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ON THE RATE OF GROWTH OF CRACKS DURING PLASTIC
DESCRIPTION OF METALS, BY V. F. LOZOVSKAYA,
P. O. PASHKOV, ET AL, 12 PP.

RUSSIAN, PER, ZHUR PRIK MEKH I TEKH FIZ, NO 5,
1960, PP L03-109. 9678055

FTD-TT-62-606

SCI - PHYS
SEP 62

209,695

Numerical Calculation of the Motion and Laser
Heating of a Plasma Formed by a Burst of Absorption
on a Vapor of a Solid, by G. G. Vilenskoiya.
RUSSIAN, per, Zh Prikl Mekhan i Tekhn Fiz, No 6,
1960, pp 3-20.
*Dept of Navy APL/JHU J-1509

Sci/Phys
June 70

On the Stability of Oscillations of a Pinched Heated Panel Taking Into Account the Excess Aerodynamic Pressure, Applying the Linearized Theory, by T. Ya. Gert.

RUSSIAN, per, Zhur Prik Mekh i Tekh Fiz, No 6, 1960, pp 163-164.

*FTD-TT-62-1483

Sci - Phys

Oct 62

The Motion of a Plasma Flow in a Tube in the
Presence of External Electrical and Magnetic
Fields, by V. M. Sarychev, 11 pp.

RUSSIAN, per, Zhur Prikladnoy Mekh i Tekh
Fiz, No 1, 1961, pp 3-9. 9664296

FTD-TT-62-43

Sci - Phys

188, 241

20 mar 62

Dispersion of a Plane Layer of Gas With Gradual
Energy Release, by I. V. Nemchinov. 18 pp.
RUSSIAN, per, Zhurnal Prikladnoy Mekhaniki i
Tekhnicheskoy Fiziki, Vol 1, 1961, pp 17-26.
AIR/PTD-MT-24-375-69

sci/mechan engr
may 70

The Influence of a Pressure Gradient in a Flow
on the Development of Cavitation Zones, by

K. K. Shal'nev, 6 pp.

RUSSIAN, per, Zhurnal Prikladnoy Mekhaniki i
Tekhnicheskoy Fiziki, No 1, 1961, pp 106-108.

F100187168-V

FTD-MT-24-162-67

Sci/Phys
Sept 68

354,921

Equation of State and Heat Capacity of Water
over a Wide Range of Thermodynamic Parameters,
by N. M. Kuznetsov, 20 pp.
RUSSIAN, per. Zhurnal Prikladnoy Mekhaniki
i Tekhnicheskoy Fiziki, No 1, 1961, ppl12-120.
NAV/STIC/Tran-3250-71

Nov 71

Kokorev, L. S. and Petrovichev, V. I.
MEASUREMENT OF HEAT TRANSFER COEFFI-
CIENTS UNDER NONSTEADY-STATE CONDITIONS.
Jan 62, 3p. 8 refs.
Order from ICE in v. 2, no. 1, \$15.00/year

Trans. of Zhurnal Prikladnoi Mekh[aniki] i Tekh-
[nicheskoi] Fiz[iki] (USSR) 1961, no. 1, p. 121ff.

DESCRIPTORS: *Heat transfer, *Fluid flow, Pipes,
Thermodynamics, *Hydrodynamics.

(Physics--Thermodynamics, TT, v. 8, no. 10)

62-34292

I. Kokorev, L. S.
II. Petrovichev, V. I.
III. International Chemical
Engineering, New York

Office of Technical Services

Equation of State and Heat Capacity of Water Over
a Wide Range of Thermodynamic Parameters, by
N. M. Kuznetsov, 20 pp.
RUSSIAN, per, Zh Prikladnoy Mekhaniki i Tekh
Fiziki, No 1, 1961, pp 112-120.
NAVSTIC, Tr-3250

Nov 71

Atomic Energy in the USSR, by
M. D. Ladyzhenskiy, L. G. Chernikova,
8 pp.

RUSSIAN, per. Zhur Prikl Mekh i Tekh Fiz,
no 2, 1961.

AF 1452545

Sci - Nuc/Phys

176, 148

18 Dec 61

Damping of Shock Waves in Nonuniform Media,
by O. S. Ryzhov.
RUSSIAN, per, Zhurnal Prikladnoi Mekhaniki i
Tekhnicheskoi Fiziki, No 2, 1961, pp 15-25.
NTC-71-14857-01A

Nasa TT F 11, 247

Feb 72

Thermocapillarity in a Liquid in the Absence
of Body Forces, by L. Ya. Lyubin,
A. S. Povitskiy.

