

**BLANK PAGE**

603359

*Zaf3*

NAVWEPS REPORT 8191

15 JULY 1964 NAVWEPS REPORT 8191

*100 of \$3.00 lc  
\$1.75 mf*

**MAGNETORESISTANCE IN METALS, SEMICONDUCTORS,  
AND ALLOYS: A BIBLIOGRAPHY ON THEORETICAL  
AND EXPERIMENTAL ASPECTS**

L. E. LEONARD

**DDC**  
**RECEIVED**  
AUG 10 1964  
**DDC-IRA .C**

Qualified requesters may obtain copies of  
this report from DDC.



**NAVAL ORDNANCE LABORATORY CORONA**  
CORONA, CALIFORNIA

# NAVAL ORDNANCE LABORATORY CORONA

E. B. JARMAN, CAPT., USN  
Commanding Officer

F. S. ATCHISON, Ph. D.  
Technical Director

## FOREWORD

This bibliography, the first of two on magnetoresistance in metals, semiconductors, and alloys, covers theoretical and experimental aspects. The companion bibliography, planned for publication soon, will deal with applications and devices which make use of magnetoresistance principles.

The work on this bibliography was done under WepTask RREN-04/371/211-1/F008-01-15.

C. J. HUMPHREYS  
Head, Research Department

## ABSTRACT

This comprehensive bibliography covers theoretical and experimental work on magnetoresistance over the period 1930-1963.

## INTRODUCTION

This comprehensive bibliography covers theoretical and experimental work on the magnetoresistance in metals, semiconductors, and alloys over the period 1930-1963. In the subject index, which precedes the main bibliography, the listings are brief but sufficient to enable the reader to find the complete entries in the bibliography section. Because the name of only one author is given for each entry, the sequence is not strictly alphabetical; for convenient reference, it parallels the sequence in the bibliography proper.

Planned for publication soon is another NAVWEPS report that will list applications and devices utilizing magnetoresistance principles.

## SUBJECT INDEX

### MAGNETORESISTANCE—GENERAL

- Allgaier, R. S., "Magnetoresistance in a Multivalley Model With  $\langle 110 \rangle$  Ellipsoids of General Shape."
- Argyres, P. N., "Quantum Theory of Longitudinal Magnetoresistance."
- Auwers, O. v., "Experiments in Strong Magnetic Fields."
- Broudy, R. M., "Galvanomagnetic Coefficients for Arbitrary Geometry."
- Chambers, R. G., "Magnetoresistance."
- Davis, L., Jr., "Change of Resistance in Magnetic Field."
- Donoghue, J. J., "A New Method for Precision Measurement of the Hall and Magneto-Resistive Coefficients."
- Drabble, J. R., "Geometrical Effects in Transverse Magnetoresistance Measurements."
- Gorkun, Yu. I., "The Effect of Current Electrodes on Magnetoresistance."
- Hajdu, J., "Theory of Magnetoresistance."

Jan, J. P., "The Phenomenological Treatment of Electrical and Thermal Conduction and Its Application to Transverse Galvanomagnetic and Thermomagnetic Phenomena."

Kubo, R., "Theory of Galvanomagnetic Effect at High Magnetic Field."

Lifshits, I. M., "On the Theory of the Shubnikov-DeHaas Effect."

Matthews, H., "Magnetoresistance Measurements by Means of Arbitrarily Shaped Flat Samples."

Peierls, R., "Theory of the Change of Resistance in Magnetic Fields."

Stinchcombe, R. B., "Quantum Theory of Magnetoresistance."

Van Bergen, F., "Variations of Resistance of Electric Conductor in a Magnetic Field."

Zil'berman, G. E., "Electron in a Periodic Electric and Uniform Magnetic Field."

#### **FERROMAGNETIC MATERIALS**

Annaev, R. G., "Change of the Electrical Resistance and of Thermoelectric Electromotive Force in a Longitudinal Magnetic Field of the  $Ni_3Mn$  Alloy. . . ."

———, "Change of the Electric Resistance of a Superstructure Alloy in a Longitudinal Magnetic Field."

———, "Effect of Mechanical Deformation on the Change of Electrical Resistance in . . . the Alloy  $Ni_3Mn$ ."

———, "Change of the Electrical Resistance of the  $Fe_3Pt$  Alloy in a Longitudinal Magnetic Field."

———, "Measurement of the Electrical Resistance and Thermoelectric e. m. f. of the Alloy  $Fe_3Pt$  in Longitudinal and Transverse Magnetic Fields."

Bates, L. F., "The Magneto-Resistance of High Coercivity Alloys."

Belov, K. P., "The Electrical and Galvanomagnetic Properties of Lithium Ferrite-Chromite Near the Compensation Point."

———, "Measurement of Magnetoresistance in Ferrites Near the Curie Point."

- , "On Galvanomagnetic Properties of Ferromagnetics Near the Absolute Zero of Temperature."
- , "Electrical and Magnetoresistance Properties of Single Crystals of Manganese Ferrite."
- , "Galvanomagnetic Properties of Manganese Ferrite."
- Bosorth, R. M., "Magnetoresistance and Domain Theory of Iron-Nickel Alloys."
- Chalilaw, P. A., "Change of Resistance of Magnetite in a Magnetic Field at Low Temperature."
- Coren, R. L., "Magnetoresistance and Magnetic Switching in Permalloy Films."
- Drigo, A., "Electrical Resistance of Ferromagnetic Metals in Relation to the Magnetic Properties."
- , "On the Magneto-Resistance of Thin Ferromagnetic Films."
- , "Particular Aspects of the Magnetization of Thin Ferromagnetic Films."
- Drozshina, V. I., "The Change in the Electrical Resistance of Ferrosilicon in the Magnetic Field (Thomas Effect)."
- , "On the Variation of the Electric Resistance in a Magnetic Field (Thomson Effect) in Highly Coercive Alloys."
- Fakidov, I. G., "The Influence of a Magnetic Field on the Electrical Resistance of Ferromagnetic Alloys of Mn and Sb."
- Gans, R., "Resistance Variation in Ferrimagnetic Crystals."
- Gerlach, W., "Change of Electrical Resistance With Magnetisation."
- Gerritsen, A. N., "Resistance and Magneto-Resistance of Dilute Alloys of Gold With Iron at Low Temperatures."
- Gorter, C. J., "Electrical Resistance of Some Ferromagnetic Metals and Alloys in a Magnetic Field at Low Temperatures."
- Griffiths, J. H. E., "Anomalous High-Frequency Resistance of Ferromagnetic Metals."

