

**Metallic Wear During Sand Blasting, by K.
Wellinger.**

**GERMAN, per, Zeits. Metallkunde, Vol 40,
No 10, 1949, pp 361-364.**

(Doc 1351)

CRUI 3367

314,401

**Sci - Mechanical, Industrial,
Civil, and Marine Engineering**

How 66

X-Ray Study of Behavior of Steels Under Repeated
Cyclic Stress, by A. Schaal.

GERMAN, per, Zeit Metallkunde, Vol XL, No 11,
1949, pp 417-427.

Brutcher Tr
No 3102

Scientific - Min/Metals

Jan 56 CTS/DEX
\$13.60

30,246

Recrystallization in Solid Materials, by W. G. Burgers.
GERMAN, per, Z. Metallkunde., Vol 41, 1950, pp 2-8.

*NTIS/NBS TT 71-55131

Available NBS Only

June 71

Zeitschrift fuer Metallkunde, Vol. XLI, No. 3, 1950,
pp 71-75.

Werner Koester, The Kinetics of Age Hardening.

Proj. 8541

61-20752

Löhberg, Karl.

CORROSION OF INTERMETALLIC COMPOUNDS
[Korrosion Intermetallischer Verbindungen]. [196.] 8p.
(5 tables, 8 refs. 4 graphs omitted).
Order from SIA \$1.10

61-20752

Trans. of Zeitschrift für Metallkunde (West Germany)
1950, v. 41 [no. 2] p. 36-39.

DESCRIPTORS: *Intermetallic compounds, Aluminum
compounds, Magnesium compounds, *Corrosion,
Corrosion inhibition.

(Metallurgy--Corrosion, TT, v. 7, no. 3)

I. Löhberg, K.

Office of Technical Services

Magnesium Rolled Alloys With Zirconium, by
F. Sauerwald,

GERMAN, per, ~~Zett~~ Metallk, Vol. XLI, No 3, 1950,
pp 81-87.

TPA3/TIB Tr ^{T-}No. 4356

23,582

Scientific - Min/Metals

May 55 CTS

The Evaluation of Creep Tests, by E. Ludwig. UNCL
GERMAN, por, Z Metallkunde, Mar 1950, pp 87-91.

British Iron and Steel Ind
(no number given)

Sc1 - Min/Mat
Sep 59

78,263

The Systematics of Molten Metals and Alloys Part III,
by F. Sauerwald.

Full translation.

GERMAN, per, Zeitschrift fur Metallkunde, Vol XLII,
No 4, 1950, pp 97-104.

AEC Tr 1290

Scientific - Minerals/Metals

Jun 52 CTS

DEX

New Work on Recrystallization in Mehl's Group in
Pittsburgh, by K. Lucke.

GERMAN, per, Z. Metallkunde., Vol. 41, 1950,
pp 114-124.

*NTIS/NBS TT 71-55132

Available NBS Only

June 71

Theory of Gnsification and Degasification of
Molten Metal Baths, by W. Geller, 13 pp.

GERMAN, per, Z Metallkunde, Vol XLI, No 4, 1950,
pp 124-127.

SLA Tr 57-841

Sci - Minerals/Metals
Feb 58

58, 545

Oxidation of Molten Cadmium and Cadmium ~~alloy~~ Alloys
by W. von Gruhl, G. Wassermann, 5 pp.

GERMAN, per, Z. Metallkunde, Vol. XLI, 1950,
pp 178-184.

S.L.A. Tr 1230

Sci - Min/Metals
Jan 57 CTS

442,680

Systematics of Molten Metals and Alloys,
Part I, III, by F. Sauerwald. URCL

GERMAN, Ber, Z Metallkunde, Vol XXIV, No 5,
pp 65-111; 1950, Vol XII, No 4, pp 97-104;
1952, Vol XLIII, pp 214-218.

British Iron and Steel Ind
(no number given)

109,269

Sci - ILL/Int
Sep 59

ZEITSCHRIFT FÜR METALLKUNDE
1950 V41 N5 P129-140 70-11232-11F <*>
Inhalt: ...

Order from NTC

The Oxidation of Cadmium and Cadmium-Alloy Melts, by Wolfgang Gtuhl, Gunter Wassermann.

GERMAN, per, Z Metall, Vol XLI, 1950,
pp 178-179, 183-184.

AEC IS Trans-24 9232575
 RDDC Mar 8, 1966

Sci-Chem/ML/M
Mar 06

On the Systematics of Molten Metals and Alloys
Part III, by F. Sauerwald.