RUSSIAN, per, Zhur Priklad Mekh i Tekh Fiz,
No 2, 1961, pp 40-46. 9696556

DDC RSIC-379

Sci - Phys

Apr 65

278,248

REQ 5- CHRON

12-11-4

0070-2163

Experimental Investigations of Explosive Waves
in Clay Soils
Lyakhov, G.M.; Marozhnaya, Z.V.
Russ per: Zhurnal Prikladnoy Mekhaniki i
Tekhnicheskoy Fiziki
no 2, 1961 123-126

12-11-4
0070-2163

Periodic Report on Atomic Energy in USSR, by P. P.
Korotkov, 15 pp.

RUSSIAN, per, Vopr Prikl Mekh i Tekh Fiz, No 3,
May/Jun 1961, p 25.

AP-1490316

Sci - N. Phys

Mar 62

193, 393

Flight of Spherical Volume of Ground During
Explosion in the Center of Symmetry, by
B. A. Vinogradov, V. N. Rodionov, 13 pp.

RUSSIAN, per, Zhurnal Prikladnoi Mekhaniki i
Tekhnicheskoi Fiziki, No 3, 1961,
pp 36-42. 9069047

AEC UCRL Trans. 859 (L)

Sci - Phys
Dec 62

217473

1000 M. 1963

Leonov, M. Ya.
ELEMENTS OF THE THEORY OF BRITTLE FRAC-
TURE (Elementy Teorii Khrupkogo Razrusheniya).
[1962] 20p. 12 refs.
Order from OTS or SLA \$1.60

62-18823

Trans. of [Zhurnal] Prikladnoi Mekhaniki i Tekhnich-
eskoj Fiziki (USSR) 1961, no. 3, p. 85-92.

DESCRIPTORS: *Fracture (Mechanics), Elasticity,
Load distribution, Mathematical analysis, *Rupture,
Stresses, Brittle materials.

(Mechanics, TT, v. 9, no. 6)

62-18823

I. Leonov, M. Ya.

Office of Technical Services

The Mathematical Theory of Equilibrium Cracks Formed
In Brittle Fracture, by G. I. Barenblatt, 109 pp.

RUSSIAN, per, Zhur Prik Mekh i Tekh Fiz, No 4,
1961, ~~XXXXXXXX~~ pp 3-56. 9678096

FTD-TT-62-132

Sci - Phys
Sep 62

209,716

The Movement of a Free Surface of
Homogeneous Ground During An Underground
Explosion, by N. I. Onis'ko, Ye. I.
Shemyakin, 22 pp.

RUSSIAN, per, Zhur Prik Mekh i Takh Fiz,
No 4, 1961, pp 82-93. 9676122

FTD-TT-62-74

Sci - Phys

189, 7/2

5 Apr 62

Demolition of a Solid by an Explosion,
by V. V. Adnashkin, A. F. Sukhotin, 14 pp.

RUSSIAN, per, Zhurn Prik Mekh i Tekh Fiz,
No 4, 1961, pp 94-101. 9676122

FTD-TT-62-74

Sci - Phys

189,713

5 Apr 62

Bykovtsev, G. L.
PROPAGATION OF DISTURBANCES IN MEDIA WITH
NONLINEAR STRESS-STRAIN RELATIONS. [1963]
10p. 9 refs.

Order from OTS or SLA \$1.10

63-18487

Trans. of [Zhurnal] F[rizkadi] M[ekhaniki] i- T[echnicheskoi] F[iziki] (USSR) 1961, no. 4, p. 102-108.

DESCRIPTORS: *Shock waves, *Propagation, Stresses, Mathematical analysis, Non-linear systems

An analysis is given of a problem of disturbance propagation in a medium with nonlinear stress-strain relation. Euler's representation for a solid medium is utilized; treatment of the problem is similar to that used by Taylor, but contrary to the latter's approach, here the principal attention is paid to the theory of propagation of shock waves.

(Mechanics, TT, v. 10, no. 9)

63-18487

I. Bykovtsev, G. L.

Office of Technical Services

Detonation of Mixed Explosive Substances, by I. M.
Voskoboinikov, G. S. Sosnova, 8 pp.

RUSSIAN, per, Zhur Prik Mekh i Tekh Fiz, No 4,
1961, pp 133-135. 909 2513

AEC Tr-5100

Sol - Phys
Jul 62

204, 710

The Hereditary Theory of Creep, by V. S. Hamastnikov,
Yu. N. Rabotnov, *4 pp.*

RUSSIAN, per, Zhur Prikl Mekh i Tekh Fiz, No 4, 1961,
pp 148-150.

*ACSI I-3520
ID 2246311

Sci - Phys
Oct 63

A One-Dimensional Model of a Magnetogasdynamie
Energy Converter, by K. A. Lar'ya, 11 pp.

