

Measurement at Low Temperatures and High Pressures.
II. Superconductivity of Sn and In Under Uniform
Compression at a Pressure of 1.750 Kg/Cm^2 ,
by H. Lazarev, L. Kan.
RUSSIAN, per, Zhur Eksper i Teoret Fiz, Vol XIV,
1944, pp 463-473.
NASA TT F-9152

Sci-Phys
Jan 65
U.S. GOVERNMENT ONLY

270,968

On the Change in the Superconductivity of Tin Under
the Influence of Inhomogeneous Deformation, by B.
Lazarov, A. Galkin, 10 pp.

RUSSTAN, par, Zhur Eksp. Teor Fiz, Vol XIV, No 12,
1944, pp 474-480.

Morris D. Friedman L-117
\$5.00

Sci - Chemistry
Mar 59

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A Compensation Chamber for Analysing the Composition
of Radioactive Preparations With Respect to Gamma
Rays, by I. Frank.

RUSSIAN, per, Zhur Ekspoz. i Secvet Fiz, Vol XV,
No 1-2, 1945, pp 25-31.

Natl Res Lib
Tr.455

Scientific - Physics

CTS/DEK

18,752

On the Theory of the Mechanism of Magnetization of Ferromagnets, by M. Shirobokov, 29 pp.

RUSSIAN, per, Zhur KHK Ekspor Teoret Fiz,
Vol XV, No 1/2, 1945, pp 57-76.

MDF S-184
9093154

Sci
Nov 61

173, 335

Quadrupolar and Dipolar Gamma Radiation of Nuclei,
by A. Migdal, 14 pp.

RUSSIAN, per, Zhur Eksp. i Teoret Fiz, Vol XV,
1945, pp 81-88. 9092511

ABC UCRL Tr-822(L)

Sed - Flye
Jul 62
List 70

204, 708

Zh Ek i Teoret Fiz Vol 15, page 703-8 (1945)

Determination of the crystal symmetry from the X-ray diffraction patterns. I. Determination of the crystal symmetry from the X-ray diffraction patterns and Friedel's law, by G. Zhdanov.

AEC Trans (avail Brookhaven)

AN EX 1 Teoret Fiz Vol 15, page 709-20 (1945)

Determination of the crystal symmetry from the X-ray diffraction patterns. II. Rational extinction tables for the determination of X-ray groups, by G. Zhdanov and V. Pospelov.

AEC Trans (avail Brookhaven)

VIBRATIONS OF POLYATOMIC MOLECULES, by V. Tatevskiy,
19 pp.

RUSSIAN, ~~DEPT~~ Zhur Eksp. i Teoret. Fiz, Vol XV, No 8,
pp 445-458.

Sci Trans Center RT-953

Scientific - Nuclear Physics
CTS/DET

14,078

Focusing Properties of the Axial Field $E_r = -ar$,
by M. Kuzunskiy, 5 pp.

RUSSIAN, per, Zhur Eksper I Teoret Fiz, Vol XVI,
No 1, 1946, pp 81-86.

Sci Trans Center
RT-1898

20,884

Scientific - Physics

Jan 55 CTS/DMX

Zh Ek i Teoret Fiz Vol 16, page 135-50 (1946)

Electronic Theory of the Surface Tension of Metals.
by A. Samoilovich

AEC Trans (avail. Brookhaven)

On the Theory of the Kompton Effect on a Meson, by
M. Al'perin, 12 pp UNCLASSIFIED

RUSSIAN, per, Zhur Eksper i Teoret, Fiz, Vol XVI,
No 2, 1946, pp 119-128.

Sci Tr Center
RT-936

Scientific - Physics

15, 386

Autolocalization of the Electron in an Inertially
Polarizable Dielectric Medium, by S. I. Pekar, 19

RUSSIAN, per, Zhur Eksp. i Teoret. Fiz, Vol XVI,
1946, pp 335-340.

AEC Tr-4259

Sci - Phys
Jun 61

156, 076

(NY 4846)

On the Possibility of Rarefaction Shock Waves, by
Ya. Zel'dovich, 6 pp.