- Hayashi, J. F., "Forced Magnetoresistance in Ferromagnetic Alloys."
- Hirsch, A. A., "Electrical Resistivity of Thin Ferromagnetic Layers at Low Temperatures."
- , "Influence of a Magnetic Field on the Electrical Resistance of Thin Ferromagnetic Layers at Low Temperatures."
- Juretacke, H. J., "Electromagnetic Theory of D. C. Effects in Ferromagnetic Resonance."
- Kikoin, I. K., "On the Magnetic Change in Resistance of Ferromagnetics Above the Curie Point."
- Kimura, H., "Temperature Dependence of Magnetoresistance Coefficients in Silicon-Iron."
- Komar, A., "The Spontaneous Magnetization and Electrical Resistance of the Alloy  $Ni_3Mn$ ."
- , "The Anomalous Change of the Electric Resistivity of the  $Ni_3Mn$  Alloy in the Magnetic Field."
- Kondo, J., "Anomalous Hall Effect and Magnetoresistance of Ferromagnetic Metals."
- Lee, G. J., "Resistance and Magneto-Resistance of Dilute Alloys of Copper and Gold With Nickel at Low Temperatures."
- McKeehan, L. W., "Magneto-Strain and Magneto-Resistance."
- Masumoto, H., "The Change in the Electric Resistance of a Single Crystal of Magnetite by Magnetic Field at Low Temperatures."
- Nakamura, M., "Magnetoresistance and Magnetostriction in Ferrites."
- Okamoto, T., "Forced Magnetoresistance in Silicon Iron at Low Temperatures."
- Okamura, T., "The Ferromagnetic Property and Electrical Conductivity of Magnetite."
- Parker, R., "The Magnetoresistance of Ferromagnetic Aluminum-Silicon-Iron Alloys."
- , "The Magneto-Resistance of Silicon-Iron."
- , "The Magnetoresistance of the Nickel-Zinc Ferrite System."

- , "The Saturation Magneto-Resistance of Ferromagnetic Alloys."
- , "The Saturation Magnetoresistance of Iron-Aluminum Alloys."
- Samoilovich, A. G., "The Additional Resistance of Ferromagnetic Metals."
- Samokhvalov, A. A., "The Hall Effect and the Effect of a Magnetic Field on Resistance of Magnetite."
- , "Magnetoelectric Properties of a Magnetite Monocrystal in the 0–100°C Region."
- Sharan, S., "Magneto-Resistance Change of Ferromagnetics in Alternating Magnetic Field."
- Shirakawa, Y., "Longitudinal Magneto-Resistance Effect in Fe-Si Alloys."
- , "Longitudinal Magneto-Resistance Effects at Various Temperatures in Iron-Cobalt Alloys."
- , "Longitudinal Magnetoresistance Effect at Various Temperatures in Iron-Nickel Alloys."
- , "Longitudinal Magnetoresistance Effect at Various Temperatures in Nickel-Cobalt Alloys."
- Smit, J., "Magnetoresistance of Ferromagnetic Metals and Alloys at Low Temperatures."
- Tatsumoto, E., "Magnetoresistance Effect in the Magnetization Reversal of Permalloy Films."
- , "Ordinary Magnetoresistance Effect in Silicon Iron."
- Tunazima, N., "Galvanomagnetic Effects in Ferromagnetic Metals."
- Volger, J., "Further Experimental Investigations on Some Ferromagnetic Oxidic Compounds of Manganese With Perovskite Structure."
- Vonsovski, S. V., "On the Peculiarities of the Variation of the Electrical Resistance in a Magnetic Field for Some Ferromagnetic Alloys."
- West, F. G., "Magnetoresistive Measurements on Domain Rotation in Nickel-Iron Alloy Films."
- Zaleskii, A. V., "Anisotropy of the Magnetoresistance Effect in Magnetite Crystals."

Zavets, K., "On the Measurement of the Galvanomagnetic Properties of Ferrites."

## **METALS**

Abeles, B., "Galvanomagnetic Effects in Bismuth."

Akhieser, A., "Change of Resistance of Metals in a Magnetic Field."

Akulov, N., "Theory of Galvanomagnetic and Galvanoelastic Effects."

Alam, M. S., "Electrical Resistance of Cobalt in a Longitudinal Magnetic Field."

———, "Occurrence of Negative Minimum in Resistance Hysteresis Curves for Nickel in Longitudinal Magnetic Fields."

Alekseevskii, N. E., "Galvanomagnetic Properties of Single Crystals of Transition Metals."

———, "Effects of Small Amounts of Admixtures on Bismuth Galvanomagnetic Properties."

———, "The Anisotropy of Magnetoresistance and the Topology of the Fermi Surfaces of Metals."

———, "Galvanomagnetic Properties of Gold."

Alers, P. B., "Thermal Magnetoresistance of Zinc at Low Temperatures."

———, "The Anomalous Magnetoresistance of Bismuth at Low Temperatures."

———, "The Magnetoresistance of Bismuth Crystals at Low Temperatures."

Alocco, G., "Discontinuities in the Magnetic Resistance in Ferromagnetism."

Armstrong, J. E., "Magneto-Resistance of Liquid Sodium-Potassium Alloy."

Babiskin, J., "New Type of Oscillatory Magnetoresistance in Metals."

Banta, H. E., "Thermomagnetic and Galvanomagnetic Properties of a Bismuth Crystal."

Barron, T. H. K., "Problems of Currents in Magnetic Fields."