Full translation.

GERMAN, per, Zeitschrift für Metallkunde, Vol XLI,
No 7, 1950, pp 214-218.

AEC Tr 1291

Scientific - Minerals/Metals

Jun 52 CTS

DEX

The Sintering of Aluminium Alloys, by A. von Zeerleder
GERMAN, per, Z. Metallk, Vol 41, No 8, pp 228-231.

TPA3/TIB T 4048

Scientific - Chemistry, metallurgy
Tr Avail @ The Secretary, Ministry of Supply,
TPA3/TIB/P & TD, Leysdown Road, Nottingham, London,
S.E.9

Index Aeronautics

5-75-

Grain-Boundary Corrosion in Cu-Si Alloys, by
O. Haasler.
GEBMANN, per, Zeit. Metallkunde, No 41, 1950,
pp 261-264.
*NBS TT 70-57805
Available NBS Only

Sci/Mat
Sept 70

New Data on the Strengthening of Crystals During
Plastic Deformation of Crystals, by Fritz Roha, Albert
Kochendorfer, 8 pp. UNCLASSIFIED

Full translation.

GERMAN, per, Zeitschrift fuer Metallkunde, Vol XLII,
No 8, 1950, pp 265-272.

Navv Tr 655/MRL 409

Scientific - Physics

Sep 52 CTS/DET

Study of the Tensile Strength Behavior of
Metallic Materials at Low Temperatures, by
Karl Wellinger, Willi Seufert, 13 p.

GERMAN, per, Zeit fur Metallkunde, 1950, Vol
Vol XLI, No 10, pp 317-321.
3

BLA 60-10172

Sci
Apr 60
Vol XIX, No 3

112,052

TT-63-20450

I. Roll, A.
II. Title: Electrolytic ...

Roll, Albert.
INFLUENCE OF ULTRASONICS ON ELECTROLYTIC
PROCESSES. I. ELECTROLYTIC DEPOSITION OF
NICKEL IN THE ULTRASONIC FIELD. [1963] 17p

4refs
Order from SLA \$1.60 TT-63-20450

Trans. of Z[eitschrift für] Metallkunde (West Germany)
1950, v. 41, p. 339-343. (Abstract available)

DESCRIPTORS: *Ultrasonics, *Electrodeposition,
Electrolytes, *Nickel, Oscillators, Cavitation, Tests,
Electrolysis.

Topics include: researches still in progress on the
influencing of electrochemical processes by ultra-
sonics; production of the ultrasonics of 34 kHz and
measurement of the acoustic field; measurement of
the current yield and deposition potential at various
sound intensities, and, stirring effect of the ultrasonics.
(Metallurgy, TT, v. 11, no. 4)

Office of Technical Services

On the Crystallographic Indices of Grain Section Sur-
faces in Metallographic Sections, by H. Kostron.

German, Z. Metallk., Vol XXXI(10), Oct 1950,
pp 370-377.

The Aluminium Laboratories LTD
Tr No OT/162

Scientific - Metallographic, crystallographic,
grain section surfaces

Index Aeronauticus

Lanke, J. C. and Wassermann, G.
VOLUME CHANGES OF AN ALUMINUM-COPPER
ALLOY DURING THE VARIOUS STAGES PRE-
LIMINARY TO PRECIPITATION. [1960] 15p.
Order from ATS \$22.40 ATS-85M45G

Trans. of ~~Zeitschrift für~~ Metallkunde (West
Germany) 1950, v. 41, no. 11, p. 381-391.

143,100

(Metallurgy, TT, v. 5, no. 1)

61-12095

I. Aluminum-copper alloys--
Phase studies

I. Lanke, J. C.

II. Wassermann, G.

III. ATS-85M45G

IV. Associated Technical
Services, Inc.,
East Orange, N. J.

Office of Technical Services

On the Influence of Supersonic Vibration on
Electrolytic Processes: 1. Electrolytic Deposition of
Nickel in a Supersonic Field, by A. Roll

GERMANY, pat., Z. Metallk., 41. (11), 413-417. Nov 1950.

TPA3/YIE Tr No T 3974

Scientific - Metallurgy

The Influence of Supersonic Vibration on Electrolytic
Processes: 2.-The Agitating Effect of Supersonic
Vibration, by A. Roll

GERMANY, per, Z. Metallk., 41 (11), 413-417, Nov
1950.