RUSSIAN, per, Zhur Eksper i Teoret Fiz, Vol XVI,
No 4, 1946, pp 363, 364.

JPRS 7320

Sci - Phys

Jan 61

136,514

(NY-4846)

On the Propagation of Shock Waves in Gases With
Reversible Chemical Reactions, by Ya.
Zel'dovich, 7 pp.

RUSSIAN, per, Zhur Eksp. i Teoret. Fiz., Vol XVI,
No 4, 1946, pp 365-368.

JPRS 7319

Sci - Phys

Jan 61

136,513

Oscillations of an Electron Plasma, by L. Landau,
16 pp.

RUSSIAN, bimo per, Zhur Eksp⁶er i Teoret Fiz, Vol. XVI,
1946, pp 574-586.

ABC Tr 2728

Sci - Electronics; Physics 48,631
Jun 57

The Theory of Electric Contacts Between
Metallic Bodies, by J. Frenkel, 18 pp.

RUSSIAN, bimo per, Zhur Eksper I Teoret Fiz,
Vol XVI, No 4, Apr 1946.

CIA/FIN/X-1455

Scientific - Physics

13,720

Relativistic Quantum Theory of Complex
Particles, by J. Frenkel, 8 pp.

RUSSIAN, bimo per, Zhur Eksp: I Teoret Fiz,
Vol XVI, No 4, Apr 1946.

CIA/FDD/X-1465

Scientific - Physics

13,719

A Phenomenological Theory of Turbulence, by V. G.
Nervgladov, 23 pp.

RUSSIAN, no per, Zhur Ekiper i Teoret Fiz, Vol XVI,
No 7, 1944, pp 614 - 625.

AMC F-TS-7483

Scientific - Physics

RT-870
Jan 1952 CTS
40 T 95

High-Current Stage of an Electric Spark in a Gas
at Atmospheric Pressure. (Part) I, by I. S. Marabak,
18 pp.

RUSSIAN, per, *Elektr. Khim.* 1 Secret File, Vol XVI,
1946, pp 703-716.

JNC Tr 2991

Sci - Electricity
Nov 95 CTS

Physics 40, 459

High-Current Stage of an Electric Spark in a Gas
at Atmospheric Pressure. Part II, by I. S. Marshak,
13 pp.

RUSSIAN, per, Zhur Zhur' i Zhur' Fiz, Vol XVI,
pp 718-727.

AND Tr 2592

RT 4551

40, 460

Sci - Electricity
Nov 56 CTS

On Ductile Rupture, by B. Ya. Pines, 26 pp.

RUSSIAN, no per, Zhur Eksp i Teoret Fiz, Vol XVI, No 8,
1946, pp 744-755.

Sci Tr Center RT-327

Scientific - Physics

10,134

62-15999

Zlunitsyn, S. A. and Rudenko, N. S.
THE COMPRESSIBILITY OF HYDROGEN AT LOW
TEMPERATURES, tr. by George N. Kasachkoff and
George F. Hill. 19 Feb 62 [8]p. 6 refs. AOMC
Trans. nr 13-62.

Order from OTS or SLA \$1.10

62-15999

Trans. of Zhurnal Eksperimental'noi i Teoreticheskoi
Fiziki (USSR) 1946. v. 16, no. 9, p. 776-779.

DESCRIPTORS: *Hydrogen, Gas cylinders, Com-
pressors, Temperature, Gases, Vapor pressure.

The paper contains the results of measurement of the
compressibility of H_2 at $T = 65.0^\circ K$, $T = 77.7^\circ K$,
 $T = 90.6^\circ K$. An apparatus is described for measure-
ment of the compressibility of gases at low tempera-
tures. (Author)

(Physics - Thermodynamics, TT, v. 7, no. 11)

- I. Zlunitsyn, S. A.
- II. Rudenko, N. S.
- III. AOMC Trans-13-62
- IV. Army Ordnance Missile
Command, Redstone
Arsenal, Ala.