RUSSIAN, per, Zhur Prik Mekh i Teoreticheskoy
Fiz, No 5, 1961, pp 3-9. 9677204

FTD-TT-62-542

Sci - Phys

18 Jun 62

201,152

Certain Problems Concerning the Movements of a
Conductive Viscous Gas in the Presence of
Magnetic and Electric Fields, by V. P. ~~SHIDLOVSKIY~~
Shidlovskiy, 9 pp.

RUSSIAN, per, Zhur Prik Mekh i Tekh Fiz, No 5,
1961, pp 10-15. 9685484

FTD-TT-63-202

Sci-Phys

Aug 63

842,529

AN INVESTIGATION OF RESISTANCE AND HEAT TRANSFER
DURING TURBULENT AIRFLOW IN AXIALLY SYMMETRIC
CHANNELS WITH A LONGITUDINAL PRESSURE GRADIENT,
BY A. I. LEONT'YEV, A. N. OBLIVIN, ET AL,
18 PP.

RUSSIAN, PER, ZHUR PRIK MEKH I TEKH FIZ, NO 5,
1961, PP 16-25. 9678385

FTD-TT-62-1044

ICE . .

SLA 62-3432.5

SCI - PHYS
12 OCT 62

212,824

Influence of Structural Changes of a Radial-Axial Hydroturbine on its Cavitation, by I.V. Kotenev, K.K. Shal'nev. 29 pp. RUSSIAN, per, Zhurnal Prikladnoy Mekhaniki i Tekhnicheskoy Fiziki, No 5, 1961, pp 26-38.

P100030666

FTD-MT-65-499

Sci/Propulsion & Fuels
Oct 66

309,491

Pulsating Combustion of Gas Behind a
Shock Wave in Supersonic Flow, by
R. I. Soloukhin, 5 pp.
RUSSIAN, per, Zhur Prikl Mekh i Tekh
Fiz, No 5, 1961, pp 57-60. 9697333
FID-TT-65-32

Sci-Engr
Jul 65

282,715

The Buckling of an Unbounded Plane Panel by
Aerodynamic Heating, by T. Ya. Gert, 7 pp.

RUSSIAN, per, Zhur Prikl Mekh i Teoret Fiz,
No 5, 1961, pp 71-75. 9677204

FTD-TT-62-542

Sci - Phys

18 Jun 62

201, 153

Expansion of a Gas Space in an Incompressible
Elastoplastic Medium, (Effects of Explosions on
Rock Strata), by Ye. I. Shemyakin.

RUSSIAN, per, Zhurnal Prikladnoi Mekhaniki i
Tekhnicheskoi Fiziki, No 5, 1961, pp 91-99.
P911003966

AEC UCRL-tr-10038

Sci/Physics
Aug 66

306,364

Conditions of the Evolution of Magnetohydrodynamic
Flows, by R. V. Polovin, 9 pp.

RUSSIAN, per, Zhur Prikl Mekh i Tekh Fiz, No 6,
1961, pp 3-7. 9676722

FED-TT-62-338

Sci - Engr, Phys

196, 473

22 May 62

On Plasma Acceleration ~~MA~~ in Crossed Electrical
and Magnetic Fields, by V. M. Sarychev, 16 pp.

RUSSIAN, per, Zhur Prikl Mekh i Tekh Fiz,
No 6, 1961, pp 17-23. 9679275

FTD-TT-62-191

Sci-Phys
Dec 62

219,353

Concerning the Behavior of Certain Plasma
States With Anisotropic Distribution of
Velocities in a Magnetic Field, by G. K.
Zaslavskiy, S. S. Moiseyev, 9 pp.

RUSSIAN, per, Zhur Prik Mekh i Tekh Fiz,
No 6, 1961, pp 24-28. 5576722

FTD-TT-62-358

Sci - Phys

22 May 62

196,474

The Operation of a Plasmatron Having an Air-Stabilized Arc, by G. Yu. Dautov, M. F. Zhukov, V. Ya. Samolyakov, 14 pp.

RUSSTAN, per, Zhur Prik Mekh i Tekh Fiz, No 5, 1961, pp 29-35. 9676722

GB 347

FTD-TT-62-338

Sci - Phys

22 May 62

196,476

Interaction of the Boundary Layer With
An External Flow Caused by Radiative
Heat Transfer, by V. V. Lamev, A. N. Rumynskiy,
20 pp.
RUSSIAN, per, Zhur Prik Mekh i Tokh Fiz.
Vol VII, No 6, 1961, pp 44-53. 9698231
FTD-TT-65-958

Sci - Engr
Nov 65

291,894

Destruction of the Leading Edge of a Delta
Wing in a Hypersonic Flow, by G. A. Tirskey,
20 pp.

