Mines Branch Information Circular IC 123

BIBLIOGRAPHY OF HIGH-TEMPERATURE CONDENSED STATES RESEARCH IN CANADA AND ELSEWHERE, OCTOBER TO DECEMBER, 1960

by

Norman F.H. Bright*

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SYNOPSIS

This is the fifth quarterly Information Circular on high-temperature research. It contains a bibliography of work on high-temperature condensed states published in Canadian journals during the period October to December, 1960. Also included are bibliographies of work in this field in Australia, Austria, Belgium, France, Germany, Great Britain, Scandinavia, the United States and the U.S.S.R. during the period July to September, 1960, and in Japan during the period January to June, 1960.

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Direction des mines

Circulaire d'information IC 123

BIBLIOGRAPHIE DES RECHERCHES EFFECTUÉES DANS LE DOMAINE DES ÉTATS CONDENSÉS AUX TEMPÉRATURES ÉLEVÉES, AU CANADA ET AILLEURS, D'OCTOBRE À DÉCEMBRE 1960

par

Norman F.H. Bright*

RÉSUMÉ

Voici la cinquième circulaire trimestrielle d'information sur les recherches effectuées aux températures élevées. Elle contient une bibliographie des études sur les états condensés aux températures élevées, publiées dans les revues techniques du Canada au cours de la période comprise entre octobre et décembre 1960. On y trouve également la bibliographie des travaux dans ce domaine publiés en Australie, en Autriche, en Belgique, en France, en Allemagne, en Grande-Bretagne, en Scandinavie, aux États-Unis et en URSS, au cours de la période comprise entre juillet et septembre 1960, ainsi qu'au Japon, au cours de la période allant de janvier à juin 1960.

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CONTENTS

Page

Synopsis i

Résumé ii

Introduction 1

Part I
Bibliography of Work on High-Temperature Condensed States Published in Canada in October-December, 1960 5

Part II
Bibliography of Work on High-Temperature Condensed States Published Elsewhere 9

a) Australia, July-September, 1960 10

b) Austria, July-September, 1960 12

c) France and Belgium, July-September, 1960 ... 15

d) Germany, July-September, 1960 25

e) Great Britain, July-September, 1960 29

f) Scandinavia, July-September, 1960 38

g) U.S.A., July-September, 1960 42

h) U.S.S.R., July-September, 1960 53

i) Japan, January-June, 1960 63

INTRODUCTION

This report represents a continuation of the material contained in Mines Branch Information Circulars IC 117, IC 118, IC 119 and IC 122, published at intervals during 1960.

Since the publication of Information Circular IC 122, no additional information has become available concerning the location and fields of interest of workers on high-temperature condensed states research. However, bibliographic information concerning work published in Australian journals is presented for the first time.

In the present circular, the following information is provided:-

(i) The results of a literature search by the writer through journals published in Canada during the period October to December, 1960, for papers dealing with research in this field.

(ii) Bibliographies of work published during the period July to September, 1960, in Australia, Austria, Belgium, France, Germany, Great Britain, Scandinavia, the United States and the U.S.S.R., and of work published in Japan during the period January to June, 1960. These bibliographies have been put together by the scientists named hereafter

and have been supplied to the writer by Dr. Marc Foëx, Secretary of the Sub-commission on Condensed States of the Commission on High Temperatures and Refractories of the International Union of Pure and Applied Chemistry. Additional information, including particularly that referring to Australia, has been supplied to the writer by Dr. J.J. Diamond of the National Bureau of Standards, Washington, D.C.

Austria --- Professor H. Nowotny, Vienna, Austria.

Belgium
France --- Dr. M. Foëx, MontLouis, France.

Germany --- Professor H. Nowotny, Vienna, Austria.

Scandinavia --- Professor Gunnar Hägg, Uppsala, Sweden.

U.S.A. --- Dr. J.J. Diamond, N.B.S., Washington.