- Bellia, C., "Effect of Pressure on Galvanomagnetic Phenomena."**
- , "Galvanomagnetic Phenomena in Thin Metallic Pellicles."
- Bergeron, C. J., "Galvanomagnetic and Thermomagnetic Potentials in Zinc at Liquid Helium Temperatures."**
- Berlincourt, T. G., "Hall Effect, Magnetoresistance, and Size Effects in Copper."**
- , "Hall Effect, Resistivity, and Magnetoresistivity of Th, U, Zr, Ti, and Nb."
- , "Relation Between the DeHaas-Van Alphen Effect and the Magnetoresistance in Bismuth."
- , "Pulsed Magnetic Field Studies of the Negative Magnetoresistivities of Dilute Ti-Mn and Cu-Mn Alloys at Low Temperatures."
- Blom, J. W., "The Change of the Resistance of Single Crystals of Gallium in a Magnetic Field."**
- , "The Fourier Analysis of the Magnetic Increase of the Resistance of Gallium . . ."
- , "The Kohler Diagram for the Magnetic Increase of the Resistance of Gallium Single Crystals."
- Blunt, R. F., "The A. C. Magneto-Resistance of Bismuth."**
- Böhringer, E., "The Influence of Spontaneous, True and Ferromagnetic Magnetization on Electrical Resistance,"**
- Bordoloi, K., "Galvanomagnetic Effects in Sn at Low Temperature."**
- Borovik, E. S., "Change of the Electric Resistance of Metals in a Magnetic Field at Low Temperatures."**
- , "The Hall Effect and the Change in Resistance for Lead, Copper, and Magnesium in a Magnetic Field."
- , "Variation of the Electric Resistance of Tin and of Indium in the Magnetic Field."
- , "The Effect of Form on the Resistance of Single Crystals of Bismuth in a Magnetic Field."

- Borovik, E. S., "Effect of Shape on the Electrical Resistance of Single Crystals of Bismuth in a Magnetic Field."
- , "Galvanomagnetic Phenomena in Pt at Low Temperatures."
- , "Investigation of Galvanomagnetic Phenomena in Chromium at Low Temperatures."
- Butler, E. H., Jr., "Galvano- and Thermomagnetic Phenomena in Fe and Ni."
- Chambers, R. G., "The Conductivity of Thin Wires in a Magnetic Field."
- , "Magneto-Resistance Effects in the Group I Metals at High Fields."
- Chikvashvili, Ya. M., "Variation in the Resistivity of Bismuth in a Strong Magnetic Field."
- Clark, D. E., "Sensitive Method for Measurement of Magneto-Resistance Effect With Direct Currents and With Microwaves."
- Cochran, J. F., "Magnetoresistance Effects in Small Gallium Single Crystals."
- Coldwell-Horsfall, R. A., "Influence of Collective Effects on the Magnetoresistance of Metals."
- , "On the Magnetoresistance Effect in Metals."
- Colombani, A., "The Magnetoresistance of Thin Plates of Bismuth."
- , "Thermal Evolution of the Magnetoresistance of Thin Films of Bismuth."
- , "Measurement of Small Variations of Resistance . . ."
- , "Electric and Magnetic Properties of Thin Films of Antimony."
- Conn, G. K. T., "Anomalous Magnetoresistance Effects in Bismuth."
- Connell, R. A., "Hall Effect and Magnetoresistance of Bi Single Crystals at He Temperatures."
- Coren, R. L., "Magnetoresistance and Domain Structure in Thin Nickel Films."
- Cotti, P., "Measurement of Magnetoresistance of Rectangular Plates."

- , "Size Effects in High Magnetic Fields."
- , "Pulsed Field Magnetoresistance Measurements in Metals."
- Datars, W. R., "A New Effect in the Magnetoresistance of Antimony at 4.2°K."
- DeHaas, W. J., "Change of Resistance of Single Crystals of Gallium in a Magnetic Field."
- , "Influence of Magnetic Field and Temperature on Resistance of Gallium Single Crystals."
- , "Variation of Resistance of Bi Crystals in Magnetic Fields at Low Temperatures."
- , "Change of Resistance of Metals in a Magnetic Field at Low Temperatures."
- , "Electrical Resistance at Low Temperatures and Effect of Magnetic Field."
- DeLaunay, J., "Magnetoresistance of Copper."
- DeMandrot, R., "Magnetoresistance of Cobalt and Temperature."
- DeNobel, J., "Thermal and Electrical Resistance of a Tungsten Single Crystal at Low Temperatures and in High Magnetic Fields."
- Dolecek, R. L., "Effect of Oxygen on the Magnetoresistance of Copper."
- Donovan, B., "The Magneto-Resistance Effect in Metals at High Frequencies."
- , "The Electrical Conductivity of Bismuth Fibers, II."
- Döring, W., "Dependence of Resistance of Nickel Crystals on Direction of Magnetisation."
- Drigo, A., "Resistance of Nickel in Transverse Magnetic Fields at Various Temperatures."
- Eastman, P. C., "Thermal Origin of Nonohmic Magnetoresistance Effects in Semimetals."
- Epstein, S., "Galvanomagnetic Effects and Band Structure of Pure and Tin-Doped Single-Crystal Antimony."

- Erfling, H. D., "Further Investigations With Be Crystals in the Transverse and Longitudinal Magnetic Field."**
- Esaki, L., "New Effect in Magnetoresistance of Bismuth at Low Temperatures."**
- , "New Phenomenon in Magnetoresistance of Bismuth at Low Temperature."
- Fakidov, I. G., "The Physical Properties of the Chromium-Germanium Alloys."**
- , "The Galvanomagnetic Properties of the Phosphides of Manganese."
- Fawcett, E., "Magnetoresistance of Molybdenum and Tungsten."**
- , "Magnetoresistance of Transition Metals in the High-Field Limit."
- Foroud, A., "Influence of Strong Magnetic Fields on Resistance of Mo Single Crystals."**
- , "Magneto-Resistance of In."
- Frank, N. H., "Change of Metallic (Electrical) Resistance in Intense Magnetic Fields."**
- , "Theory of Change of Metallic Resistance in a Magnetic Field."
- Franken, B., "Influence of a Magnetic Field on the Electrical Resistance of Iron Films."**
- Frenkel, J., "Galvanomagnetic Phenomena in Crystals."**
- García-Moliner, F., "Magnetoresistance and Fermi Surface of Alkali Metals."**
- Gerritsen, A. N., "Low Temperature Resistance and Magnetoresistance of Dilute Alloys of Gold With Cobalt."**
- , "The Magnetoresistances of Alloys of a Noble Metal and a Transition Metal at Low Temperatures."
- , "The Electrical Resistance of Silver-Manganese Alloys at Low Temperatures, II."
- Gitsu, D. V., "Electrical Properties of Monocrystals of Bismuth and Its Alloys."**

