Particles,
by V. I. Odelevskiy. UNCL

RUSSIAN, per, Zhur Tekh Fiz, Vol XXI, No 6,
1951, pp 667-685.

DSIR LLU M.1332

(loan) 113, 719

Sci - Phys
Apr 60

Positive Column of a Gas Discharge in an
Axially-Symmetric Inhomogeneous Magnetic Field,
by E. M. Reikhrudel, 13 pp.

RUSSIAN, no par, Zhur. Tekh. Fiz., Vol XXI, 1951,
pp 733-745.

ABC Tr 2731

48,651

Sci - Physics
Jun 57

ATS 48-77

ATS 48J-16 R 2075

Oscillographic Study of Discharge in ~~Ex~~ Pulsed X-Ray
Tubes, by E. M. Reikhrudel, A. A. ~~Ad~~ Sanin, T. A.
Titova, 6 pp.

RUSSIAN, per, Zhur Tekh Fiz; Vol XXI, No 7, 1951,
pp 746-752.

Amer Meteorol Soc
AF Cambridge Res Center

DRB Canada

T308R

Sci

On the Solution of the Integral Equation of
the Boundary (Diffraction) Problems of Elec-
trodynamics, by N. V. Zernov, 1 $\frac{1}{2}$ pp.

RUSSIAN, per, Zhur Tekh Fiz SSSR, Vol XXI,
No 7, 1951, pp 766-771.

NLL 5828.4F

SLA R-1953

Sci

OCT 509 N

Jul 58

68,322

Theory of Slot Antennas in a Round Waveguide,
by M. I. Levin, *ibid.*

RUSSIAN, no par, *Zhur Tekh Fiz*, Vol XXI, No 7,
1951, pp 772-780.

CIA/ROD X-2892

Sci - Russian
May 1957 OIS/OSW

47,330

The Derivation of the Fundamental Equation of the
Theory of Slot Antennas, by M. L. Levin, 8 pp.

RUSSIAN, no par, Izv. Vys. Fiz, Vol XXI, No 7,
1951, pp 731-734.

CIA/FDD X-2393

Sci - Physics
May 1957 CES/dec

SLA R-175
47, 332

A Slot Antenna With a Guiding System, by M. L. Levin,
7 pp.

RUSSIAN, no per, Zhur Tekh Fiz, Vol XXI, No 7, 1951,
pp 795-801.

CIA/FDD X-2394

47,496

Sci - Physics
May 1957 CTS/dex

Influence of Manganese Upon Diffusion of Carbon
in Austenite, by M. E. Blaxter.

RUSSIAN, per, Zhur Tekh Fiz, Vol XXI, No 7, 1951,
pp 818-821.

Brutcher Tr No 2924

Scientific - Min/Metals

14,931

Impulse Analysis by Means of Resonators, by A. A. Khar-
kevich, 11 pp. UNCLASSIFIED

Full translation.

RUSSIAN, no per, Zhur. Tekh Fiz, Vol XXI, No 8, USSR,
1951, pp 885-891.

AMC F-TS-7852-RE

Scientific - Physics, resonators

Sep 52 CTS/DEK

CIA 857883

Dispersion of Sound in Disperse Systems, by V. K. Michurin, L. A. Chernov, 14 pp. UNCLASSIFIED

Full translation.

RUSSIAN, no per, Zhur Tekh Fiz, M Vol XXI, No 8, USSR, 1951, pp 920-926.

AMC P-TS-7852-RE

Handwritten: No. 8, 1951

Scientific - Physics, dispersion, sound waves

Sep 52 CTS/DEX

CIA 857883

Dissipation of Sound in a Slightly Nonhomogeneous
Medium, by M. L. Levin, 4 pp. UNCLASSIFIED

Full translation.

RUSSIAN, no pag, Zhur Tekh Fiz, Vol XXI, No 8, USSR,
1951, pp 937-939.

AMC F-TS-7852-RE

Scientific - Physics, sound

Sep 52 CTS/DEX

CIA 857883

The Theory of Measuring Weak Signals Having a Continuous Spectrum, by V. S. Troitsky, 18 pp. UNCLASSIFIED

Full translation.

RUSSIAN, no per, Zhur Tekh Fiz, Vol XXI, No 8, USSR, 1951, pp 994-1003.