TPA3/TIB Tr No T 3975

Scientific - Metallurgy

A. Kussman

Study of conversions in the platinum-iron
system. 21 pp.
GERMAN, Zeit. Metallk, Vol 41, 1950, pp 470-
477
NASA TT F 14,320

oct 72

On the Structure of Iron Layers Deposited by
Evaporation, by Carl Heck

Full translation.

GERMAN, per, Zeitschrift fur Metallkunde, Vol
XLII, No 1, 1951, pp 10-13.

Butcher No 2771
Price ~~DEX~~ \$4.60
SLA 57-2514

Also available @ Bell Telephone Tr B91 (MW)

Scientific - Minerals/Metals CTS/DEX

4086

The Binary System Silver-Indium, by Erwin
Helmer, 6 pp.

GERMAN, per, Z Metall, Vol XLII, 1951, pp 17-19.

ABC 3446

Sci - Chem, Min/Met

Dec 58

78, 253

The Application on Wagner's Theory of Tarnishing
Reactions to the Development of Alloys
Resistant to Dry Corrosion, by Karl Hauffe, 18pp
GERMAN, per, Zeitschrift fur Metallkunde,
Vol 42, 1951, No 2, pp 34-43
SLA TT-64-18861

Sci - Meta
May 67

346,696

High and Low Temperature Sintering Techniques,
by E. Kieffer.

GERMAN, per, Z. Metallkde, No 42, 1951, pp 97-106.

*USDC/NBS TT 70-57530

Available NBS Only

Sci/Mat
Feb '71

On the Shape of the Elastic Stress-Strain Curve
of Very Pure Aluminum Crystals and the Development
of Deformation Bands, by K. Inoue, H. Lange, 36 pp.

GERMAN, per, Zeit fuer Metallkunde, Vol XLIII, No 2,
1952, pp 55-66.

SLA 59-10947

Sci - Minerals/Metals
Sep 59
Vol. II, No 2

98,655

FROM: [illegible]
BY: [illegible]

GRUBER, [illegible], Metallkunde, Vol XLIX, No 4, 1951,
pp 97-105.

British Iron and Steel Inst
(no number given)

Sci-Tech/Inst
Sep 59

98, 250

The Influence of Supersonic Vibration on Electrolytic Processes, The Influence of the Frequency on the Agitating Effect of the Supersonic Vibration, by A. Roll, G. Schrag, 19pp.

GERMAN, per, Z. Metallk., 42 (7), 197-201, July 1951.

SLA TT-68-20439
TPA3/TID Tr No T 3976

Scientific - Metallurgy

The Influence of Supersonic Vibration on Electrolytic
Processes: 1. -The Influence of Supersonic Vibration on
the Brightness of Nickel Deposits, by ~~XXXXXXXX~~ A. Roll
20pp

GERMAN, ger, Z. Metallk., 42 (8), 238-243, Aug, 1951.

SLA TT-63-20440
TPA3/MIB Tr No T 3977

Scientific - Metallurgy

62-16918

Assmus, F. and Pfeifer, F.
RESISTANCE ANOMALIES OF HIGHLY PERMEABLE
NI-FE-MO ALLOY. [1962] 11p. (refs. figs. omitted).
Order from SLA \$1.60
62-16918

I. Assmus, F.
II. Pfeifer, F.

Trans. of Zeitschrift für Metallkunde (West Germany)
1951, v. 42, Oct, p. 294-299.

DESCRIPTORS: *Nickel alloys, *Iron alloys, *Molyb-
denum alloys, Permeability, Resistance, Heat
treatment.

Changes in permeability and electrical resistance due
to additional heat-treating were investigated in a cer-
tain molybdenum-iron alloy. As a parallel phe-
nomenon of the well known increase in permeability
there was found an increase in cold-resistance and de-
pendence of the hot-resistance on the rate of cooling
or the holding time at constant temperature. The
time-temperature law of the change in resistance
(Metallurgy, TT, v. 8, no. 9)
(over)

Office of Technical Services

A New Viewpoint on Strain Hardening of Metals, by
J. Bingel

GERMAN, per, Z. Metallk., 40 (10), 309-315, Oct 1951.

TPA3/TIB Tr No T 3991

Scientific - Metals

On the Reaction Between Metals and Non-Metallics
to Form a High Melting Point Ceramic Material,
by E. Meyer-Hartwig.

GERMAN, per, Z. Metallkde., Vol 42, 1951,
pp 302-308.

*NTIS/USDC/NBS TT 71-55065

Available NBS Only

May 71

Semi-Metals With Continuous Transitional Properties
Between Metal and Ceramics, by Eberhard Meyer
Hartwig, 12 pp.