- Gondo, Y., "On the Temperature Dependence of Magnetoresistance Effect of Iron Single Crystal."
- Gordon, R. B., "Magnetoresistance of the Alloy  $\text{Cu}_3\text{Au}$ ."
- Goureaux, G., "Magnetoresistance of Thin Films of Nickel: Longitudinal Effect."
- , "Magnetoresistance of Thin Nickel Films: Consequences."
- , "Magnetoresistance of Thin Films of Nickel: Perpendicular Effect."
- Green, M., "Magnetoresistance in Thin Films of Bismuth and Antimony."
- Gross, F., "Change of Resistance of Thin Sheets of Bismuth in the Magnetic Field."
- Grum-Grzhimailo, N. V., "Electrical Resistance of Iron, Copper and Nickel Alloys in a Longitudinal Magnetic Field."
- Grüneisen, E., "Effect of Transverse Magnetic Field on Thermal Resistance of Pure Metals."
- , "Influence of Transverse Magnetic Fields on Electrical and Thermal Conductivity of Pure Metals at Low Temperatures."
- , "Electric and Thermal Resistance of Be Crystals in Transverse Magnetic Fields."
- , "Thermal and Electrical Conduction of Bismuth Crystals in Transverse Magnetic Fields."
- , "Electrical and Thermal Conduction of Single Crystals of Bismuth in Transverse Magnetic Fields."
- Gugan, D., "The Magnetoresistance of Lithium."
- Gupta, M. M. S., "Physical Significance of Apparent Irregularities in the Magneto-Resistance Curves of Nickel."
- , "A. C. Resistance of Nickel in a Longitudinal Magnetic Field."
- Hake, R. R., "Low-Temperature Resistivity Minima and Negative Magnetoresistivities in Some Dilute Superconducting Ti Alloys."
- Halpern, L., "The Corbino Effect and Magnetoresistance in Bismuth."

- Heaps, C. W., "Discontinuities of Resistance Associated With the Barkhausen Effect."
- , "Magnetoresistance of Bismuth at 3000 Megacycles."
- , "The Magnetoresistance of Nickel in Large Fields."
- Hellenthal, W., "The Dependence of Magnetoresistance Changes in Evaporated Nickel Films on Thickness and Structure."
- , "The Determination of the Curie Temperature of Thin Films by Means of the Magnetoresistance Effect."
- , "On the Frequency Dependence of the Coercivity of Thin Evaporated Nickel Films. . . ."
- Herring, C., "Effect of Random Inhomogeneities on Electrical and Galvanomagnetic Measurements."
- Hopfield, J. J., "Classical Explanation of the Anomalous Magnetoresistance of Bismuth."
- Huet, P., "Magnetoresistance in Thin Films of Bismuth."
- Jaffe, H., "Electrical Conductivity and Galvanomagnetic Effect in a Metallic Compound of Li and  $\text{NH}_3$ ."
- Jones, H., "Galvanomagnetic Effects in Bismuth."
- , "Theory of Change of Resistance in a Magnetic Field."
- Jongenburger, P., "The Influence of Plastic Deformation on the Transverse Magnetoresistance of Polycrystalline Copper, Silver and Gold."
- Juretschke, H. J., "Galvanomagnetic and Magnetic Properties of Thin Nickel-Iron Films."
- Justi, E., "Electrical Resistance, Magnetic Variation of Resistance and Hall Effect of Alkali Metals."
- , "Electrical Resistance of Polycrystalline Au, Pb, Nb, and Ta Under Strong Magnetic Crossfields at Low Temperatures."
- , "Resistance Increase in Magnetic Fields and Conduction Types of the Metals."
- , "Anisotropy of Electrical Resistance of Na in Magnetic Field."

———, "Change of Resistance of Aluminum Single Crystals in Strong Magnetic Fields at Low Temperatures."

Kaganov, M. I., "Galvanomagnetic Effects in Metals With Nearly Equal Numbers of Electrons and Holes."

Kapitsa, P., "Change of Resistance in Strong Magnetic Fields."

———, "Change of Resistance of Gold Crystals at Very Low Temperatures in a Magnetic Field and Superconductivity."

Kaye, G. W. C., "Thermal and Electrical Resistance of Bismuth Single Crystals . . ."

Klauder, J. R., "Higher Order Open Orbits and the Interpretation of Magnetoresistance and Hall Effect Data for Copper."

Knook, B., "The Electrical Resistance and the Magnetoresistance of Dilute Alloys of Gold With Rhodium, Palladium and Molybdenum and of Silver With Palladium at Low Temperatures."

Kobayashi, K., "Hall Effect for Electrons in Silver Chloride."

Koch, K. M., "The Corbino Effect and the Change of Resistance in a Magnetic Field."

Koenigsberg, E., "Conductivity of Thin Films in a Longitudinal Magnetic Field."

Kohler, M., "Change of Electrical Resistance of Different Conductors in a Magnetic Field."

———, "Influence of Magnetic Fields on Electrical Resistance of Pure Metals."

———, "Magnetic Resistance Change and Conductivity Types, I and II."

———, "Resistance Changes in Crystalline Media in Magnetic Fields."

———, "Resistivity Changes of Bivalent Metals, Having Body-Centered Cubic Structure. . . ."

———, "Theory of Magnetic Resistance Effects in Metals."

Komar, A., "Electric Resistance of the  $\text{Cu}_3\text{Pd}$  Alloy in a Transverse Magnetic Field and the Long-Range Order of Atoms."