Office of Technical Services

ZHUR EKSP I TEOR FIZ VOL XVI, No 11

Nov 1946

3 pp

"The Doppler Effect in a Wave Guide"

N. N. Nalov

NRL Translation 113

13T58

(NY-4846)

Luminescence Temperature Measurements of
Explosions by an Optical Method, by M. N.
Alentsev, A. F. Belyayev, N. N. Sobolev, B. M.
Stepanov, 16 pp.

RUSSIAN, per, Zhur Eksper i Teoret Fiz, Vol XVI,
No 1.1, 1946, pp 990-995.

JPRS 7318

Sci - Phys

Jan 61

136,576

Scattering of Slow Neutrons in Crystals, by
A. Akhiezer, I. Pomeranchuk.

RUSSIAN, per, Zhur Ekaper i Teoret Fiz, Vol XVII,
1947.

ABC Tr

S.Tr.C. RT935

Scientific - Physics

CTS Nov 1949 (2/49)

12,902

On the Theory of the Diffusion of Rrsonance
Radiation, by L.M.Biberman.

RUSSIAN, per, Zhurnal Eksperimentalnoi i
Teoreticheskoi, vol. 17, 1947, pp. 416-526.

NTC 70-17011-20A

Annemling of Twin Crystals of Calcite and Sodium Nitrate, by N. I. ~~Harber~~, 9 pp.

RUSSIAN, per, Zhurn Eksper i Teoret Fiz, Vol 17, ^{No}(1), 1947, pp 63-67.

~~SECRET~~

Sci Museum Lib No 51/316A - London

On the Theory of Spin, by V. L. Ginzburg, I. E. Tamm.

Full translation.

RUSSIAN, for, Zhur Eksper i Teoret Fiz, Vol XVII, No 3,
1947, pp 227-237.

AEC Tr 1548

Scientific - Physics

May 53 CTS

2093

61-10799

Pershits, Ya.
THE EFFECT OF IMPURITIES ON THE ELECTRICAL CONDUCTIVITY OF DIELECTRICS AT HIGH TEMPERATURES. [1960] 19p. 12 refs.
Order from LC or SI.A ml\$2.40, ph\$3.30, 61-10799

OTS 62-10938
Trans. of Zhurnal Eksperimental'noy i Teoreticheskoy Fiziki (USSR) 1947, v. 17, no. 3, p. 251-259.

The conditions of formation and decomposition of an unstable poorly conducting electrode layer which originates at the dielectric-metal interface is investigated by the method of successive reversal of the field. An explanation of the observed phenomena from the aspect of a definite mechanism of impurity movement is proposed. (Author)

1. Dielectrics--Conductivity
2. Dielectrics--Impurities
3. Dielectrics--
Temperature factors
1. Pershits, Ya.

151863

Office of Technical Services

(Engineering--Electrical, TT, v. 5, no. 9)

ZHURNAL EKSPERIMENTAL'NOY I TEORETICHESKOY FIZIKI

Vol XVII, No 4, 1947, 13 pp

"Electron and Ion Emission of Thoriated Tungsten in Sodium Vapors"

L. N. Dobretsov

AMC Trans # F-TS-5562-4E
(copy in files)

ASC-ATI-10982

34T80

Stepped Processes in the Inelastic Interaction
between Atoms and Electrons, by B. M. Yavorskiy,
17 pp.

RUSSIAN, per, Zh. Eksperimentalnoy i Teoretich.
Fiziki, Vol 17, No 4, 1947, pp 315-327.

AEC/ANL/Tr-673-68

Sci/Phy
Feb 69

374,240

Penkin

RUSSIAN, per, Zh Eks i Teor Fiz XVII, 1947,
pp. 355-356.

*PL 480
OTS 61-11437

Dec 61

Stepanov, P. E.
ON THE RELAXATION PHENOMENA IN A SHOCK
WAVE IN GAS (O Relaksatsionnykh Yavleniyakh v
Udarnoi Volne v Gaze). 25p. (foreign text included).
7 refs. DTC-3.
Order from OTS, ETC or DTC \$1.65 62-28790

Unedited draft trans. of Zhurnal Eksperimental'noi i
Teoreticheskoi Fiziki (USSR) 1947, v. 17, no. 5,
p. 377-385.