GERMAN, part, Z fuer Metallkunde, Vol XLII, No 10,
1951, pp 302-308.

ACSI I-2440
ID 2227678

Sci - M/M
Dec 63

243,418

r1-22158

G.M. L.
THE LAMELLAR GROWTH OF CRYSTALS. I. EX-
PERIMENTAL PART. [1961] 12p.
Order from ATS \$16.70 ATS-02N49G

Trans. of Z[eitschrift für] Metallk[unde] (West
Germany) 1951, v. 42, p. 336-340.

- I. Crystal Growth
- I. G.M. L.
- II. ATS-02N49G
- III. Associated Technical
Services, Inc., East
Orange, N. J.

107132

Office of Technical Services

(Physics--Solid State, TT, v. 5, no. 11)

Sintering Study of Al, by E. Boenisch.
GERMAN, per, Z. Metallkde, Vol 42, 1951, pp 344-348.
*NTIS/USDC/NBS TT 71-55043
Available NBS Only

May 71

Effect of Magnetism on Diffusion in Some Ni-Cu
Alloys, by W. Koster.

GERMAN, per, Z. Metallkde, Vol 42, 1951,
pp 387-391.

*NTIS/USDC/NBS TT 71-55059

Available NBS Only

May 71

The Influence of Lead Upon the Modulus of
Elasticity and Upon Damping of Copper, Silver,
Brass, by Koster, Werner and Bangert, Lothar,
9 pp.

GERMAN, per, Zeit fur Metallkund, Vol XLII,
No 10, 1951, pp 391-394.

OTS 60-15481

Sci

188, 926

30 Mar 62

Investigations on Sintered Aluminium, by Edith
Boenisch, W. Wiederholt.

GERMAN, per, ~~Zinn~~ Metallk, Vol XLII(11), Nov 1951,
pp 344-348.

Aluminium Laboratories, Ltd
Tr No B-TM-92-52 OE/319

Index Aeronauticus

On the Rolling- and Recrystallization Textures of
Pure Aluminium, by H. J. Walbaum, 11 pp.

GERMAN, per, Z. fuer Metallkunde, Vol. XLII, No 12,
1951, pp 371-376.

SLA 63-10003

S 1
Jul 63

238,185

Graf, L.
THE LAMELLAR GROWTH OF CRYSTALS II. THE
MECHANISM OF THE GROWTH OF CRYSTALS
UNDER CONDITIONS FAR FROM PHASE EQUILIB-
RIUM. [1961] 13p.
Order from ATS \$23.95

ATS-03N49G

Trans. of Z[eitschrift fur] Metallk[unde] (West
Germany) 1951, v. 42, p. 401-409.

See also 61-22158

61-22159

- I. Crystals--Growth
- I. Graf, L.
- II. Title: Mechanism...
- III. ATS-03N49G
- IV. Associated Technical
Services, Inc., East
Orange, N. J.

102130

Office of Technical Services

(Physics--Solid State, TT, v. 5, no. 11)

The Effect of Extremely High Cooling Rate
on the Solidification and Structure of
Binary Alloys, by G. Falkenhagen,
Wilhelm Hofman. 41 p.
GERMAN, per, Z. Metallk, No 41, 1952,
pp 69-81. 9228243
AEC SC-T-64-2011

Sci/MEM
May 66

300,489

Application of the Band Model of the
Electron Theory to the Crystal Chemistry of
Alloys, IV. Distortion of Simple Structures, by
H. Schubert

G. F. MANN, per, Z Metallkunde, Vol. XLIII, 1952,
p. 1-10.

Nat'l Res Council Canada TT 338

Scientific - Chemistry
JCS CTS/DEK

16,870

Sintering of Tungsten Carbide - Cobalt Compositions
as a Surface Reaction, by W. Davidl

GERMANY, Zeitschrift Metallkunde, Vol 43, 1952, No 1,
pp 20-22.

Butcher Order No 3067

Scientific - Metallurgy Price \$4.90

1380

Effect of Magnetism on Diffusion In Sintered
Ni-Zn Alloys, by W. Koster.
GERMAN, per, Z. Metallkde, Vol 43, 1952,
pp 37-39.

*NTIS/USDC/NBS TT 71-55060
Available NBS Only

May 71

Contribution to the System Molybdenum-Silicon,
by R. Kieffer, E. Cervenka

GERMAN, Zeitschrift für Metallkunde, Vol 43, 1952,
No 4, pp 101-105.