- Kondo, K., "On the Properties of a Ferromagnetic Alloy of Manganese and Bismuth at Low Temperatures, II."
- Koretz, M., "Change of the Resistance of Alkali Metals in a Magnetic Field."
- Kuwahara, I. K., "Longitudinal Magneto-Resistance Effect of Narrow Single Crystal Strips of Iron."
- Kuwahara, K., "Magnetoresistance Effect in Aluminum-Iron."
- Lasarew, B. G., "Change of Resistance of Zn Single Crystals in a Magnetic Field."
- Lautz, G., "Low Temperature Measurements of the Magnetoresistance and the Reduced Kohler Diagram of Rhenium Wires."
- , "Experimental Investigation of the Magnetoresistance Effect in Corbino Discs of Copper and Gold at Low Temperatures."
- Lerner, L. S., "Shubnikov-DeHaas Effect in Bismuth."
- Lifshits, I. M., "Quantum Theory of Electrical Conductivity of Metals in a Magnetic Field."
- , "On the Theory of Galvanomagnetic Phenomena in Metals."
- Logan, J. K., "Low-Temperature Magnetoresistance of Gold in Fields up to 50 Kilogausses."
- Luthi, B., "Longitudinal Magnetoresistance of Metals in High Fields."
- , "Magnetoresistance of Metals in High Magnetic Fields."
- , "Variation of the Resistance of Metals in High Magnetic Fields."
- , "A New Effect in the Magnetoresistance of Aluminium."
- MacAlpine, W. W., "Resistance of Bismuth in Alternating Magnetic Fields."
- MacDonald, D. K. C., "Influence of a Magnetic Field on the Size Variation of Electrical Conductivity."
- , "Magneto-Resistance in Metals."
- , "The Magneto-Resistance of the Alkali Metals."
- , "Properties of Metals at Low Temperatures."

——, "Galvanomagnetic Effects in Conductors."

MacDonald, J. R., "A. C. Hall and Magnetoresistive Effects in Photoconducting Alkali Halides."

McKeehan, L. W., "Electrical Resistance of Nickel and Permalloy Wires as Affected by Longitudinal Magnetisation and Tension."

Mackintosh, A. R., "Magnetoresistance and Fermi Surface Topology of Thallium."

Marcus, J. A., "Oscillatory Hall Effect and Magnetoresistance of Bismuth."

Masumoto, H., "Longitudinal Magneto-Resistance Effect in Nickel-Copper Alloys."

Matuyama, Y., "Magneto-Resistance of Bismuth, Nickel, Iron, Cobalt and Heusler Alloy."

Meissner, W., "Electrical Resistance of Gold in Magnetic Fields at Low Temperatures."

——, "Measurements With the Aid of Liquid Helium, IV."

Meixner, J., "Effect of Reversal of Magnetic Field on Galvanomagnetic and Thermomagnetic Effects."

Milner, C. J., "Magneto-Resistance Effect in Cadmium at Low Temperatures."

——, "Magneto-Resistance Effect in Single Crystals of Cadmium."

Miyake, S. J., "Nonlinear Magnetoresistance in Bismuth."

Moore, E. J., "An Analogy Between the Effects of Fluctuating Electric Fields and Steady Magnetic Fields in Isotropic Conductors When a Universal Relaxation Time Cannot Be Defined."

Müller, J., "Change of Resistance of Nickel, Iron and Bismuth in L. F. A. C. Fields."

Muto, Y., "Magnetoresistances of Dilute Alloys of Manganese in Copper, Manganese in Zinc, and Chromium in Zinc at Liquid Helium Temperatures."

Nachimovich, N. M., "The Anomalous Dependence of the Resistance of Zinc on a Magnetic Field."

- Nakhimovich, N. M., "Dependence of the Electrical Resistance of Gold and Several of Its Alloys on a Magnetic Field at Low Temperatures."**
- Nanney, C., "An Explanation for the 'New Effect in the Magnetoresistance of Antimony.'"**
- Nedoluha, A., "The Mechanism of Resistance Changes in a Magnetic Field."**
- Ohara, T., "Longitudinal Magnetoresistance Effect of Single-Crystals of Biogen-Iron at Low Temperatures."**
- Olsen, J. L., "Magnetoresistance and Size-Effects in Indium."**
- , "Magnetoresistance and Size Effects in Indium at Low Temperatures."
- , "Magnetoresistance of Copper to 150000 Oersted at 4.2°K."
- Olson, R., "Magnetoresistance of Single Crystals of Copper."**
- Pačes, J., "Magneto-Resistance Effect in the Region of the Curie Point."**
- Parker, R., "An Analysis of the Magnetization Processes in Iron Single Crystals by an Electrical Method."**
- Perrier, A., "Magnetoresistance and Directional Relations of Spontaneous Magnetization."**
- , "New Theoretical Magnitudes and Formulae for Galvanomagnetic and Thermomagnetic Phenomena."
- , "Theory to the Second Approximation of the Magnetoresistance of Microcrystalline Cobalt."
- Potter, H. H., "Change of Resistance of Nickel in a Magnetic Field."**
- , "Magneto-Resistance and Magneto-Caloric Effects in Iron and Heusler Alloys."
- Priestley, M. G., "Magnetoresistance of Copper, Silver and Gold."**
- Rappeneau, T., "Effect of a Magnetic Field on the Electrical Resistance of Thin Films of Nickel."**
- , "Study of the Magnetoresistance of Thin Evaporated Nickel Films."