RUSSIAN, per, Zhur Prikl Mekh i Tekh Fiz,
No 6, 1961, pp 54-68. 9676722

FTD-TT-62-338

Sci - Aero, Phys

196,475

22 May 62

Acoustic Conductivity of a Rigid Burning Surface,
by S. S. Novikov, Yu. S. Ryazantsev, 10 pp.

RUSSIAN, per, Zhur Prik Mekh i Tekh Fiz, No 6,
1961, pp 73-77. 9668568

FTD-TT-62-1690

OTS 62-20054

Sci-Phys
May 53

*NAVY/APL 5504

230, 85F74

Shock Load Wave in an Underground Explosion
in Rocks, by N. S. Medvedeva, E. I. Shemyakin,
19 pp.

RUSSIAN, per. Zhur Prikl Mekh i Tekh Fiz, No 6,
1961, pp 78-87, 9207688.

AEC-UCRL-Tr-934(L)

Sci - Phys

Jun 63

231,920

Reflection of Spherical Elastic Wave
From the Boundary of Semispace, by
Kh. M. Aliyev, 9 pp.
RUSSIAN, per, Zhur Prik Mekh i Tekh
Fiz, No 6, 1961, pp 88-92. 9698938
FTD-TT-65-994

Sci - ~~XXXX~~ Nucl Sci & Tech
Feb 66

294,750

On Transient Creep, by V. D. Klyushnikov.

RUSSIAN, per, Zhur Prik Tekh Tekh Fiz, No 6,
1961, pp 118-122.

NLL RTS 2464 (loan)

01 S-TT-64-1243

Sep 64

Stability of Rods in the State of Creep, by
V. F. Vorobyev, 17 pp.
RUSSIAN, per, Zhur Prik Mekh i Tekh Fiz,
No 6, 1961, pp 135-144. 9692347
DDC RSIC-145

Sci - Phy
May 64

256,981

The Stability of Vibrations of a Clamped Heated
Plate Taking Excess Aerodynamic Pressure Into
Account by a Linearized Theory, by T. Ya. Gert,
4 pp.

RUSSIAN, per, Zhur Prik Mekh i Tekh Fiz, No 6, 1961,
pp 163-164. 9667818

FTD-TT-62-1483

Sci
Mar 63

Isothermal Acceleration of a One-Dimensional
Plasma Flow in External Transverse Homogeneous
Magnetic and Electrical Fields, by V. M. Sarychev,
6 pp.

RUSSIAN, per, Zhur Prik Mekh i Tekh Fiz, No 1,
1962, pp 12-14. 9578795

FTD-TT-62-1186

Sci-Phys
Dec 62

217,594

Magnetohydrodynamic Problems Concerning Settled
Convection in Vertical Channels, by S. A. Regirer,
7 pp

RUSSIAN, per, Zhur Prik Mek i Tekh Fiz, No 1,
1962, pp 15-19. 9668354

Sci-Phys
Apr 63

FTD-TT-62-1695

AEC-Tr-5982

(9216048)

229,453

About States With Anisotropic Distribution
Function in Rarefied Relativistic Gas,
by G. M. Zaslavskiy, S. S. Moiseyev, 7 pp.
RUSSIAN, per, Zhurnal Prikladnoy
Mekhaniki i Tekhnicheskoy Fiziki, No 1,
1962, pp 20-24. 9698220
FTD-TF-65-100

Fuels & Prop
Nov 65

291,2456

On the Influence of Prandtl Number Variability
on the Flow in the Vicinity of Critical Point
of an Obtuse Body at Small Reynolds Numbers,
by L. N. Murzinov, 8 pp.

RUSSIAN, per, Zhur Prik Mek i Tekh Fiz, No 1,
1962, pp 39-43, 9668354

FTD-TT-62-1695

Sci-Phys
Apr 63

229,454

The Turbulent Boundary Layer of a Gas on a
Permeable Wall, by S. S. Kirtateladze,
A. I. Leontev, 18 pp.

RUSSIAN, per, Zhur Prikladnoy Mekhaniki 1
Tekh Fiz, No 1, 1962, pp 51-60. 9667382

FED-TT-62-1315

Sci - Phys
Jan 63

219,944

Istratov, A. G. and Librovich, V. B.
THE THEORY OF FLAME VELOCITY IN SYSTEMS
INVOLVING CHAIN REACTIONS. Jan 63 [6]p. 12 refs.
Order from ICE in v. 3, no. 1, \$15.00/year

Trans. of Zhurn[al] Priklad[noi] Mekh[aniki] i Tekh[...]
[nicheskoj] Fiz[iki] (USSR) 1962, no. 1, p. 68ff.