~~XXXXX~~

Butcher Order No 2960

Price ~~XXXXXX~~ \$5.80

1389

Scientific - Metallurgy

Internal Friction of Liquid Au-Ag Alloys by
E. Gebhardt, M. Becker.

GERMAN, Z. Metallk, Vol LXII, No 4, April 1952,
pp 111-117.

TIA3/TIB T 3981

*AEC

Scientific - Min/Metals

13,965

Alloys of Titanium With Copper, Silver, and Gold, by
E. Raub, P. Walter, M. Engel.

Full translation.

GERMAN, per, Zeitschrift fur Metallkunde, Vol XXXVIII,
No 4, 1952, pp 112-115.

Brutcher Tr 3017

Scientific - Alloys, Ti-Cu, Ti-Ag, Ti-Au

On Slip Shrinkage in Metal-Metal Oxide Mixtures and
in Boron Carbide, by W. Dawid, 7 pp.

GERMAN, Proc. 2. Intern. Metallurg. Conf., Vol XLII, 1952,
pp 138-142.

ABC Pr 3/97

Sci - Chem

May 59

86,153

Influence of Stress and Temperature on Stress
Corrosion Tests, by Otto Lissner, 5 pp.

GERMAN, per, Z. Metallkunde, Vol. XLIII, May 1952,
pp 147-150. 9215541

AEC-Tr-6127

Sci - Phys

Dec 63

244,178

Theoretical and Experimental Fundamentals
of Nondestructive Material Testing by the
Eddy Current Method, I. The Search Coil
Method, by Fritz Foerster,
GERMAN, per, Zeitschrift für Metallk., Vol
XLIII, 1952, pp 163-171. P911078666
AEC OINL-tr-1297

Sci-Materials
Nov 66

313,860

63-16832

1. Schaaber, O.

Schaaber, Otto.
NEW DEVELOPMENTS IN THE FIELD OF CONTINUOUS CASTING. [1963] [27] p. (figs. omitted) 42 refs.
Order from SLA \$2.60 63-16832

Trans. of [Zeitschrift für] Metallkunde (West Germany)
1952, v. 43, p. 181-190.

DESCRIPTORS: *Casting, *Steel, *Copper, *Aluminum.

After general review of the process of solidification in the usual ingot casting and in continuous rodcasting, the factors determining the degree of difficulty in casting are discussed. The casting properties of steel, copper and aluminum are compared. (Author)

(Metallurgy, IT, v. 10, no. 8)

Office of Technical Services

On the Kinetics of the Ageing of Aluminium-Silver
Alloys, Part IV, by G. Ziegler

GERMAN, per, Z Metallkunde, Vol XLIII, Jun 1952,
pp 213-216.

Fulmer Research Institute
46 OT/701

Scientific - Minerals/Metals
CTS/DEK

8 912

On the Small Angle Scattering of X-Rays on the
Structure of Age-Hardening Alloys, by A. Guinier

GERMAN, per, Z Metallk, Vol XLIII, 1958, pp 217-223.

R Fulmer Research Institute
41 OT/631

Scientific - Minerals/Metals
CIS/DEX

8227

Heat Transmission in Metal Melts in the Immediate
Neighbourhood of the Liquid/Solid Phase Boundary,
by O. Schmaier.

Full translation.

GERMAN, Z. Metallk., Vol 43, No 7, pp 251-258, July 1952

Aluminium Laboratories, LTD. Tr No
B-TH-104-52 OT 434

also have been sent 279

Scientific - Metallurgy

Index Aeronautics - March 1953

Aluminum and Gas, II Part I., by I. H. Kostren

GERMANY, per, Zeitschrift für Metallkunde,
Vol XLIII, No 6, 1952, pp 269-277.

Brutcher Tr 3276

AEC Tr 4923
909 7861

Scientific - Minerals/Metals

Jul CTS/DEK Price \$13.20

15,962

Aluminum and Gas. Part II, by H. Kostron, UNCLASSIFIED.

GERMAN, per, Zeitschrift Fur Metallkunde, Vol XLIII, No 8,
1952, pp 277-284.

Brutcher Tr No 3277

Scientific - Min/Metals

17,372

Development and present Status of Continuous
Casting of Nonferrous Metals in the U. S., by
P. Brenner, 17 pp.

GERMAN, per, Z Metallkunde, Vol XLIII, 1952,
pp 325-332.