OTS 63-14426

AMC F-TS-7852-RE

W. J. R. I. J.

Scientific - Physica, spectrum, signals

Sep 52 CTS/DEX

CIA 857883

Distribution of the Density of Mercury Vapor in
the Presence of an Evaporating and Condensing
Liquid Mercury Surface, by R. Ya. Barskaya, N.
A. Denisyuk, L. A. Sena.

RUSSIAN, per, Zhurnal Tekhnicheskoi Fiziki,
Vol 21, No 9, 1951, pp 1005-1007.

*AEC SCL-T-66-251

Sci - Physics

Limits of Stable Existence of Positive Gas
Discharge Column, by I. A. Poletayev, 13 pp.

RUSSIAN, per, Zhur Tekhnicheskoi Fiz, Vol
XXI, No 9, 1951, pp 1021-1028. 9667412

FTD-FT-62-1238

Sci - Phys
Jan 63

542

Diffusion of Polymers in Solution, by S. E. Bresler,
S. A. Pavlova, P. A. Finogenov, 12 pp.

Full translation.

RUSSIAN, per, Zhur Tekh Fiz, Vol XXI, No 9,
1951, pp 1061-1065.

CIA/FDD/X-995

Scientific - Chemistry

Aug 53 CTB/DEK

4580

Influence of Alloying Elements Upon Martensite Transformation Temperatures, by V. G. Vorob'ev and A. P. Gulyaev, UNCLASSIFIED

RUSSIAN, per, Zhur Tekh Fiz, Vol XXI, 1951, No 10, pp 1157-1163

Butcher Order No 3080
Price \$4.60

Scientific - Metallurgy

456

Transformation of Austenite into Martensite at
Subzero Temperature. Communication II., by
V. G. Vorob'ev, EK A. P. Gulysev;

RUSSIAN, per, Zhur Tekh Fiz, Vol XXI, 1951, No 10,
pp 1164-1169.

Butcher Tr No 3021

Scientific - Metallurgy

Price \$3.90

1375

On Biological and Chemical Processes in the Field of
Ultrasonic Waves, by I. Ye. El'piner.

RUSSIAN, no per, Zhur Tekh Fiz, Vol XXI, No 10,
Oct 1951, pp 1205-1212.

USDA Tr 310²

USSR
Scientific - Biology

Jan 54 CTS

9152

Investigation of Fatigue Effects on Rochesalt
Monocrystals by an Optical Method, by D. B.
Gogoberidze, I. D. Kurvalidze. UNCLASSIFIED

RUSSIAN, *Sov. Zhur Tekh Fiz*, Vol XXI, No 10,
1951, pp 1255-1261.

Sci Mus Lib 57/4287

Sci - Min/Inst
Sep 58

73,391

Temperature in the Cutting of Metals, by A. A.
Avakov, 7 pp.

RUSSIAN, per; Zhur Tekh Fiz, Vol XXI, No 10, 1951,
pp 1262-1268.

Sci Mus Lib Tr 57/0954

Sci - Physics
Jul 57

49,808

Study of Residual X-Ray Strains Produced in Metals
by Homogeneous Plastic Deformation. Part II., by
B. M. Rovinskii, 22 pp.

RUSSIAN, per, Zhur Tekh Fiz, Vol XXI, No 11, 1951,

~~1325-1335~~

NLL 5828.4F CIA/RDD/X-1369

PHYSICS

Scientific - ~~Classification~~

13,038

STS/DEI

The Coefficient of Correlation as a Criterion of the
Acoustic Quality of a Closed Room, 6 pp.
by S. G. Merzhan, UNCLASSIFIED

RUSSIAN, no per, Zhur Tekh Fiz, Vol XXI, No 12,
1951, pp 1492-1536. *CTA 450445*

Defence Sci Info Sv; DRB Canada T 37 R

Scientific - Physics, acoustics

Mar 53 CTS

865
~~454~~

on the Question of the Mechanism of the Decomposition of Supersaturated Solid Solutions in Alloys, by
M. A. Bagharyatskiy, 14 pp.

Full translation

RUSSIAN, no per, Zhur Tekh Fiz, Vol XXI, No 12,
1951, pp 1497-1503.

R Sci p Physics

Sci Ma Lib 53/2047

F.K.I No. 45

7461

X-Ray Camera for Low Temperatures, by L. S. Kan, B. G. Lazarev, 4 pp.