DESCRIPTORS: *Flame propagation, Velocity, Theory,
Chain reactions, Hydrogen compounds, Chlorides,
Chemical engineering.

(Chemistry--Physical, TT, v. 9, no. 6)

63-12688

I. Istratov, A. G.
II. Librovich, V. B.
III. International Chemical
Engineering, New York

Office of Technical Services

~~XXXXXXXXXX~~ in
Nonequilibrium Flow of Air in Nozzles, by
S. I. Anisimov, G. S. Romanov, 10 pp.

RUSSIAN, per, Zhurnal Prikladnoy Mekhaniki i
Tekhnicheskoy Fiz, No 1, Jan-Feb 1962,
pp 76-81. ~~XXXX~~ 9667377

FID-TT-62-1278

Sci - Phys
Jan 63

2. 14. 506

Particular Solutions of the Hydrodynamic Equations
of a Diluted Plasma in Axisymmetric Motion,
by V. P. Korobeynikov.

RUSSIAN, per, Zhur M Prik Mekh i Tekh Fiz, No 1,
1962.

*FTD-LT-62-1695

Sci - Phys
31 Jan 63

Conversion of Kinetic Energy of a Stationary
Plasma Stream Into Electricity With Isothermal
Retardation of the Stream in a Transverse
Magnetic Field, by V. M. Sarychev, 7 pp.

RUSSIAN, per, Zhur Prik Mekh i Tekh Fiz,
No 2, 1962, pp ~~XXX~~ 3-6. 9683277

FTD-TT-62-1778

Sci-Phys
Jun 63

234, 544

Generation of Electric Current by a Plasma
Flowing in a Tube, by E. I. Andriankin, 11 pp.

RUSSIAN, per, Zhur Prik Mekh i Tekh Fiz, No 2,
1962, ~~XXXXXXXX~~ 9683277
pp 7-13.

FTD-TT-62-1778

Sci-Phys
Jun 63

GOAN) HLL Ref. 9622.02 1962 (3, 24)

234,545

71-2-1937

Thermal Ionization and Electric Conductivity
of Some Combustion Mixtures and Products, by
G. S. Aravin, V. P. ~~SHANNIKOV~~ Shavelev, 20 pp.

RUSSIAN, per, Zhur Prik Mekh i Tekh Fiz, No 2,
1962, pp 20-31. ~~9685277~~

FTD-TT-62-1778

Sci-Phys
Jun 63

234,546

RESULTS OF AN INVESTIGATION OF THE PROPERTIES OF
A WATER-STABILIZED ARC, BY G. YU. DAUTOV,
M. F. ZHUKOV, 9 PP.

RUSSIAN, PER, ZHUR PRIKLADNOY MEKHAN I TEKHNIЧЕСКОY
FISIKI, NO 2, 1962, PP 32-36.

JPRS 15923

SCI - ENGR

NOV 62

216,262

Spectroscopic Investigation of the State
of Gas Behind a Detonation Front,
by R. I. Seloukhin, T. A. Sharapova, 8 pp.
RUSSIAN, per, Zhur Prikl Mekh i Tekh
Fiz, No 2, 1962, pp 37-41. 9697534
PTD-TT-65-33

Sci-Phys
Jul 65

282,712

Kokorev, L. S. and Ryaposov, V. N.
TURBULENT HEAT TRANSFER DURING THE FLOW
OF A HEATING MEDIUM OF SMALL PRANDTL
NUMBER ALONG A TUBE. Oct 62 [6]p. 22 refs.
Order from ICE in v. 2, no. 4, \$15.00/year

Trans. of Zhurn[al] Priklad[noi] Mekh[aniki] i
Tekh[nicheskoi] Fiz[iki] (USSR) 1962, no. 2, p. 42ff.

DESCRIPTORS: *Heat transfer, *Heat exchangers,
Liquid metals, *Mercury, Turbulent flow, Thermal
conductivity, Pipes, *Chemical engineering.

(Mechanics, TT, v. 9, no. 6)

63-12329

I. Kokorev, L. S.
II. Ryaposov, V. N.
III. International Chemical
Engineering, New York

Office of Technical Services

Rumynskii, A. N.
THE EFFECT OF DIFFUSION OF A RADIATING
ADDITIVE ON CONVECTIVE HEAT TRANSFER.
Oct 62 [6]p. 18 refs.
Order from ICE in v. 2, no. 4, \$15.00/year

Trans. of Zhurnal Prikladnoi Mekh[aniki] i
Tekhnicheskoi Fiziki (USSR) 1962, no. 2, p. 50-58.