- Rausch, K., "Investigations on Antimony Single Crystals in a Transverse Magnetic Field . . ."
- Reed, W. A., "Topology of the Fermi Surface of Gallium."
- Richtmyer, F. K., "Magnetoresistance Effects in Films of Bismuth."
- Rodine, M. T., "Thermal and Electrical Conductivities of Bismuth Single Crystals in a Magnetic Field."
- Rumer, Y. B., "On the Theory of Electric Conduction of Metals in a Magnetic Field."
- Sarginson, K., "Influence of a Magnetic Field on the Size Variation of Electrical Conductivity."
- Schmitt, R. W., "Magnetization and Magnetoresistance of Some Dilute Alloys of Mn in Cu."
- Schubnikow, L., "Increase of Electrical Resistance of Bismuth Monocrystals Due to Magnetic Fields at Low Temperatures."
- , "Resistance Changes of Bismuth Crystals in a Magnetic Field at the Temperature of Liquid Hydrogen."
- Schuler, C., "Magnetoresistance in Thin Evaporated Gadolinium Films."
- Sekoyan, S. S., "The Effect of Pressure on Magnetoelectric Properties of Bismuth."
- Shibuya, Y., "Some Physical Properties of Alloys of 0.007 ~ 5.4% Mn in Cu."
- Shoenberg, D., "Hall and Magneto-Resistance Effects."
- Sidorov, S. K., "Galvano-Magnetic Properties of Some Ordered Alloys."
- Smith, J. H., "Resistivity and Magnetoresistance of  $Au_2Mn$ ."
- Sommerfeld, A., "Longitudinal Resistance Change in Magnetic Field."
- Sondheimer, E. H., "Influence of a Magnetic Field on the Conductivity of Thin Metallic Films."
- , "The Influence of a Transverse Magnetic Field on the Conductivity of Thin Metallic Films."
- , "The Theory of the Magneto-Resistance Effects in Metals."

- Stark, R. W., "Oscillatory Magnetic Breakdown in Zinc."**
- , "Magnetoresistance Investigation of the Fermi Surface of Magnesium."
- , "Magnetoresistance and Hall Effect in Single Crystals of Aluminum."
- Steele, M. C., "Anomalous Longitudinal Magnetoresistance of Metal Single Crystals."**
- , "Hall Effect and Magnetoresistance Oscillations of Antimony Single Crystals in Magnetic Fields at Liquid Helium Temperatures."
- , "Oscillatory Galvanomagnetic Properties of Antimony Single Crystals at Liquid-Helium Temperatures."
- , "Oscillatory Thermomagnetic Properties of a Bismuth Single Crystal at Liquid Helium Temperatures."
- Steinberg, D. S., "Effect of Direction of Spontaneous Magnetisation on Resistance."**
- Stevenson, R., "Transverse Magnetoresistance of High-Strength Copper Alloys."**
- Stierstadt, O., "Change of Conductivity of Ferromagnetics in Magnetic Fields."**
- , "Change of Resistance of Bi Single Crystals in Magnetic Fields (New Phenomena)."
- , "Change of Resistance of Pure Electrolytic Iron in Transverse Magnetic Fields."
- , "Change of Resistance of Very Pure Electrolytic Iron in Longitudinal Magnetic Fields."
- , "Electrical Conductivity of Ferromagnetic Materials in Longitudinal Magnetic Fields."
- , "Electrical Resistance of Nickel and Iron Wires in Longitudinal Magnetic Fields."
- , "Resistance Variation of Bismuth Crystals in a Magnetic Field, I."
- Stout, J. W., "Effect of Magnetic Field Upon Electrical Resistance of Gold and Silver Between 1 and 20°K."**

- Symonds, J. L., "Methods of Measuring Strong Magnetic Fields."
- Talalaeva, E. V., "The Temperature Dependence of Magnetoresistance of Manganese Ferrites."
- Tanabe, Y., "The Change of Conductivity of Metals in Strong Magnetic Fields."
- , "The Change of the Electric Resistance of Bismuth Crystals in Strong Magnetic Fields, I-IV."
- Tanuma, S., "Magnetoresistance of Bismuth Metal and Bismuth-Antimony Alloy Single Crystals."
- Tatsumoto, E., "Magnetoresistance Coefficients and Their Temperature Dependence in Iron and Silicon-Steel."
- Thompson, N., "Galvanomagnetic Effects in Bi Alloys."
- Tippins, H. H., "Magnetoresistance of Silver Bromide."
- Titeica, S., "Variation of Resistance of Metals in a Magnetic Field."
- Van Bueren, H. G., "Influence of Lattice Defects on the Electrical Properties of Cold-Worked Metals."
- Van Elst, H. C., "The Anisotropy in the Magneto-Resistance of Some Nickel Alloys."
- , "Magnetoresistance of Some Nickel Alloys."
- , "Ferromagnetic Anisotropy of the Specific Resistance of Some Nickel Alloys."
- Van Itterbeek, A., "Measurements on the Electrical Resistivity of Thin Nickel Films at Very Low Temperatures."
- , "Measurements of the Electrical Resistance of Films of Bismuth Under the Action of a Magnetic Field at Low Temperatures."
- , "Electric Resistance of Ag Films in a Magnetic Field at Low Temperatures."
- Volger, J., "Solid-State Research at Low Temperatures, II."
- Waller, I., "On the Conductivity of a Metal in a Magnetic Field."
- Webber, R. T., "Resistance Minimum in Magnesium: Magnetoresistance."

White, G. K., "Electrical and Thermal Magneto-Resistance in Thin Rods of Pure Sodium."

Wiener, B., "The Variation of Magnetoresistivity and Resistivity of AuCu During Annealing From the Cold-Worked and Thermally Disordered States."

———, "Specification of Thermally and Mechanically Induced Nonequilibrium States in AuCu by the Resistivity and Magnetoresistivity."

———, "Variation of Magnetoresistivity of AuCu With Degree of Order."

Williams, S. R., "Changes in Resistance of Nickel Due to Magnetism and Hardness."

Ynetma, G. B., "Magnetoresistance of Mg, Cu, Sb, and Al at Liquid-Helium Temperatures."

Yosida, K., "Anomalous Electrical Resistivity and Magnetoresistance Due to an s-d Interaction in Cu-Mn."

Zil'berman, G. E., "Thermal and Galvanometric Effects in Strong Fields at Low Temperatures."

Ziman, J. M., "Galvanomagnetic Properties of Cylindrical Fermi Surfaces."

Zotov, T. D., "Change of the Electric Resistance in a Magnetic Field in Single Crystals of Transformer Steel."

## SEMICONDUCTORS

Abeles, B., "Theory of the Galvanomagnetic Effects in Germanium."

Adams, E. N., "Galvanomagnetic Phenomena in Very Strong Magnetic Fields."

Adrianov, D. G., "Magnetoresistance of Degenerate n-Type Germanium and Silicon."

Aerts, E., "Field Effect Measurements in a Transverse Magnetic Field."