SLA 2313

54, 053

Sci - Minerals/Metals
Oct 57

Aluminum and Gas, Part III, by H. H. H. H.,

GERMAN, per, Z. f. Metallkunde, Vol XLIII,
No 6, 1952, pp 373-381.

Brutcher Tr No 3278

Scientific - Min/Metals

13,734

Aluminum and Gas. Part IV. (Concluding), by
H. Kostron.

German
~~English~~, per, Zeitschrift Metallkunde, Vol. XLIII,
No 8, 1952, pp 381-387.

Brutcher Tr
No 3279

41280
Scientific - Minerals/Metals CTS/DEX

19,513

Contributions to the Metallography of Light Metals.
IV. On the Crystallization of the Residual Melt in
Commercial Aluminum Alloys, by Hans Kostron,
Margarete Schippers, 13 pp.

GERMAN, per, Zeit. für Metallkunde, Vol XLIII, No 9,
Sep 1952, pp 303-306.

S.I.A. 1021

33,504

Scientific - Metals/minerals

Preparation of Fe-Zn Alloys From
Amalgams (slightly abridged), by
F. Lühl; A. Demel.
GERMANY, per, Zeitschrift für Metallkunde,
Vol 43, No 9, 1952, pp 307-310.
DISI 4111

EE-Germany
Sci/MSM
May 65

278,821

Tinning and Soldering of Aluminum by Ultrasonics,
by P. Wenk, H. Boljahn

DE
GEIDMAN, per, Zeitschrift für Metallkunde,
Vol XLIII, No 9, 1952, pp 322-324.

Brutcher Tr 3231

Scientific - Minerals/Metals
CTS/DEX

Price \$2.90

11,409

The Creep of Aluminium Wire Spirals, by G. Lucas,
H. Gering

GERMAN, par, Z. Metallk, Vol XLIX, No 10, Oct 1952,
pp 341-349.

TPA3/TIB T 403⁸²93

Scientific - Minerals/Metals
CTB/DEX

8187

On the Constitution Diagram of the System Copper-Silver-Indium. II. Equilibrium Course Up to Indium Contents of 30%, by Erich Gebhardt, H. Manfred Dreher, 13 pp.

GERMAN, par, Z Metallkunde, Vol XLIII, 1952, pp 377-388.

ABC 17 3/76

Sci. - Metallurgy/Met

Apr 59

85,752

The Influence of Alloying Constituents and Treatment
with Metallic Oxide Vapours on the Oxidation Rate
of Nickel and Titanium, by H. Pfeiffer, K. Hauffe.

4-3

GERMAN, Ref. 2. Metallk, Vol. LXIX, No 10, Oct 1952,
pp 364-359,

AEC TR 2507

TRAS/713, T 4130

10,998

Scientific-min/metals

II. Bubbles and Pores in Malleable Materials, by
Hans Kostron, 49 pp.

GERMAN, per, Z Metallkunde, Vol XLIII, No 11, 1952,
pp 373-387. 9097854

AEC Tr-4949

Sci - Min/Metals
Apr 62

189.925-

Investigation on Zinc Alloys Made from "Five-Nine"
Zinc (99.999%), by W. Hofmann, F. Erdmann-Jechitzer,
H. Hanemann
UNCLASSIFIED

GERMAN, per, Z. Metallk., Vol XLIII, No 12, 1952,
pp 417-421

TPA3/MTB T 4226

Scientific - Min/Metals

April 54 CTS/DEX

11,563

Internal Notch Effect and Surface Sensitivity
Under Cyclic Bending Stresses. Part IV of
Processes Occurring in Metals Under Tensile and
Fatigue Stresses, by C. Petersen

GERMAN, no par, Z. Metallkunde, Vol XLIII, 19
No 12, 1952, pp 429-433.

Bratcher Tr 3157

\$6.80

Sci - Min/Metals
Sep 56 CTS

88,525

Aluminum and Gas. II. Blisters and pores in Elastic
Materials, by Hans Kostron.

GERMAN, per, Z Metallkunde, Vol XLVI, No 11, 1952,
pp 373-387.

*AEC

Sci - Min/Metals
Nov 61.

X-Ray Methods for the Direct Measurement of Stress
Components Without the Use of Reference Lines, by
E. Oswald, 13 pp.

GERMAN, per, Z. Metallkunde, Vol XXXV, Pt 1, Jan
1953, pp 19-21.

SLA 58-648

Sci

Aug 59

95. 6 73

The Influence of Lead Upon the Modulus of
Elasticity and Upon Damping of Copper, Silver,
Brass, by Koster, Werner and Bangert, Lothar,
9 pp.