Japan --- Dr. Hisao Mii, Nagoya, Japan.

The information relevant to Great Britain and to the U.S.S.R. was again collected by the "Centre National de la Recherche Scientifique" of France, and supplied to the writer by Dr. M. Foëx.

Again, as in the case of previous Information Circulars in this series, the writer would appreciate being advised of any errors or omissions in the various sections of the present document. Such information should be sent to the following address:-

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PART I

BIBLIOGRAPHY OF WORK ON HIGH-TEMPERATURE CONDENSED STATES PUBLISHED IN CANADA IN OCTOBER-DECEMBER, 1960.

International Union of Pure and Applied Chemistry
Commission on High Temperatures and Refractories
Sub-commission on Condensed States

Bibliography (October, November, December, 1960)

for Canada

collected by Dr. Norman F.H. Bright, Mines Branch, Ottawa

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A. Devices for achieving high temperatures

1. Shawinigan's new Fluohmic furnace.
Charles R. Graham.
Canad. Chem. Proc., 44 (12), 73, (1960).

B. Devices for measuring and controlling high temperatures

nil

C. Devices for physical measurements at high temperatures

nil

D. Properties of refractory phases and systems studied at lower temperatures

a. Metallic systems

1. The corrosion behaviour of aluminum in natural waters.
H.P. Godard.
Canad. Journ. Chem. Eng., 38 (5), 167, (1960).

2. Some chemistry of the nickel-cadmium battery.
E.J. Casey.
Chemistry in Canada, 12 (10), 49, (1960).

3. Mechanical and structural changes during the deformation of copper by fatigue.
J.T. McGrath and R.C.A. Thurston.
Mines Branch Research Report R 68, Department of Mines and Technical Surveys, Ottawa, Canada. (1960).

b. Non-metallic systems

1. Slime coatings in galena flotation.
A.M. Gaudin, D.W. Fuerstenau and H.L. Miaw.
Canad. Min. Met. Bull., 53 (584), 960, (1960).

2. Relaxation in ruby.
R.A. Armstrong and A. Szabo.
Canad. Journ. Phys., 38 (10), 1304, (1960).

3. Catalytic oxidation of CO present in low concentrations.
S. Sourirajan and M.A. Accomazzo.
Canad. Journ. Chem., 38 (10), 1990, (1960).

E. Properties and uses of refractory phases and systems at high temperatures

a. Metallic systems

nil

b. Non-metallic systems

1. Exothermic reactions due to annealing of defects in oxide lattices: Study of the decomposition of carbonates.
C.N.R. Rao, S.R. Yoganarasimhan and M.P. Lewis.
Canad. Journ. Chem., 38 (12), 2359, (1960).

F. Properties of non-refractory phases and systems at high temperatures

a. Metallic systems

nil

b. Non-metallic systems

1. Evaporation of stationary droplets in high-temperature surroundings.
T.W. Hoffman and W.H. Gauvin.
Canad. Journ. Chem. Eng., 38 (5), 129, (1960).

2. Structure of Bridgman's black carbon disulphide.
E. Whalley.
Canad. Journ.Chem., 38 (11), 2105, (1960).

G. Phase equilibria

1. The copper/arsenic system and the copper arsenide minerals.
R.D. Heyding and G.J.G. Despault.
Canad. Journ. Chem., 38 (12), 2477, (1960).

H. Reactions (physical and chemical) at high temperatures

1. Decomposition pressures of ferric sulphate and aluminum sulphate.
N.A. Warner and T.R. Ingraham.
Canad. Journ. Chem., 38 (11), 2196, (1960).

2. Operations at Canadian Copper Refiners Limited.
G. Bridgstock, E.M. Elkin and S.S. Forbes.
Canad. Min. Met. Bull., 53 (582), 773, (1960).