Agarwal, D. B., "Magnetoresistance in Nondegenerate Semiconductors Considering Electron-Electron Scattering."

Albers, W. A., Jr., "Effective Mobilities of Surface Carriers in Germanium."

———, "Observations of Surface Transverse Magnetoresistance Effects on n-Type Germanium."

- Alekseevskii, N. E., "Investigation of the Effect of Pressure on the Galvanomagnetic Properties of Tellurium at Low Temperatures."
- Alers, P. B., "De Haas-Van Alphen Oscillations in the Thermal and Electrical Magnetoresistance of Tin."
- Allgaier, R. S., "Galvanomagnetic Effects and Band Structure in PbS, PbSe and PbTe."
- , "Magnetoresistance in PbS, PbSe, and PbTe at 295°, 77.4°, and 4.2°K."
- , "Weak-Field Magnetoresistance in p-Type Lead Telluride at Room Temperature and 77°K."
- Amirkhanov, Kh. I., "Galvanomagnetic Effects in n-Type InSb in Magnetic Pulsed Fields."
- , "Quantum Galvanomagnetic Effects in n-InAs."
- , "Quantum Oscillations of the Magnetoresistance of n-Type InSb in Strong Pulsed Magnetic Fields."
- Andrianov, D. G., "Magnetoresistance of Degenerate n-Type Germanium and Silicon."
- Andronik, I. K., "Anisotropy of Electrical Properties of Cadmium Antimonide Monocrystals."
- Annaev, R. G., "Anisotropy of the Galvanomagnetic Effect in a Crystal of n-Type Germanium at Temperatures of the Transitional Region of Conductivity."
- Appel, J., "Influence of the Orbital Quantization in a Magnetic Field on the Longitudinal Resistance-Variation of Covalent Semiconductors."
- , "The Transverse Galvanomagnetic Effects in Semiconductors."
- Argyres, P. N., "Longitudinal Magnetoresistance in the Quantum Limit."
- Auwers, O. v., "Magnetic Change of Resistance and Hall Effect in Cuprous Oxide With and Without External Illumination."
- Barrie, R., "Magnetoresistance in Strong Magnetic Fields."
- , "Negative and Oscillatory Longitudinal Magnetoresistance."

- Bass, F. G., "The Theory of Isothermal Galvano- and Thermo-Magnetic Phenomena in Semiconductors."
- Bate, R. T., "Galvanomagnetic Effects in Semiconductors Containing Impurity Gradients."
- , "Influence of Conductivity Gradients on Galvanomagnetic Effects in Semiconductors."
- , "Influence on Magnetoconductivity Discontinuities on Galvanomagnetic Effects in Indium Antimonide."
- , "Hall Coefficient and Magnetoresistance in Semiconducting Diamond."
- , "Transverse Magnetoresistance and Hall Effect in n-Type Indium Antimonide."
- Bates, L. F., "Resistance of Manganese Arsenide."
- Becker, W. M., "Energy Band Structure of Gallium Antimonide."
- Beer, A. C., "Galvanomagnetic Effects in III-V Compound Semiconductors."
- , "Final Report on Investigation of the Effects of the Valency Band Degeneracy on the Conduction Processes in Germanium."
- , "Evaluation of Transport Integrals for Mixed Scattering and Application to Galvanomagnetic Effect."
- , "Hall and Transverse Magnetoresistance Effects for Warped Bands and Mixed Scattering."
- Bellia, C., "Effect of Pressure on Galvanomagnetic Phenomena."
- , "Galvanomagnetic Phenomena in Thin Metallic Pellicles."
- Bemski, G., "Observations of Oscillatory Magnetoresistance in InAs at Microwave Frequencies."
- Benedek, G. B., "Conductivity, Hall Effect, and Magnetoresistance in n-Type Germanium, . . ."
- Berlincourt, T. G., "Further Correlation Between Magnetoresistance Variations and the De Haas-Van Alphen Effect."

- , "Oscillatory Hall Effect, Magnetoresistance, and Magnetic Susceptibility of a Graphite Single Crystal."
- Black, J., "Some Semiconducting Properties of HgTe."
- Bothorel, P., "Apparatus for the Measurement of the Hall Effect in Powdered Solids."
- Bray, R., "Optical and Magnetic Surface Studies on Germanium."
- Breckenridge, R. G., "Magnetoresistance and Hall Effect Studies in Graphite."
- Broom, R. F., "Magnetoresistance of n-Type InSb at 4.2° K."
- , "A Source of Error in Magnetoresistance Measurements."
- , "Magnetoresistance Effects in Gallium Arsenide."
- Broudy, R. M., "D.C. Magnetoconductivity and Energy Band Structure in Semiconductors."
- Bullis, W. M., "Galvanomagnetic Effects in Oriented Single Crystals of n-Type Germanium."
- Busch, G., "Mechanism of Electric Conduction of Gray Tin."
- , "Electrical Properties of Grey Tin."
- , "Electronic Properties of Gray Tin."
- , "Semiconducting Properties of Grey Tin."
- Champness, C. H., "High-Field Magnetoresistance Measurements at Room Temperature in Indium Antimonide."
- , "High Pulsed Field Magnetoresistance in Indium Antimonide and Indium Arsenide."
- , "Interpretation of the Transverse Magnetoresistance in p-Type Indium Antimonide at Liquid Nitrogen Temperature."
- , "Magnetoresistance and Hall Effect in Oriented Single Crystal Samples of n-Type Indium Antimonide."
- , "Magnetoresistance Effect in Indium Antimonide."
- , "The Transverse Magnetoresistance Effect in Indium Antimonide."