DESCRIPTORS: *Shock waves, Gases, Theory.

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

62-28790

I. Stepanov, P. E.
II. DTC-3
III. Danish Translations
Centre, Roskilde

Office of Technical Services

On the Theory of the Diffusion of Resonance
Radiation, by L. M. Biberman.
RUSSIAN, per, Zhurnal Eksp. Teoret.
Fiziki, Vol 17, No 5, pp 416-428, 1947
AEC ORNL-Tr-681 9230173

SLA-R-1102

Sci-NS&T
Nov 65

290,674

ZHUR IKSP I TEOR FIZ Vol XVII, No 6

Jun 1947

8 pp

"A Spectroscopic Study of the Movement of Ions in Plasma"

S. E. Frish, Yu. M. Kagan

Done by AEC
Prelim Union List of Trans
Available TLB

11T68

V
(FDD 21953)

A ~~Gamma~~ Controlled Optical Shutter, by N. N. Sobolev, 13 pp.

RUSSIAN, no per, Zhur Eksper i Teoret Fiz,
Vol XVII, No 7, Moscow/Leningrad, Jul 1947,
pp 655-660.

CIA/FDD/U-6379

USSR

Sci - Physics, optics, &
photography

18, 188

On the Domain Structure of Ferromagnetic Bodies
in the Presence of a Magnetic Field, by
L. Kholodenko, 30 pp.

RUSSIAN, per, Zhur Ekspet i Teoret Fiz,
Vol XVII, No 8, 1947, pp 690-707.

SIA 60-1/201

AEC (Anat. B. ...)

Sci
Feb 62
Vol III, No 11

184,696

On the Phenomenon of Mechanical Drinning, A. V.
Stepanov.

^{vol 17}
RUSSIAN, per, Zhur Eksper i Teoret Fiz, No 8,
1947, pp 713-723.

~~50/3663~~

Sci Museum Lib No 50/3663 - London

AEC In. 1099

Dec 51 CTS

4 EC
LB/G-3052 Uncl.

CONSTRUCTION OF THE GREEN TENSOR FOR THE FUNDAMENTAL EQUATION OF ELASTICITY THEORY IN THE CASE OF AN UNBOUNDED ELASTICALLY ANISOTROPIC MEDIUM. Lifshits, I. M.; Rozentsveig, L. N. Translated by J. E. Baker (Atomic Energy Research Establishment, Harwell, Eng.) from Zh. Eksp. Teor. Fiz., 17: 783-91(1947). 16p.

mathematics; physics (solid-state); translations

ND-34 NP RC

Unlimited

Agency: Picatinny Arsenal
P.O. Req. 50-70

R-11031-D
6 Nov. 69

Title: The Passage of a Spark Discharge.
pp. 862 to 867.

Author: I. S. Abramson, et al.

Source: Zh. Eksp. i Teor. Fiz., Vol. 17 (1947).

Language: Russian. 6pp

Special instruction: Please translate & type 1 copy only.

Construction of the Green Tensor for the Fundamental Equation of Elasticity Theory in the Case of an Unbounded Elastically Anisotropic Medium, by I. M. Lifshits.

RUSSIAN, per, Zh Eksp i Teore Fiziki, Vol 17(9), 1947, pp 783-791.

*AEC/LB/G-Tr-3052

Sci/Phy
Feb 71

The Diffraction Field of an Ideally Conducting
Sphere, by A. R. Volpert, & A. I. Potekhin, 8 pp.

RUSSIAN, per, Zhur Eksp. i Teoret. Fiz., Vol XVII,
No 9, 1947, pp 802-813.

CIA/RID X-2424

Sci - Physics
May 1957 CTS/dax

47, 336

Surface Effects in Superconductors in Intermediate States, by A. Meshkovskiy, A. Shal'nikov, 33 pp.

RUSSIAN, per, Zhur Eksptl Teort Fis, Vol XVII, No 10, 1947, pp 851-861.