PART II

BIBLIOGRAPHY OF WORK ON HIGH-TEMPERATURE CONDENSED STATES PUBLISHED ELSEWHERE

a) Australia, July-September, 1960,

b) Austria, July-September, 1960,

c) France and Belgium, July-September, 1960,

d) Germany, July-September, 1960,

e) Great Britain, July-September, 1960,

f) Scandinavia, July-September, 1960,

g) U.S.A., July-September, 1960,

h) U.S.S.R., July-September, 1960,

i) Japan, January-June, 1960.

International Union of Pure and Applied Chemistry
Commission on High Temperatures and Refractories
Sub-commission on Condensed States

Bibliography (July, August, September, 1960)

for Australia

supplied by Dr. J.J. Diamond, N.B.S., Washington

- - - -

A. Devices for achieving high temperatures

nil

B. Devices for measuring and controlling high temperatures

nil

C. Devices for physical measurements at high temperatures

nil

D. Properties of refractory phases and systems studied at lower temperatures

a. Metallic systems

1. Addition compounds of titanium.
P. Dunn (Defence Standard Lab., Maribyrnong, Victoria).
Australian J. Chem., 13, 225, (1960).

2. Extraction and purification of thorium.
A.W. Wylie (C.S.I.R.O., Melbourne).
Revs. Pure and Appl. Chem., (Australia), 9, 169, (1959).

b. Non-metallic systems

1. The reaction of carbon with carbon dioxide at high pressure.
J.D. Blackwood and A.J. Ingeme (C.S.I.R.O., Melbourne).
Australian J. Chem., 13, 194, (1960).

E. Properties and uses of refractory phases and systems at high temperatures

a. Metallic systems

nil

b. Non-metallic systems

1. The interaction of gases with carbon surfaces.
R.V. Culver and H. Watts (South Australian Inst. Tech., Adelaide).
Revs. Pure and Appl. Chem., (Australia), 10, 95, (1960).

F. Properties of non-refractory phases and systems at high temperatures

a. Metallic systems

nil

b. Non-metallic systems

1. Thermodynamic functions of formaldehyde.
L.O. Dworjanyn (Imperial Chem. Ind. of Australia and New Zealand, Ascot Vale, Victoria).
Australian J. Chem., 13, 175, (1960).

G. Phase equilibria

1. Molten salts.
H. Bloom (Auckland Univ., New Zealand).
Revs. Pure and Appl. Chem., (Australia), 9, 139, (1959).

2. Observations on the systems Th-S, Th-Se, and Th-Te.
J. Graham and F.K. McTaggart (C.S.I.R.O., Melbourne).
Australian J. Chem., 13, 67, (1960).

H. Reactions (physical and chemical) at high temperatures

1. High-temperature dielectric breakdown of alkali halides.
J.J. O'Dwyer (Univ. New South Wales, Sydney).
Australian J. Phys., 13 (2A), 270, (1960).

International Union of Pure and Applied Chemistry
Commission on High Temperatures and Refractories
Sub-commission on Condensed States

Bibliography (July, August, September, 1960)

for Austria

collected by Prof. H. Nowotny, Vienna, Austria

- - - -

A. Devices for achieving high temperatures

nil

B. Devices for measuring and controlling high temperatures

nil

C. Devices for physical measurements at high temperatures

nil

D. Properties of refractory phases and systems studied at lower temperatures

a. Metallic systems

1. Magnetische Messungen an den Teilsystemen: TiC-ZrC, TiC-HfC, ZrC-HfC, TiC-VC, TiC-NbC, TiC-TaC u. NbC-TaC.
H. Bittner and H. Goretzki.
Mh. Chem., 91, 616, (1960).

2. On etching effects in tantalum.
R. Bakish (The Alloy Corporation, Cambridge, Mass.).
Planseeber. Pulvermetallurgie, 8, 54, (1960).

3. Beitrag zur Technologie der Legierungen des Niobs mit Molybdän und Wolfram.
H. Braun, K. Sedlatschek and B.F. Kieffer (Metallwerk Plansee AG, Reutte/Tirol u. Montanist. Hochschule, Leoben/Steiermark).
Planseeber. Pulvermetallurgie, 8, 58, (1960).