GERMAN, per, Zeit fur Metallkunde, Vol XLII,
No 10, 1951, pp 391-394.

OTS 60-16481

Sci

30 Mar 62

Contributions to the Metallography of Light Metals:
6. " On the Etching of Super-Purity Aluminium, by
H. Kostron, E. Hoffler, W. Sautter.

CHERMAN, per, Z. Metallk, Vol XLIV, No 1, Jan 1953,
pp 17-21.

Aluminium Laboratories LTD
B-M-131-53, OT/872

Scientific - Minerals/Metals

Aug 54 CTS 16,403

Light Migration and Contacts From Alloys With Over-
structure, by E Albert REED and Meyer Keil, Carl-
Ludwig, 16 pp.

GERMAN, per, Zeit Metallkunde, Vol XLIV, No 1,
Jan 1953, pp 22-26.

S.L.A. Tr 1007/1956

Sci - Minerals/Metals

39,227

The Kinetics of Magnetite Formation in the
Oxidations of Iron, by Karl Bauffe, Harald
Pfeiffer, 25 pp.

GERMAN, per, Zeit Metallk, Vol XLIV, 1953,
pp 27-35.

AEC Tr 2514

Mci - Minerals/Metals

36,779

Jul 1956

On Hardness, by Herbert Moser, 14 p.

GERMAN, per, Zeit fur Metallkunde, 1953, Vol XLIV,
No 2, pp 43-50.

SLA 59-17965

Sci
Mar 60
Vol 2, No 11

109,632

The Change in Electrical Resistance During
Cold Information, by E. Weyerer. UNCLASSIFIED

²
GERMAN, per, ¹Metallkunde, Vol XLIV, 1953,
pp 51-58.

DSIR/31430/CT

Sci - Phys
Sci - Min/Mat
Sep 58

T3, 855

Application of the Geiger-Counter X-Ray Spectrometer
to the Direct Determination of Transformation Rates
(Phase-Change Reaction Velocities), by Rosler, Ulrich
and Ruff/Wolfram.

GERMAN, per, Z. Metallkunde, Vol XLIV, No 2, 1953,
pp 65-68.

Assoc Tech Sv
19F30

33,045

Sci - Physics, Chemistry

(\$5.90)

Stress Corrosion in Aluminium Alloys, by P. Eberner.

GERMAN, per, Zeit fur Metallkunde, Vol XLIV, No 3,
Mar 1953, pp 85-97.

Aluminium Laboratories, Ltd. Tr B-TM-184-55

OT/1825

Sci - Min/metals

39, 9/8

Plastic Deformability of Germanium at Higher
Temperatures, by L. Graf, H. Lucour, K. Seiler,
6 pp.

GERMAN, per, Z Metallkunde, Vol XLIV, Mar 1953,
pp 113-114.

SLA 57-994

May 58

63,822

Study of the strong formation on local alloys when an
Air stream is injected into the melt, by Helmut
Hartmann, et al., 7 pp.

GERMAN, per, ²Z¹Metallkunde, Vol XLIV, No 4, 1953,
pp 123-126.

S.L.A. Tr 456/1956

Ebur - Germany

Scientific - Minerals/Metals

36,595

The Result of Diffusion Processes in Artificial Mixed
Crystals, by Theo Heumann, and Alfons Kottmann, 27 pp.

~~GERMAN~~
~~German~~, per, Z. Metallkunde, Vol XLIV, 1953, pp 139-
154.

S.L.A. Tr 74/1956

Chemistry
Scientific - Physics; MIN/MCTC/ss

33,998

Reaction Between Solid Iron and Liquid Nitrogen
Chemical Abstr., by G. Schmidt, 1958, p. 151-153.

Full translation.

GERMAN, 1958, Zeitschrift für Metallkunde, 48, 151-153,
1958, pp 151-153.

BISE 10722

Reactions between iron and nitrogen

Scientific - Minerals/Metals

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\$9.20 price

5/8/58

Investigations of the Amalgams of the Metals
Manganese, Iron, Cobalt, Nickel, and Copper,
by F. Lihl.

QINMAN, per, Zeitschrift für Metallkunde, Vol
XLIV, 1953, pp 160-166.

Dept of Int
US Bur of Mines
Eastern Paper Sta
College Park, Md.

Sci - Min/Met

May 59

87,733

Periodic Liquation in the Continuous Casting of
Commercial-Purity Aluminium, by G. Siebel, D. A.
Altenpohl, H. M. Cohen.