SLA Tr R-886

Sci - Electricity, Physics

52, 284

Sep 57

Zh Ek i Teoret Fiz

Vol 17, No 10 (1947),
page 883-8

~~SECRET~~

Magnetospin resonance in ferromagnetic substances on
centimeter waves, by E. K. Zavoiski

AEC Trans (avail Brookhaven)

S-176/60

(NY-4032)

Formation of a Supercompressed Detonation Wave
a Narrowing Tube, by B. V. Ayvazov, Ya. B.
Zel'dovich, 27 pp.

RUSSIAN, per, Zhur Skaper i Teoret Fiz, Vol XVII
No 10, 1947, pp 889-900.

JPRS 5735

Sci - Phys

Oct 60

128,451

Some Theorems on the Group Velocity of Electro-
magnetic Waves, by S. M. Rytov.
RUSSIAN, per, Zh Eksperiment i Teor Fiz, Vol
17, No 10, 1947, pp 930-936.
Dept of Navy APL/JHU T-2306

Sci-Phys
Oct 69

393,327

Some Theorems on the Group Velocity of
Electromagnetic Waves, by S. M. Rytov.

RUSSIAN, per, Zhur Ekaper Biolog i Med,
Vol XVII, No 10, 1947, pp 930-936.

ASLIB GB 10XIB 1527

Sci - Electron, Med

Apr 62

192, 734

Study of Alkaline-Earth Phosphors which Have High
Sensitivity to Infra-Red Rays, by V. L. Levshin,
V. V. Antonov-Romanovskiy, Z. L. Morgenshtern,
et al, 20 pp.

RUSSIAN, per, Zhur Eksper i Teoret. Fiz, Vol XVII,
1947, pp 949-963. ~~9291237~~

AEC UCRL Tr 856(L)

Sci - Phys
Jan 63

219,499

61-13392

Noskov, M. M. and Sokolov, A. V.
 THE MAGNETO-OPTICAL KERR EFFECT AS A
 FUNCTION OF THE THICKNESS AND OPTICAL
 CONSTANTS OF THIN FILMS. II. (Zavisimost' Mag-
 netoopticheskogo Effekta Kerra ot Tolshchiny i Opti-
 cheskikh Konstant Tonkikh Plenok) tr. by D. R. H.
 Phillips. 24 June 60, 8p. (35 equations, 3 figs. omitted)
 9 refs. Trafford Park Trans. no. 2844; M2031.
 Order from LC or SLA mi\$1.80, ph\$1.80 61-13392

Trans. of [Zhurnal Eksperimental'noy i Teoreticheskoy
 Fiziki] (USSR) 1947, v. 17, no. 11, p. 969-975.

The explanation of the influence of thin films on the
 magneto-optical Kerr effect ensues from resolution of
 a system of Maxwell equations for the chosen model of
 the phenomenon, and reduces to a special case of in-
 terference of polarised light, in which there is rotation
 of the plane of polarisation of one of the interference
 beams owing to reflection from the magnetised mirror.
 (See also 61-13393)

(Physics--Theoretical, TT, v. 5, no. 2)

1. Thin films--Magnetic properties
2. Thin films--Optical properties
3. Title: Kerr effect

1. Noskov, M. M.

II. Sokolov, A. V.

III. AEI(M) TP/T-2844

IV. DSIR LLU M. 2031

V. Associated Electrical
 Industries (Manchester)
 Ltd. (Gt. Brit.)

141,183

Office of Technical Services

Noskov, M. M.

THE MAGNETO-OPTICAL KERR EFFECT AS A
FUNCTION OF THE THICKNESS AND OPTICAL
CONSTANTS OF THIN FILMS. I. (Zavisimost'
Magnetoopticheskogo Effekta Kerra ot Tolshchiny i
Opticheskikh Konstant Tonkikh Plenok) in: by
D. R. H. Phillips. 24 June 60. 5p. (4 equations,
1 fig. omitted) 5 refs. Trafford Park Trans. no. 2843;
M2032.

Order from LC or SLA mi\$1.80, ph\$1.80 61-13393

Trans. of Zhurnal Eksperimental'noy i Teoreticheskoy Fiziki (USSR) 1960, v. 17, no. 11,
p. 964-968.