4. Über die elektrische Leitfähigkeit von hochschmelzenden, harten Karbiden und Karbidmischkristallen.
E. Rudy and F. Benesovsky (Metallwerk Plansee AG, Reutte/Tirol).
Planseeber. Pulvermetallurgie, 8, 72, (1960).

b. Non-metallic systems

1. Ein neuer Weg zur Prufung von losem Schleifkorn.
H. Stolko.
Radex-Rundschau, 203, (1960).

E. Properties and uses of refractory phases and systems at high temperatures

a. Metallic systems

1. Das Homogenitätsgebiet des $MoSi_2$.
S. Amberg.
Mh. Chem., 91, 412, (1960).

2. Ein Beitrag zum Dreistoff Titan-Molybdän-Bor.
A. Wittmann, H. Nowotny and H. Boller (Inst. f.phys. Chemie d.T.H. Wien,u. Anorgan. u. phys. Chem. Inst. d. Univ. Wien).
Mh. Chem., 91, 608, (1960).

3. Über einige Hf-haltige Phasen: $HfAl_2$, Hf_5Sn_3.
H. Boller, H. Nowotny and A. Wittmann.
Mh. Chem., 91, 736, (1960).

4. Eskolait in Glasschmelzen.
F. Troyer (Osterr. Amer. Magnesit AG. Radenthein/ Kärnten).
Mikroskopie, 15, 12, (1960).

5. Beitrag zum Aufbau der Systeme Zr-C und Hf-C.
F. Benesovsky and E. Rudy (Metallwerk Plansee AG. Reutte/Tirol).
Planseeber. Pulvermetallurgie, 8, 66, (1960).

b. Non-metallic systems

1. Zum binären System $BaO-Al_2O_3$.
G. Purt.
Radex-Rundschau, 198, (1960).

F. Properties of non-refractory phases and systems at high temperatures

nil

G. Phase equilibria

nil

H. Reactions (physical and chemical) at high temperatures

nil

International Union of Pure and Applied Chemistry
Commission on High Temperatures and Refractories
Sub-commission on Condensed States

Bibliography (July, August, September, 1960)

for France and Belgium

collected by Dr. M. Foëx, MontLouis, France

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A. Devices for achieving high temperatures

1. Les fours à induction de fusion d'acier, à l'air libre et sous vide: Construction - Utilisation.
A. Belly (Société Générale d'Applications Electro-thermiques).
Revue de Métallurgie, 57, 679, (1960).

2. Contribution de la technique du vide à la métallurgie.
C.A. Degras (Compagnie Générale de Radiologie, Paris).
Revue de Métallurgie, 57. 805, (1960).

3. Position actuelle du four à arcs de grosse capacité dans la sidérurgie.
R. Boutigny and C. Barbazanges (Société Stein et Roubaix).
Revue de Métallurgie, 57, 589, (1960).

4. L'équipement électrique des fours à arcs modernes.
P. Bonis (Compagnie de Construction de Gros Matériel Electro-Mécanique).
Revue de Métallurgie, 57, 783, (1960).

B. Devices for measuring and controlling high temperatures

nil

C. Devices for physical measurements at high temperatures

1. Dilatomètre absolu enregistreur à haute température en atmosphère contrôlée.
A. Baudran (Société Française de Céramique, Paris).
Silicates Industriels, Bruxelles, 25, 397, (1960).

2. Calorimètre adiabatique.
P. Berge and G. Blanc (Centre d'Etudes Nucléaires, Saclay, Seine et Oise).
J. de Physique et le Radium, 21, 129A, (1960).

3. Microbombe calorimétrique adaptable au microcalorimètre type E. Calvet.
E. Calvet, P. Chovin, H. Moureu and H. Tachoire (Institut de Microcalorimétrie et de Thermogénèse).
J. de Chimie Physique, 57, 593, (1960).