DESCRIPTORS: *Gas flow, Blunt bodies, *Heat transfer,
Additives, Gases, Diffusion, Thermal conductivity,
*Chemical engineering.

(Mechanics--Aerodynamics, TT, v. 9, no. 6)

63-12340

I. Rumynskii, A. N.
II. International Chemical
Engineering, New York

Office of Technical Services

Bushing Cavitation and Pressure Pulsation in the
Draft Tube of a Turbine, by E. V. Kotenev,
K. K. Shal'nev. 27 pp.

RUSSIAN, per, Zhurnal Prikladnoy Mekhaniki i
Tekhnicheskoy Fiziki. No 2, 1962, pp 59-71.

P100030566

FTD-MT-65-500

Mech, Indust, Civil
& Marine Engineering
Oct 66

309,487

Effect of Rate of Heat Release in Electric
Explosions in Water on the Distribution of
the Explosion Energy, by M. I. Vorotnikova,
6 pp.

RUSSIAN, per, Zhur Prik Mekh i Tekh Fiz, No 2,
1962, pp 110-112. 968327?

FTD-TT-62-1778

Sci-Phys
Jun 63

234,539

THEORY OF THE INITIATION OF CRACKS FORMED
IN THE BRITTLE FRACTURE OF A CRYSTAL, BY
YU. M. PLISHKIN, 16 PP.

RUSSIAN, PER, ZHURNAL PRIKLADNOY MEKHANIKI
I TEKHNICHESKOY FIZIKI, NO 2, MAR-APR 1962,
PP 95-103.

JFRS 17578

SCI - PHYS

FEB 63

222,257

Determination of the Chapman-Jouget Pressure
and Reaction Time in Detonation Waves of
Powerful Explosives, by B. A. Ivanov,
S. H. Kogarko.

RUSSIAN, per, Zh. Prikladnoi Mekh i Tekh
Fiz, No 2, 1962, pp 164-166.

*AEC

EDC 1/24/66

Sci-
Jan 66

Directed Throwing of Bodies by
Explosion Products, by G. M. Lyakhov,
15 pp.

RUSSIAN, per, Zhur Prikl Mekh i Tekh
Fiz, No 3, 1962, pp 44-52. 9698515
FTD-MT-65-156

Sci - Biol & Med Sci
Nov 65

291,876

Diffusive-Thermal Stability of Laminar Flame
by G. I. Barenblatt, and Ya. B. Zel'dovich,
17 pp.

RUSSIAN, per, Zhur Prik Mekh I Tekh, No 4,
July-August 1962, pp 21-26. 9688775

FTD-TT-63-87

Sci-Phys
Nov 63

242, 286

Percussive (Shock) Compression of Quartz,
by G. A. Adadurov, A. N. Drenin, 18 pp.
RUSSIAN, per, Zhur Prikl Mekh i Tekh
Fiz, No 4, 1962, pp 81-89. P100125766
FTD-HT-66-211

Sci - Phys
Feb 67

318,791

Experimental Investigation of Spinning Detonation by
Means of Piezoelectric Gauges, by M. Ye. Topchiyan
15 pp.

RUSSIAN, per, Zhur Prikl Mekh I Tekh, No 4, July-
Aug 1962, pp 94-99, 9688775'

FTD-TT-63-87

Sci-Phys
Nov 63

242,285

Turbulent Boundary Layer on a Plane Plate
by G. L. Grodzovskiy, 6 pp.

RUSSIAN, per, Zhur Prik Mekh I Tekh, No 4,
July-August 1962, pp 117-119.

U.S. Library of Congress

FID-TR-63-87

Sci-Phys
Nov 63

242,287

Scale Effect of Cavitation Erosion, by
K. K. Shal'nev. 21 pp.
RUSSIAN, per, Zhurnal Prikladnoy Mekhaniki
i Tekhnicheskoy Fiziki, No 4, 1962,
pp 121-128. 9700183
FTB-TT-65-1577

Sci/Earth Sci
May 66

299,489

An Approximate Treatment of the Problem of a Plate
of Finite Length in the Stream of Radiating Gas, by
A. T. Onufriev, 15 pp.
RUSSIAN, per, Zhurnal Prikladnoi Mekh i Tekh Fiziki,
No 5, 1962, pp 70-74. 9225719
Purdue Univ
A & ES TT-6

Sci - Phys
Nov 64

269,106

On the Possibilities of Stable Combustion, by
R. M. Zaidel', 4 pp.

RUSSIAN, per, Zhur Prik Mekh i Tekh Fiz, Vol II,
No 5, 1962, pp 80-82.

CIA FDD XX-1341
NO FOREIGN DISSEM

Sci - Chem
12 Mar 63
USIB INTERNAL USE ONLY

224,541

Transients in the Burning of Powders, by
B. V. Nevozhilov, 12 pp.