RUSSIAN, per, Zhur Tekh Fiz, Vol XXI, No 12, 1958,
pp 1542-1543.

CIA/FDD/X-1353

Physics
Scientific - ~~Chemistry~~
CPS/DEX

14,402

Some Problems of Contemporary Solid State
Electron Theory, by F. F. Vol'kenshtein, 23 pp.

RUSSIAN, no per, Zhur Tekh Fiz, Vol XXI, 1951,
p 1544.-1554.

SLA R-1954-Loew
Morris D. Friedman ✓-114
\$12.00

USSR
Scientific - Physics

CPS 65/Feb 55

2,282

Contribution to the Theory of the Hardening of
Metals. 2. Electron Density and Chemical Defects
in the Lattice of the Solid Solution of Aluminum
in Copper, by B. M. Rovinskiy, 7 pp.

RUSSIAN, no per, Zhur Tekh Fiz, Vol XXII, No 1,
1952, pp 63-66.

Sci Museum Lib No 53/2359

F.R.I. 112 49

SSR

Scientific - Minerals/Metals

Mar 54 CTS

9889

Optical Factors and Effective Depth in the Photo-
Effect of Cesium Antimony Cathodes, by B. I.
Dyatlovskaya

Full translation.

RUSSIAN, per, Zhur Tekh Fiz, Vol XXII, No 1, 1952,
pp 84-100.

ABC Tr 1588

Scientific - Physics

Jun 53 CT8/DEX

3157

On Deformation of Electromagnetic Pulses Propagated
in the Ionosphere, by B. N Gershman, 7 pp.

RUSSIAN, per, Zhur Tekh Fiz, Vol XXII, No 1,
1952, pp 101-104.

SLA Tr R-661

Sci - Electricity

50,633

Aug 57

On the Thermal Conductivity, Electrical Conductivity
and Thermoelectric Force of SbZn Alloys, and Also on the
Influence on These of Minute Admixtures of Other Metals,
by E. Dsvyatkov, Yu. Maslakovets, L. Stil'banz, 24 pp.

RUSSIAN, per, Zhur Tekh Fiz, Vol XXII, No 1, 1952, pp
129-142.

SLA R-887

Sci - Min/Met

Feb 58

58, 441

The Photoelectric Effect, by K. A. Yumatov.
RUSSIAN, per, Zhur Tekh Fiz, Vol XXII, No 1,
1952, pp 177-178.
ERDL, Ft Belvoir T-1720

(AD - 436421)

Sci - Phys
Oct 64

267,625

Processes of Oxidation and Transfer Occurring
at the Metal Electrodes of a Direct-Current Arc,
by V. V. Dorovkov, P. D. Korzh, 12 pp.

RUSSIAN, per, Zhur TekhFiz, USSR, Vol XXII,
1952, pp 227-237.

CIA/FDD/Z-117

Scientific - Physics

13,764

Spectral Reflexion of Metals in the Spectrum Region
220-250m, by T. Gh. Porokhova, UNCLASSIFIED

RUSSIAN, Zhur Tekh Fiz, 1952, Vol 22, No 2, pp 308-312

RUSSIAN Sci Mus Lib No 52/3112

Scientific - Physics

29 November 1952

Energy Spectra of Electrons in Ionic Crystals
(Tight-Binding Case), by S. V. Tyablikov, 12 pp.

RUSSIAN, no per, Zhur Tekh Fiz, Vol XXII, 1952,
p 325.

Morris D. Friedman
\$6.00

T-106

USSR
Scientific - Physics

CTB 65/1 55

21,315

On The Sensitivity of Radio Pyrometers, by V. S.
Troitzky (ATIC - 69906-2) 11 pp.

RUSSIAN, per, Zhur Tekh Fiz, Vol XXII, No 3,
Mar 1952

ATIC F-15-7884

Scientific - Electronics

CIA 2001353

7054

CTS/DEX

Theory of Solid Rectifiers, by A. I. Gubanov

RUSSIAN, per, Zhur Tekh Fiz, 1952, Vol XXII,
No 3, pp 381-393.