4. Etude des échanges thermiques entre fluide et particules solides dans les milieux fluidisés.
G.A. Donnadieu (Laboratoire d'Aérothermique du C.N.R.S., Bellevue, Seine et Oise).
J. des Recherches du C.N.R.S., No. 51, 161, (1960).

D. Properties of refractory phases and systems studied at lower temperatures

a. Metallic systems

1. Etude de l'effet Kirkendall en fonction de la concentration dans la diffusion uranium-zirconium.
Y. Adda, C. Mairy and J.L. Andrev (Centre d'Etudes Nucléaires de Saclay, Seine et Oise, et Ecole Nationale Supérieure des Mines, Paris).
Mémoires Scientifiques de la Revue de Métallurgie, 57, 550, (1960).

2. Extraction et dosage de l'hydrogène dans l'uranium et le zirconium.
L. Champeix, G. Coblence and R. Darras.
Mémoires Scientifiques de la Revue de Métallurgie, 57, 502, (1960).

3. Contribution à l'étude de la corrosion du zirconium et du zircaloy-2 dans la vapeur d'eau surchauffée à 400°C (105 Kg/cm^2).
H. Coriou, J. Gauduchau, L. Grall, J. Huré and M. Pelras.
(Centre d'Etudes Nucléaires de Saclay, Seine et Oise).
Mémoires Scientifiques de la Revue de Métallurgie, 57, 511, (1960).

b. Non-metallic systems

1. Quelques propriétés des carbones graphitables et non-graphitables.
N. Platzer-Rideau (Faculté des Sciences, Sorbonne, Paris).
Annales de Chimie, 5, 805, (1960).

2. Sur la structure et les propriétés des composés formés par l'oxyde de germanium avec les oxydes de zirconium et d'hafnium.
J. Lefevre and R. Collongues (Laboratoire de Chimie Métallurgique du C.N.R.S., Vitry, Seine et Oise).
C.R. Acad. Sci., 251, 1016, (1960).

3. Méthode de recouvrement de cathodes à oxydes par centrifugation.
H. Huber and J.P. Freytac (Compagnie Générale de T.S.F., Orsay).
Le Vide, 15, 234, (1960).

4. Variations de température d'une cathode à oxydes, provoquées par le passage du courant thermoionique.
G. Mesnard and R. Uzan (Institut de Physique Générale de l'Université de Lyon).
Le Vide, 15, 301, (1960).

c. Mixed systems

1. Procédés scellement "céramique-titane".
A.J. Velte (Compagnie Générale de T.S.F., Orsay).
Le Vide, 15, 330, (1960).

E. Properties and uses of refractory phases and systems at high temperatures

a. Metallic systems

nil

b. Non-metallic systems

1. Recherches récentes sur les sulfures métalliques.
J. Flahaut (Faculté de Pharmacie, Paris).
Bulletin de la Société Chimique de France, 1282, (1960).

F. Properties of non-refractory phases and systems at high temperatures

a. Metallic systems

1. Evolution des textures de recristallisation dans des fers de diverses puretés.
   P. Coulomb and P. Lacombe (Ecole des Mines, Paris).
   Mémoires Scientifiques de la Revue de Métallurgie, 57, 573, (1960).

2. Influence de la pureté du fer sur son aptitude à la polygonisation après un écrouissage important.
   J. Talbot (Centre de Chimie Métallurgique du C.N.R.S., Vitry, Seine et Oise).
   C.R. Acad. Sci., 251, 243, (1960).

3. Sur le comportement particulier de l'acier extra-doux sollicité par fatigue entre l'ambiante et 500°C.
   J. de Fouquet (Laboratoire de Métallurgie Physique de Poitiers).
   Mémoires Scientifiques de la Revue de Métallurgie, 57, 603, (1960).