RUSSIAN, per, Zhur Prik Makh i Tekh Fiz,
No 5, 1962, pp 83-88. 9668496

FTD-TT-63-112

Sci-Phys
May 63

QIA F00 XX-1339
X01B USE ONLY 230,876

Interaction Between a Shock Wave in a Elasto-
Plastic Medium and a Nonrigid Wall, by
G. M. Lyakhov, N. I. Polyakova, 14 pp.

RUSSIAN, per, Zhur Prik Mekh i Tekh Fiz, No 5,
Sep-Oct 1962, pp 89-95. 9683282

FTD-TT-63-XX360

Sci-Engr
Jun 63

234,547

Total Utilization of Explosion Energy, by A. Ya.
Kh. Agin, N. F. Voliba, et al, 22 pp.

RUSSIAN, per, Zhur Prik Mekh i Tekh Fiz, No 5, 1962,
pp 96-106. 9208777

AEC-Tr-5762

Sci - Nucl Sci

Jul 63

235,680

Determination of Parameters of State of Solid Bodies at
High Pressures by the Method of Piston Displacement,
by Yu. S. Genshaft, L. D. Livshits, et al, 25 pp.
RUSSIAN, per, Zhur Prik Mekkh i Tekh Fiz, No 5,
1962, pp 107-116. 9226291
AEC-UCRL-Tr-1087 (L)

Sci-Phys
Jan 65

271,823

Explosions in Sandy Grounds. by V. M. Zvetkov,
10 pp.

Russian
---, Zhurn Prik Mela i Tekh Fiz, No 5,
1962, pp 150-153. 9216794; 7218771

AEC-UCRL-~~2552~~; 995(L)

Sci. ~~...~~
Jan 64

246,148

Explosions in Sandy Grounds, by V. M. Tsvetkov, 11 pp.
RUSSIAN, per, Zh. Prikl. Mekhan. i Tekhn. Fiz., No 5, 1962,
pp 150-153.

AEC-UCRL-Tr-996(L)

Sci - NS
Feb 64

250, 574

Ilyukhin, V. S.

THE ELECTROMOTIVE FORCE OF A PAIR OF METALS COMPRESSED BY A SHOCK WAVE (Elektro-dvizhushchaya Sila Pary Metallov Szhacykh Udernov Voynov). [1963] 7p (figs omitted) 5refs
Available on loan from SLA

TT-63-18944

Trans. of [Zhurnal] Prikladnoi Mekhaniki i Tekhnich-eskoi Fiziki (USSR) 1962, no. 5, p. 175-176.

DESCRIPTORS: *Thermoelectricity, Metals, Thermo-couples, *Nickel, *Copper, *Shock waves,

(Physics--Electricity, TT, v. 11, no. 1)

TT-63-18944

I. Ilyukhin, V. S.

Office of Technical Services

High-Velocity Cumulative Jets by N. P. Novikov,
16 pp.

RUSSIAN, per, Zhur Prik Mekh i Tekh, No 6,
1962, pp 22-28. 9687050

FTD-TT-63-566

Sci - Phys
Oct 63

345, 410

Vedutskii, V. N. and Onufriev, A. T.
RADIATION COOLING OF A GAS FLOWING IN A
FLAT CHANNEL. Apr 63, 6p. 13 refs.
Order from ICE in v. 3, no. 2, \$15.00/year

Trans. of Zhurnal Prikladnoi Mekh[aniki] i
Tekhnicheskoi Fiz[iki] (USSR) 1962, no. 6, p. 298. 34

DESCRIPTORS: Chemical engineering, *Cooling, *Gas
flow, Cases, Temperature, Emissivity, Neutron trans-
port theory, Couette flow, Numerical analysis.

(Physics--Thermodynamics, TT, v. 10, no. 3)

63-17514

- I. Title: Radiation cooling
- I. Vedutskii, V. N.
- II. Onufriev, A. T.
- III. International Chemical
Engineering, New York

Handwritten:
H + ES TT-11
2154410

Office of Technical Services

Analogy Between Cylindrical Explosion
and Hypersonic Gas Flow Past Bodies,
by V. P. Korobenynikov, 10 pp.
RUSSIAN, per, Zhur Prikl Mekh i Tekh
Fiz, No 6, 1962, pp 45-49. 9698810
FTD-TT-65-981

Sci - Engr
Nov 65

291,890

On Method of Small Perturbations in Problems
of Flow Around Slender Blunt Bodies by a
Hypersonic Flow of Gas, by V. V. Sychev, 19 pp.
POST EDITED

RUSSIAN, per, Zhur Prikl Mekh i Tekh Fiziki,
No 6, 1962, pp 50-59. 9694817

REF-MT-64-59
GOV'T USE ONLY

Sci - Engr
Sept 64

267,233

Cavitation on Surface Irregularities of
Triangular Profile, by K. K. Shal'nev,
31 pp.