D.S.I.R. Tr No CTS 10

Scientific - Electricity

List No 49, Apr 1953

1064

Kontorovich, M. I. and Murav'ev, Yu. K.
THE DERIVATION OF THE LAWS OF REFLECTION
OF GEOMETRICAL OPTICS ON THE BASIS OF THE
ASYMPTOTIC TREATMENT OF DIFFRACTION
PROBLEMS. [1961] 21p. (2 figs. omitted) 3 refs.
Order from OTS or SLA \$2.60 62-10477

Trans. of Zhur[nal] Tekh[nicheskoi] Fiz[iki] (USSR)
1952, v. 22, no. 3, p. 394-407.

DESCRIPTORS: *Diffraction, *Optics, Surfaces,
Electromagnetic fields, *Reflection, Theory, Mathe-
matical analysis, Integral equations, Electromag-
netic waves reflection.

The derivation of an asymptotic equation for the sur-
face integrals from the oscillating functions (the
method of the stationary phase) is considered. By the
use of the equation obtained, the relation between the
laws of reflection of geometrical optics and the laws
(Physics--Optics, TT, v. 7, no. 10) (over)

62-10477

I. Kontorovich, M. I.
II. Murav'ev, Yu. K.

Office of Technical Services

An Investigation Into the Influence of Speed of Circulation on the Values of Critical Heat Flows for Liquid Boiling in Tubes, by L. S. Storman, N. Gh. Styushin, 10 pp.

RUSSIAN, per, Zhur Tekh Fiz, Vol XXII, No 3, 1952, pp 446-454.

Sci Mus Lib Tr 57/3254

Sci - Physics
Mar 58

60,520

On the Theory of a Wave Guide With Coil, Partially Filled With a Dielectric Material. (The Case of Arbitrary Dielectric Permeabilities) by V. P. Shestopalov.

Full translation.

RUSSIAN, no per, Zhur Tekh Fiz, Vol XXII, No 3, USSR, 1952,

AEC Tr 1383

Scientific - Electronics, Wave Guide, Dielectric

Sep 52 CTS/DEX

Calculation of the Excitation of Wave Guides,
by L. S. Benenson, 30 pp.

RUSSIAN, no per, Zhur Tekh Fiz, Vol XXII, 1952,
p 558.

Morris D. Friedman
\$15.00

USER
Scientific - Physics

CTS 65/Feb 55

21,321

Some Characteristics of the Flow of a Two Phase
Mixture in a Horizontal Pipe, by L. Yu. Kraayakova,
21 pp.

RUSSIAN, per, Zhur Tekh Fiz, Vol XXII, No 4, 1952,
pp 654-669.

Sci Mus Lib Tr 57/3671
AGRE Lib Tr 695

Sci - Physics
~~Mar~~ 58
~~Apr~~

60,574

Compacting and Sintering of Metal Powders ~~2~~ Studied
on the Basis of Their Electrical ~~2~~ Conductivity,
by V. I. Likhtman, L. T. Nazarov,

~~KX~~ Full translation.

RUSSIAN, per, Zhur Tekh Fiz, Vol XXII, No 4, 1952,
pp 696-702.

Brutcher Tr No 3065

Jul 53 CTS/DEX

Scientific - Minerals/Metals Price \$6.40 3508

Model of the Movement of Charged Particles in a
2-Dimensional Electric Field, With Consideration
of the Space Charge, by B. V. Bobykin,

RUSSIAN, per, Zhur Tekh Fiz, Vol XXII, No 5, 1952,
pp 736-743.

UKSM GB 43

Sci - Electricity

52,351

Sep 57

Temperature Relation of the Spectral Sensitivity of
Caesium-Antimony Photocells, by V. S. Khazanov,
S. G. Yurov.

Full translation.

RUSSIAN, no per, Zhur Tekh Fiz, Vol XXII, USSR, 1952,
pp 744-746.

AEC Tr 1500

Scientific - Physics, spectral, caesium-antimony
photocells

Influence of Tensile Stressing in the Dielectric
Losses and the Polarization EX of Crystalline
Polymers, by G. P. Mikhailov, B. M. Fainshtein

RUSSIAN, Zhur Tekh Fiz, 1952, Vol XXII, No 5,
pp 759-~~EX~~ 764.

D.S.I.R. Tr No CTS 7

Scientific - Physics

List No 49, Apr 1953

1069

Reactivity of Diffusion of Carbon Into Tungsten,
by G. S. Kreimer, L. D. Efros, 24 pp.
RUSSIAN, per, Zhur Tekh Fiz, Vol XXII, 1952,
pp 858-883. 9226314
AEC-Tr-6510

Sci-Phys
Feb 65

274,251

The Use of "EP-2" and "EQ-2" Glues in Experiments
at Low Temperatures, by B. N. Samoilov, 2 pp.