14,182

(Physics--Theoretical, TT, v. 3, no. 2)

61-13393

1. Thin films--Magnetic properties
2. Thin films--Optical properties
3. Title: Kerr effect
- I. Noskov, M. M.
- II. AEI(M) TP/T-2843
- III. DSIR LLU M.2032
- IV. Associated Electrical Industries (Manchester) Ltd. (Gr. Brit.)

Office of Technical Services

Sobolev, N. N.
INVESTIGATION OF THE ELECTRICAL FUSION OF
THIN WIRES. June 60, 31p. 7 refs. Picatinny Arsenal
Trans. no. 100. AD-240 588.
Order from LC or SLA m\$3.00, ph\$6.30 60-23115

Trans. of Zhurnal Eksperimental'noy i Teoreticheskoy Fiziki (USSR) 1947, v. 17, p. 986-997.

Results are presented of an investigation of a condenser discharge through thin wires, obtained with the aid of an image scanning controlled optical shutter and instantaneous shadow photography. At the discharge of a condenser through a copper wire, a fusion-like dispersion of the material in individual fragments takes place. This is followed by a current break, conditioned by the occurrence of a great number of fusions; after the latter have been filled up with metal vapors - phase of the gas discharge. (Author)

(Physics--Theoretical, TT, v. 5, no. 3)

60-23115

1. Wire--Melting
2. Electric discharges--
Physical effects
3. Spark shadowgraph
photography
1. Sobolev, N. N.
- II. PA Trans-100
- III. Joint Publications Research
Service, Washington, D. C.
- IV. AD-240 588

142,995

Office of Technical Services

NATO 60-4-1, Roli 1, Reel 10750

Zh Ek i Teoret Fiz Vol 17, page 1106-13 (1947)

Calculation of the Lowest Excited Levels of the
Naphthalene Molecule.
by A. S. Davydov.

AEC Trans (avail. Brookhaven)

Measurement of Relative Forces of Vibrators in
Cr Multiplets, by N. P. Penkin.

RUSSIAN, per, Zhur Eksper i Teoret Fiz, Vol XVII,
No 12, 1947, pp 1114-1121.

ERDL, Ft Belvoir T-1458
*PL-480 OTS 61-11437
179.359

Sci - Phys
Jan 62

61-27621

Kapitsa, P. L.
 WAVE FLOW IN THIN FILMS OF VISCOUS
 LIQUIDS. I. FREE FLOW [Volnovoe Tchenie
 Tonikikh Sloev Vyazkoj Zhidkosti. I]. [1961] [16]p.
 4 refs. C. E. Trans. 1768; [DSIR LLU] M. 3249.
 Order from OTS or SLA \$1.60 61-27621

Trans. of Zhurnal Eksperimental'noi i Teor[eti-
 cheskoj Fiziki [USSR] 1948, v. 18, no. 1, p. 3-18.
 Another trans. is available from INSDOC as T. 832a.

DESCRIPTORS: Liquids, Viscosity, *Fluid flow,
 *Wave transmission

A theoretical study is presented of the flow of films of
 viscous liquids under the action of a constant volu-
 metric force and with a consideration of surface ten-
 sion. An approximate solution of the equation of flow
 is found showing that wave flow, which was observed
 (Mechanics--Hydrodynamics, TT, v. 6, no. 9) (over)

OTS 61-27621 62-24250

I. Kapitsa, P. L.
 II. Title: Free...
 III. CE Trans-1768
 IV. DSIR LLU M. 3249
 V. Central Electricity
 Generating Board
 (Ct. Brit.)
 VI. INSDOC T. 832a
 VII. Title: Undulatory flow
 of thin layers of viscous
 liquid

185611

1768 17.4296

AEJ-71-5514

Office of Technical Services

Wave Flow of Thin Layers of a Viscous Liquid,
Pt. 2. Flow at Contact with a Gas Stream, and Heat
Transfer, by P. L. Kapitza, 13 pp.
RUSSIAN, per, Zhur Eksperimental i Teoret Fiz,
Vol XVIII, No 1, 1948, pp 19-28.
AEC-tr-6179

Sci - Eng
Jul 66

305,892

ZHUR EKSPER I TEORET FIZ Vol XVIII, No 1, 1948, 10 p
P.P. 19-38

"Wave Flow of Thin Layers of a Viscous Liquid: II, Heat
Transfer, and Flows in Contact with a Stream of Gas"

P. L. Kapitsa

Not to be published

rough copy in file

Proj 1401

U-192/49

AR- 11 Mar 1949

DE 1

AEC-Tr- 6179
(9219760)

41T106

Isothermal Growth of Nuclei During Dissociation of
a Supersaturated Solution, by B. V. Pines, 29 pp.