4. Sur la mise en évidence directe de microhétérogénéités consécutives à la précipitation de carbures dans une austénite Fe-Ni-Cr.
   J. Philibert, C. Crussard, X. Wache and M. Gerber (Institut de Recherches de la Sidérurgie et Laboratoire des Aciéries d'Imphy).
   C.R. Acad. Sci., 251, 1289, (1960).

5. Influence du cobalt sur les propriétés d'aciers au chrome.
   D. Coutsouradis and L. Habraken (C.N.R.M., Liége, Belgique).
   Mémoires Scientifiques de la Revue de Métallurgie, 57, 557, (1960).

6. Influence des traitements thermiques sur l'évolution des carbures dans les aciers au chrome-molybdène.
   L. Backer, R. Bigot and E. Herzog (Aciéries de Pompey, et Faculté des Sciences de Nancy).
   Mémoires Scientifique de la Revue de Métallurgie, 57, 527, (1960).

7. Contribution à l'étude des fragilités des aciers spéciaux: Analogies entre divers types de fragilités observés sur des aciers ferritiques et austénitiques.
R. Castro and A.Gueussier (Société d'Electrochimie d'Ugine).
Revue de Métallurgie, 57, 715, (1960).

8. Détermination du grain gamma par condensation d'alliage syncristallisable: Rôle du nitrure d'aluminium sur le grossissement du grain.
G. Vigneron (Laboratoire Central de la Régie Nationale Renault, Billancourt).
Mémoires Scientifiques de la Revue de Métallurgie, 57, 705, (1960).

9. La possibilité d'emploi de l'azote comme élément d'alliage.
M. Mandl (Institut de Recherches de la Sidérurgie, Prague, Czechoslovakia).
Mémoires Scientifiques de la Revue de Métallurgie, 57, 643, (1960).

10. Traitement de la fonte grise par l'azote.
N. Volianik (Centre Technique des Industries de la Fonderie).
Mémoires Scientifiques de la Revue de Métallurgie, 57, 609, (1960).

11. Les bases scientifiques du traitement thermique des aciers en relation avec les applications pratiques.
A. Constant (Institut de Recherches de la Sidérurgie, St. Germain-en-Laye, Seine et Oise).
Mémoires Scientifiques de la Revue de Métallurgie, 57, 695, (1960).

12. Etude dilatométrique de la restauration et de la recristallisation de monocristaux d'uranium-α écrouis par compression.
G. Cizeron, D. Calais, B. Pinteau and P. Lacombe (Centre d'Etudes Nucléaires, Saclay, Seine et Oise, et Ecole Nationale Supérieure des Mines, Paris).
Mémoires Scientifiques de la Revue de Métallurgie, 57, 589, (1960).

13. Comparaison de l'influence de faibles additions de chrome, de fer ou de molybdène sur les transformations que subit l'uranium au cours de sa trempe et du revenu ultérieur.
J. Delaplace (Ecole Nationale Supérieure de la Métallurgie et de l'Industrie des Mines, Nancy).
Mémoires Scientifiques de la Revue de Métallurgie, 57, 721, (1960).

14. Sur les alliages fer-cérium.
F. Gaume-Mahn (Institut de Physique Générale, Faculté des Sciences, Lyon).
Mémoires Scientifiques de la Revue de Métallurgie, 57, 638, (1960).

15. Essais sur modèles pour l'étude du processus de dégazage de métaux en fusion.
T. Kraus and O. Winkler (Société pour la Technique du Vide et des Couches Minces, Balzers, Principality of Liechtenstein).
Mémoires Scientifiques de la Revue de Métallurgie, 57, 520, (1960).

16. Trempes des lacunes dans l'argent.
Y. Quère.
C.R. Acad. Sci., 251, 367, (1960).

17. Contribution à l'étude expérimentale de la conductibilité électrique des couches minces d'or.
S. Minn (Laboratoire des Hautes Pressions du C.N.R.S., Bellevue, Seine et Oise).
Journal des Recherches du C.N.R.S., No. 51, 131, (1960).