UNCLASSIFIED

RUSSIAN, per, Zhur Tekh Fiz SSSR, Vol XXII, No 5,
1952, pp 888-889.

Navy Tr 787/MRL 438

USSR

Scientific - Physics

Jul 53 CTS

3851

Vacuum Metallography, Its Present State and Future
Trends of Development, by N. T. Gudtzov, and M. Gh.
Lozinskii, 23 pp.

Full/ translation.

RUSSIAN, Zhur Tekh Fiz, 1952, Vol XXII, No 6,
pp 905-921.

See CIA/FDD/Z-66
Sci Mus Lib No 52/3251

Scientific - Microscopy

27 December 1952

Forced Vibrations of Systems Striking a Stop, by
P. S. Livshits,

RUSSIAN, per, Zhur Tekh Fiz, Vol XXII, No 6, 1952,
pp 921-931.

ATS RJ-1303

Sci - Phys
Jul 59

92, 218

Investigations of the Influence of Atomic
Admixtures on the Thermal Conductivity in a
Crystalline Lattice, by E. D. Devyatkova, L. S.
Stil'bens, 6 pp.

RUSSIAN, per. *No 6,* Zhur Tekh Fiz, Vol XXII, ¹¹ 1952,
pp 968-972, 9207653.

AEC-SCL-Tr-468

Sci - Phys

Jun 63

OTS 62-16110
(63-23453)
231,905

Concerning the Work Functions of Separate Faces
of Monocrystalline Tungsten, by B. G. Smernov,
G. N. Shuppe, (AF 499340)

RUSSIAN, per, Zhur Tekh Fiz, Vol XXII, No 6,
1952, pp 973-980.

ATIC F-TS-8125

Scientific - Physics

OTS 61-17211

Aug 53 CTS/DEX

4180

Rapid Method of Determining the Thermal Characteristics
of Poor Heat Conductors, by V. S. Vol'kenshtein, 23 pp.

RUSSIAN, per, Zhur Tekh Fiz, Vol XXII, No 6, 1952,
pp 1043-1049.

SLA Tr R-998

Sci - Engineering
Feb 58

59,550

Theory of a Rotation-Vibration Viscometer for
Highly Viscous Liquids, by L. S. Prucea. USSR

RUSSIAN, *ibid.*, *Zhur Tekh Fiz.*, Vol XXII, No 6,
1952, pp 1050-7.

DOER 125 M.1331

(cont)

Sol - Phys
Apr 60

112, 720

Criticism, Partial Foundation and Limits of
Applicability of the Band Theory of Electrons
in Crystals, by S. I. Pekar, 27 pp.

RUSSIAN, no ser, Zhur Tekh Fiz, Vol XXII, No 6,
1952, pp 1062-1077. ~~CIA D 193578~~

Morris D. Friedman P-101

Scientific - Physics

CIS 67/Apr 55

22,756

On Polaron Theory, by S. I. Pekar, 20 pp.

RUSSIAN, no per, Zhur Tekh Fiz, Vol XXII, No 6,
1952, pp 1076-1085. CIA D 193577

Morris D. Friedman P-103

Scientific - Physics

CTB 67/Apr 55

22,757

(TOP SECRET)

Soviet Scientific and Technical Articles, June
1952. RESTRICTED

RUSSIAN, no pag, Zhury Tekh Fiz, Vol XIII, No 6,
Moscow/Leningrad, Jun 1952, pp 1085-1096.

*CIA

USSR

Scientific - Physics, luminescence, optics

Investigation Of the Sintering Of Electrolytic
Copper by R.I. Garber and S.S. D'Yachenko.

RUSSIAN, per, Zhurnal Tekhnicheskoi Fiziki, Vol XXII,
No 7, 1952, pp 1097-1108.

CSIRO

Oct. 62

Distribution of Concentration of Current Carriers
in Semiconductor Specimen With the Hall Effect,
by A. I. Ansel'm. 11 pp.
RUSSIAN, per, Zhurnal Tekhni. Fiz., Vol 22, No 7,
1952, pp 1146-1153.
NASA TT F-12,698

sci/physics
~~---~~ apr 70

404,508

(FDD 13890)

Frequency Division [Subharmonics] in a Circuit With a
Nonlinear Capacitor, by A. Ye. Salomonovich, 10 pp.