RUSSIAN, per, Zhurnal Prikladnoy Mekhaniki
i Tekhnicheskoy Fiziki, No 6, 1962,
pp 68-89. 9700063
FTD-TT-65-1606

Sci/Earth Sci
May 66

299,475

299,533

Method of Considering Relaxation in the
Problem of Directing a Flow Around A Cone
by V. N. Arkhipov and L. S. Khreshko, 8 pp.

RUSSIAN, per, Zhurnal Prikladnoy Mekhaniki
i Tekhnicheskoy Fiziki, No 6, 1962,
pp. 121 - 124. 9686825

FD-TH-63-655

Sci - Aero

344,092

Sept 63

Zhurnal Prikladnoi Mekhaniki i Tekhnicheskoy
Fiziki, No 1, 1963, 160 pp.
FTD-MT-64-84

Aug 67

FSTC

S-8000-D

17 Feb 67

Some properties of High-Velocity Cumulative Jets

By: N. P. Novikov

From: Zhurnal Prikladny Mekhaniki i Tekhnicheskoy Fiziki

No. 1, 1963: 3-13

(11 pp)

Russian - est for wds:

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FSTC-HT-23-12-67.

Kazantsev, A. P.
THE STRUCTURE OF A SHOCK WAVE IN A RARE-
FIED NON-ISOTHERMAL PLASMA. July 63, 4p.
9 refs.
Order from ICE in v. 3, no. 3, \$15.00/year

Trans. of Zhurnal Prikladnoi Mekhaniki i Tekhnicheskoi
Fiziki (USSR) 1963, no. 1, p. 32-37.

DESCRIPTORS: Chemical engineering, *Plasma physics,
*Shock waves, Superaerodynamics, Hydrodynamics.

(Mechanics, TT, v. 10, no. 7)

63-17888

I. Kazantsev, A. P.
II. International Chemical
Engineering, New York

Office of Technical Services

Concerning The Stability of the Burning Regime of
a Powder in a Semiclosed Space by Ya. B. Zel'dovich,
23 pp.

RUSSIAN, per, Zhur Prikl Mekhan i Tekhnich Fiz,
No 1, 1963, pp 67-76. 9687640

FTD-TT-63-572

Sci-Phys
Nov 63

Aug 31 1963 / AF2 T-775

241,455

break-up of drops and the fluid jet of an air shock
wave, by Suvstov.
RUSSIAN, per. Zhur Prikl Mekh i Tekh Fiz. No 1, 1961,
pp 154-156.
Navy/APL J075

Sci-Engn: Phys
Feb 63

On the Exact Solutions of Certain Problems of
Magneto-Hydrodynamics, by G. I. Nazarov, 13 pp.
RUSSIAN, per, PMTF Z. Prikl. Meh. i Tehn. Fiz.,
1963, Vol. No. 2, pp 63-72
Amer Math Soc Tr,
Vol 61, Series 2

337,026

Sci - Math
Sep 67

Journal of Applied Mechanics and Technical
Physics (Collection of Articles). 319 pp.
RUSSIAN, bk, Zhurnal Prikladnoy Mekhaniki i
Tekhnicheskoy Fiziki, No 2, 1965, pp 1-176.
P100022566-V

FTD-MT-64-87

CFSTI TT-64-19355

Sci/Physics
Sep 66

306,594

Certain Problems of the Hydrodynamics of Relaxing
Media, by I. P. Stakhanov, Ye. V. Stypochenko,
35 pp.
RUSSIAN, per, *KZhur Prikl Mekh i Tekh Fiziki*, No 2,
1963, pp 3-20. 9692318
FTD-TT-63-839

Sci - Phys
May 64

RAE T 1047

257,653

On the Exact Solutions of Certain Problems of
Magneto-Hydrodynamics, by G. I. Nazarov, 13 pp.
RUSSIAN, per, PMTF Z. Prikl. Meh. i Tehn. Fiz.,
1963, Vol. No. 2, pp 63-72
Amer Math Soc Tr,
Vol 61, Series 2

337,026

Sci - Math
Sep 67

Excitation of Strong Collisionless Shock Waves
in a Plasma, by R.Kh. Kurtmullayev, V.K. Malinovskiy.
RUSSIAN, per, Zh. Prikl. Mekh, Tech. Fiz, No 2,
1963, pp 79-83. 9232875
AEC NP-tr-1378

Sci/Physics
Jun 66

302,471

Meteorological Factors