18. Couches minces de cobalt obtenues par vaporisation thermique.
F. Savornin (Laboratoire de Physique M.P.C., Faculté des Sciences, Alger).
C.R. Acad. Sci., 251, 57, (1960).

b. Non-metallic systems

1. Point de Curie du carbure de fer hexagonal-ε.
H. Wintenberger, J. Pomey, P. Lesage and A. Diament (Laboratoire de la Régie Nationale Renault, Billancourt).
C.R. Acad. Sci., 251, 1220, (1960).

2. Préparation d'oxydes et de sulfures de rhénium et étude de leurs spectres-X d'absorption.
S. Tribalat, M.L. Jungfleisch and V. Collet (Laboratoire de Chimie Physique de l'Ecole Nationale Supérieure de Chimie de Paris).
C.R. Acad. Sci., 251, 718, (1960).

3. Contribution à l'étude structurale des aluminates de lithium.
L. Debray and A. Hardy (Laboratoire de Chimie Minérale A, Faculté des Sciences de Rennes).
C.R. Acad. Sci., 251, 725, (1960).

4. Préparation et étude de ferrites de thallium.
J. Pillot (Laboratoire de Chimie Générale de la Faculté des Sciences de Strasbourg).
C.R. Acad. Sci., 251, 881, (1960).

5. Etude de deux antimoniates spinelles.
J. Dulac and A. Durif (Institut Fourier, Grenoble).
C.R. Acad. Sci., 251, 747, (1960).

6. Propriétés diélectriques de céramiques au titanate de baryum entre 50 kHz et 25 MHz.
G. Dejardin, G. Mesnard and D. Vasilescu.
C.R. Acad. Sci., 251, 660, (1960).

7. Sur les propriétés diélectriques du sulfure de zinc en couches minces.
R. Fuchschuber, R. Guillien and S. Roizen (École Nationale Supérieure d'Electricité et de Mécanique, Faculté des Sciences de Nancy).
C.R. Acad. Sci., 251, 51, (1960).

8. Etude de la phase non-stœchiométrique Ti_2S_3: Etendue du domaine, nature des défauts, apparition d'une surstructure Ti_8S_{12}.
Y. Jeannin (Laboratoire de Chimie Minérale, E.N.S.C.P., Paris).
C.R. Acad. Sci., 251, 246, (1960).

9. Contribution à l'étude des mécanismes de dispersion et de la masse efficace des porteurs de charge dans les semi-conducteurs: Application à l'antimoniure d'indium et au tellurure de mercure.
M. Rodot (Laboratoire des Applications du Magnétisme, Bellevue, Seine et Oise).
Annales de Physique, 5, 1085, (1960).

10. Effets magnétoélectriques et thermomagnéto-électriques dans les semi-conducteurs.
L. Godefroy and J. Tavernier (Laboratoire Central des Industries Electriques, Fontenay-aux-Roses).
J. de Physique et le Radium, 21, 544, (1960).

11. Sur l'interprétation des spectres d'absorption infrarouge de SiO_2, GeO_2 et BeF_2 vitreux et des verres SiO_2-X_2O, GeO_2-X_2O et BeF_2-XF.
J. Zarzycki and F. Naudin (Centre de Recherches de la Compagnie de Saint-Gobain).
Verres et Réfractaires, 14, 113, (1960).

12. Action de la température sur les propriétés diélectriques des verres.
L. Prod'homme (Institut d'Optique du C.N.R.S., Paris).
Verres et Réfractaires, 14, 124, (1960).

G. Phase equilibria

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nil

B. Devices for measuring and controlling high temperatures

nil

C. Devices for physical measurements at high temperatures

nil

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nil

B. Devices for measuring and controlling high temperatures

nil

C. Devices for physical measurements at high temperatures

nil

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nil

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Sub-commission on Condensed States

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