GERMAN, per, Z. Metallk, Vol XLIV, No 5, 1953,
pp 173-183.

Aluminium Laboratories, Ltd
B-TM-138-54
OT/975

Scientific - Min/Metals

13,270

The Metallography of Light Metals: Growth and Dissolution Phenomena During Crystallization, by
E. Kestran, M. Schipper.

GERMAN, per, Z Metallkunde, Vol XLIV, No 5, 1953,
pp 152-197.

Alum Lab, Ltd Tr B-TM-198-56
GT/2041

Sci - Min/met
Box 57

55, 352

SLA 57-18-1

Ultrasonic Testing of Materials in the Light Metal
Industry, by Josef Krauthamer, Walter Roth.

GERMAN, per, Zeitschrift für Metallkunde, Vol. XLIV,
1953, pp 198-205.

AEC Tr 1699

Scientific - Minerals/Metals

Sep 53 CTS

5718

Investigations into the Binary System Proxima Centauri
Zinc, by Walter H. Gebhardt, UNCLASSIFIED

GERMAN, per, Zeitschrift für Metallkunde, Vol XLIV,
No 9, 1983, pp 205-211.

Erutcher No 3269

Scientific - Min/Metals

7058

\$7.80

The Effects of Stress Concentrations on the
Rupture Strength of Metallic Materials Subjected
to Creep Loading, by G. Sachs, D. P. Newman,
W. F. Brown

GERMAN, per, Zeitschrift für Metallkunde, Vol XLIV,
No 6, 1953, pp 233-239.

Brutcher Tr 3179

Scientific - Minerals/Metals
CTS/DEX Price \$4.50

9288

A Report on the Refining [Refining?] of Magnesium,
by Karl Ernst Mann, 7 pp.

GERMAN, per, Zeitschrift für Metallkunde, Vol XLIV, 1953,
pp 264-266.

S.I.A. 1046

Scientific - Minerals/metals 33,498

Tin-Bismuth-Antimony System. Thermal and
Microscopic Investigation of the Ternary
Systems, by Rudolph Vogel, 4 pp.

Full translation.

Vol
GERMAN, per, Z. Metallkunde/XLIV, 1953, pp 323-
324.

AEC-Tr-1735

8480

Scientific - Min/Met

CTS/DEX

Melting of Metals Without Crucible Reaction,
by O. Winkler

GERMAN, no par, Z Metallkunde, Vol XLIV, 1953,
pp 333-341.

T.I.L. Ex T 4701

Sci - Min/Metals
Sep 56 GTS

39,309

SLC 47-7700

Lihl, Franz and Jenitschek, Peter. DECOMPOSITION OF HEXAGONAL ALUMINUM BORIDE AlB_2. [1961] 8p. (11 figs. omitted) 8 refs. Order from SLA \$1.10 61-20751 Trans. of <u>Zeitschrift für Metallkunde</u> (West Germany) 1953, v. 44[no. 8/9] p. 414-417. DESCRIPTORS: *Aluminum compounds, *Borides, De- composition, Aluminum, *Boron, *Alloys, Production, Microstructure, Radiography. (Chemistry--Physical, TT, v. 7, no. 3)	61-20751 I. Lihl, F. II. Jenitschek, P. Office of Technical Services
---	---

Theory of Grain Boundary Structure in Solids,
by K. Lucke.
GERMAN, per, Z. Metallkde., Vol 44, 1953,
pp 418-426.
*NTIS/USDC/NBS TT 71-55064
Available NBS Only

May 71

Phase Reaction in the Fe-Si System, by E. Fitzner.
GERMAN, per, Z Metallkde, No 44, 1953, pp 462-
472.
*NBS TT 70-57428

Sol-Mat
Aug 70

Influence of Residual Stresses on Detection of
Flaws in Steel Tubing by Electromagnetic Means,
by K. Matthayes.

GESMAN, per, Zeit Metallkunde, Vol XLIV, 1953,
pp 473-474.

Henry Bratcher 4332
\$3.85

Sol - Electronics, Engr
Oct 58

75,720

Contributions to the Metallography of Light
Metals: 7.-Observations on the Dendritic
Crystallization of Pure Aluminium, by H.
Kostrom, H. Schippers.

GERMAN, per, Z. Metallkunde, Vol XLIV, No 11,
1953, pp 477-489.

Aluminium Lab Ltd Tr
B-TM-197-56
OT/2394

Sci - Min/met
Jul 57

50,693

SLA 2 1-1777