RUSSIAN, per, Zhur Exper i Teoret Fiz, Vol 18, No 1,
USSR, Jan 1948, pp 29-44.

NRL 175

CIA 10143

The Probability of Formation of Crystalline Nuclei,
by F. L. Gorsky, 8 pp.

RUSSIAN, per, Zhur Exper i Teoret Fiz, USSR, Vol 18,
No 1, Jan 1948, pp 45-47.

NRL 174

CIA 11159

RT-853

ZHUR EKSPER I TEORET FIZ Vol XVIII, No 1, 1948,
1½ p

"Research on the Depth of Penetration of a Magnetic Field
into a Solid Superconductor"

A. I. Shal'nikov
Yu. V. Sharvin

NRL translation 203

T-7

D-113

not published

AR 14 Mar 1949

41T101

ZHUR NEKSPER I TEORET FIZ Vol XVIII, No 2 Feb 1948

"New Opinion on Electronic Conductivity in Ionic
Crystals" 5 pp

S. I. Pekar

NRL Trans 215

RT-803

44T84

ZHUR EKSFER I TEORET FIZ Vol XVIII, No 2 Feb 1948

"Influence of Distribution of Electrons According to
Level of Localization on Course of Luminescent Processes
in CaS-SrS-Ce, Sm, La-Phosphori, and Number of Multiple
Localized Electrons" 15 pp. 149-163

V. L. Levshin

Trans by NRL
NRL TRAN. 218

RT-671

44T88

Ionov, N. I.

A MASS SPECTROMETER STUDY OF THE FORMATION OF NEGATIVE HALOGEN IONS WHEN HALIDES REACT WITH AN INCANDESCENT TUNGSTEN SURFACE. [1961] 18p. 16 refs. [JPRS]-R-367-N/a.

Order from LC or SLA ml\$2.40, ph\$3.30 61-19493

Trans. of Zhurnal Eksperimental'noy i Teoreticheskoy Fiziki (USSR) 1943, v. 13 [no. 2] p. 174-186.

A mass spectrometer analysis was made of negative ions formed by surface ionization of NaCl, KCl, RbCl, CaCl₂, KI, KBr, KF, WCl₆ and ThCl₄ molecules on incandescent tungsten. In all instances, the negative atomic halogen ions entering into the composition of the salt under investigation were disclosed. Upon ionization of ThCl₄, not only were Cl⁻ ions formed but also Cl₂⁻ ions. It was ascertained that the temperature dependency of formation of the negative atomic ions conforms to a thermodynamic formula analogous to the (Chemistry--Physical, TI, v. 5, no. 11) (over)

61-19493

1. Mass spectrometers--Applications
2. Halides--Chemical reactions
3. Tungsten--Surface properties
4. Alkali metal halides--Ionization
- I. Ionov, N. I.
- II. JPRS R-367-N/a
- III. Joint Publications Research Service, New York

1961

Office of Technical Services

ZHUR EKSPER I TEORET FIZ Vol XVIII, No 2 Feb 1948

"Theory of Adsorption Spectrum of the Diphenyl
Molecule" 9 pp. *pp 210-218.*

A. S. Davydov

NRL Trans 224

NLL M-2513

44T83

Electrical Conductivity of Ferromagnetic Metals at
Low Temperatures, by S. V. Vonsovskiy, 6 pp.
RUSSIAN, per, Zhur Eksperim i Teoret Fiz, Vol XVIII,
No 2, 1948, pp 219-223. 9696359
FSTC 381-T64-115

Sci - Phys
Apr 65

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