RESTRICTED

Full translation.

RUSSIAN, no per, Zhur Tekh Fiz¹, Vol. XIII, No 7, Moscow-
Leningrad, Jul 1952, pp 1190-1191.

CIA/FDD/U-2566

USSR

Scientific - Electricity, frequency-division, sub-
harmonics, nonlinearity

On Excursions After a Quadratic Detector, by
V. M. Rozov, 6 pp.

RUSSIAN, no per, Zhur Tekh Fiz, Vol XXII, No 7,
1952, pp 1195-1200.

Morris D. Friedman

\$3.00

8-105
35,205

Scientific - Physics

Jun 56 CTS/dex

The thermal Conductivity of Aluminum Oxide at
High Temperatures, by A. R. Shul'yan, et al.

RUSSIAN, per, Zhur Tekh Fiz, Vol XXII, No 8.
1952, pp 1271-1280.

NLL. M.4538

Sci - Phys

Apr 62

193,896

The Grinding Together of Brittle Solids, by
V. D. Kuznetsov, 46 pp.

RUSSIAN, per, Zhur Tekh Fiz, ~~XXXX~~ Vol XXII, No 9,
1952, pp 1409-1427.

26,733

Sci Trans Center
RT-2416

Scientific - Physics

AUG 55 CTS/DEX

Boiling Under Gangible Conditions, by Ye. I. Nesis,
14 pp.

RUSSIAN, per, Zhur Tekh Fiz, Vol XX, No 9, 1952,
pp 1506-1512.

ATIC F-TS-9356/v

Sci - Phys

57,863

Jan 58

Factors Affecting the Strength of Glass Fibers,
by A. F. Zak, 9 pp.

RUSSIAN, per, Zhur Tekh Fiz, Vol XXII, No 10,
1952, pp 1543-1551.

28,424

Sci Mu Lib Tr 55/1487

Scientific - Physics

Nov 55 CTS

Cathode Sputtering and Electron Emission
of Iron and Graphite, by M. A. Yermeev,
Ya. K. Estrinov.

RUSSIAN, per, Zhur Tekh Fiz, Vol 22, No 10,
1952, pp 1552-1555.

(TMS 1328)

CEEB 4205

314,403

Sci - Mechanical, Industrial,
Civil, and Marine Engineering

Nov 66

Kalin, V. I. and Rasanova, T. P.
ON THE THEORY OF A MULTI-SEGMENT MAGNETRON. [1961] 10p. 3 refs.
Order from LC or SLA mi\$1.80, ph\$1.80 61-10856

Trans. of Zhurnal Tekhnicheskoy Fiziki (USSR) 1952,
v. 22, no. 10, p. 1592-1598.

The energy relationships in a multi-segment magnetron were investigated. The multi-segment magnetron was represented by a closed sequence of intervals having alternating fields (slots) and drift spaces. Fundamental kinematic relationships were derived, which are the starting point for the calculation of the energy balance in an electron stream. The electron stream itself is included in such a system of n-slots. As a result of this calculation general formulas were found and applied to the specific cases of two, three, and four slots. Comparison of the calculated values with those obtained by experiment disclosed a satisfactory agreement between the observed and calculated excitation (Izvestiya Akademiya Nauk SSSR, IT, v. 5, no. 10) (over)

61-10856

- I. Magnetrons--Theory
- I. Kalin, V. I.
- II. Rasanova, T. P.

101700

Office of Technical Services

Diffusion of Niobium Into Steel From the Gas
Phase, by Dubinin. UNCLASSIFIED

RUSSIAN, per, Zhur Tekh Fiz, No 11, 1952,
pp 1730-1740.

unclassified
~~Co-op Tr Scheme~~
Tr 802
(L3.10.0)

Sci - Phys
Apr 58

62,665

The Turbulent Boundary Layer in the Presence of a
Longitudinal Pressure Drop, by L. M. Zysina-Molozhan,
15 pp.

RUSSIAN, per, Zhur Tekh Fiz, Vol XXII, No 11, 1952,
pp 1756-1772.

CIA/FDD/2-96

Scientific - Physics
Apr 54 CTS/DEX

12,396