- Champness, C. H., "The Transverse Magnetoresistance Effect in Indium Arsenide."
- Chentsov, R. A., "Change of the Electric Resistance of Tellurium in a Magnetic Field at Low Temperatures."
- Chih-ch'ao, Lien, "Electrical and Galvanomagnetic Properties of n-Type InSb at Low Temperatures."
- Chih-ch'ao, L., "Influence of the Electric Field on the Electrical Conductivity, Hall Coefficient, and Magnetoresistance of n-Type InSb at Low Temperatures."
- Coover, R. E., "Surface Magnetoconductivity Experiments on Silicon."
- Csavinsky, P., "Low-Temperature Impurity Conduction and Magnetoresistivity in n-Type Germanium."
- Cuff, K. F., "Oscillatory Magnetoresistance in the Conduction Band of PbTe."
- Davis, R. E., "Magnetoresistance and Planar Hall Effects in n-Type Germanium."
- Diesel, T. J., "High-Field Transverse Magnetoresistance of n-Type Germanium."
- , "Transverse Magnetoresistance of Germanium in Quantum Limit."
- Drabble, J. R., "Galvanomagnetic Effects in p-Type Bismuth Telluride."
- , "Galvanomagnetic Effects in n-Type Bismuth Telluride."
- , "Anisotropic Galvanomagnetic Effects in Semiconductors."
- Dunlap, W. C., Jr., "Hall Effect and Magnetoresistance in Germanium."
- Dykman, I. M., "Magnetoresistance and the Hall Effect in Semiconductors With Hot Electrons and in Plasma."
- Eatherly, W. P., "Precision Measurement of the Hall and Magnetoresistivity Coefficients With Some Results for Graphite."
- Edmond, J. T., "The Properties of Gallium Arsenide."
- Emel'yanenko, O. V., "The Electrical Properties of GaAs at Low Temperatures."

- Estermann, I., "Magnetoresistance of Germanium Samples Between 20° and 300° K."**
- Ewald, A. W., "Measurements of Electrical Conductivity and Magnetoresistance of Gray Tin Filaments."**
- , "Growth and Properties of Gray Tin Single Crystals."
- Fakidov, I. G., "Oscillation of the Electric Resistance of n-Type Germanium in Strong Magnetic Fields."**
- Fischer, G., "Hall Effect and Magneto-Resistance in Indium Antimonide."**
- , "Magnetoresistance and Field Dependence of the Hall Effect in Indium Antimonide."
- Frederikse, H. P. R., "Galvanomagnetic Effects in n-Type Indium Antimonide."**
- , "Galvanomagnetic Effects in n-Type InSb at 4.2°K."
- , "Galvanomagnetic Effects in p-Type Indium Antimonide."
- , "Magnetoresistive Effects in Indium Antimonide and Indium Arsenide."
- , "Electrical Conduction in Magnesium Stanide at Low Temperatures."
- Fritzsche, H., "Electrical Properties of p-Type Indium-Antimonide at Low Temperatures."**
- Fukuroi, T., "Electrical Properties of Tellurium Crystals at Very Low Temperatures."**
- , "Electric Resistance, Hall Effect, Magnetoresistance, and Seebeck Effect in a Pure Tellurium Film."
- , "The Electromagnetic Properties of Single Crystals of Tellurium, I."
- , "Electrical Properties of p-Type Indium Antimonide."
- Furth, H. P., "High-Field Longitudinal Magnetoresistance of Germanium."**
- Furukawa, Y., "Magnetoresistance in Heavily Doped n-Type Germanium."**
- , "Magnetoresistance of Heavily Doped Germanium at Low Temperatures."
- Gitterman, M.Sh., "Impurity Band Conduction in n-Type GaAs."**

- Glauber, A. E., "The Theory of Semiconductor Resistance in Strong Magnetic Fields."
- Glicksman, M., "Effect of Impurity Scattering on the Magnetoresistance of n-Type Germanium."
- , "Galvanomagnetic Effects in a Semiconductor With Two Sets of Spheroidal Energy Surfaces."
- , "The Magnetoresistance of Electrons in InP and GaAs."
- , "Magnetoresistance of Germanium-Silicon Alloys."
- , "The Magnetoresistivity of Germanium and Silicon."
- , "High Electric Field Effects in n-Indium Antimonide."
- Gold, L., "Galvanomagnetic Theory for Electrons in Germanium and Silicon: Magnetoresistance in the High-Field Saturation Limit."
- , "Galvanomagnetic Theory for n-Type Germanium and Silicon: Hall Theory and General Behavior of Magnetoresistance."
- Goldberg, C., "Relaxation Time Anisotropy in n-Type Germanium."
- , "Magnetoconductivity in p-Type Germanium."
- , "New Galvanomagnetic Effect."
- , "Weak Field Magnetoresistance of n-Type Germanium."
- , "Magnetoresistance Symmetry Relation in n-Germanium."
- Gray, V., "Tables of the Conductivity Coefficients in Transverse Magnetic Fields  $K(\gamma)$  and  $L(\gamma)$ ."
- Green, M., "Corbino Disk Magnetoresistivity Measurements on InSb."
- , "Electrode Geometries for Which the Transverse Magnetoresistance Is Equivalent to That of a Corbino Disk."
- Grinberg, A. A., "Application of the Longitudinal and Transverse Magneto-Concentration Effects . . . in Anisotropic Crystals of Cubic Symmetry."
- Gupta, M. S., "Theory of Semiconductors in Magnetic Fields."
- Gurevich, V. L., "New Type of Magnetoresistivity Oscillations in Semiconductors and Semimetals."

- Hambleton, G. E., "Microwave Hall Effect in Germanium and Silicon at 20 kMc."
- Harding, J. W., "Change of Resistance of a Semi-Conductor in a Magnetic Field."
- Harman, T. C., "Angular Dependence of Magnetoresistance in HgSe."
- , "Analysis of Magnetoresistance and Hall Coefficient in p-Type Indium-Antimonide and p-Type Germanium."
- Hasiguti, R. R., "Magneto-Resistance of  $\gamma$ -Irradiated n-Type Silicon."
- Hatton, J., "The Electrical Properties of Indium Antimonide at Low Temperatures."
- Herring, C., "Effect of Random Inhomogeneities on Electrical and Galvanomagnetic Measurements."
- , "Transport Properties of a Many-Valley Semiconductor."
- Hilsum, C., "Galvanomagnetic Effects and Their Application."
- , "Properties of p-Type Indium Antimonide. I. Electrical Properties."
- Holser, W. R., "Galvanomagnetic Effects in InSb."
- Irie, T., "Magnetoresistance Effect of Lead Sulfide Group of Semiconductors, I."
- Johnson, V. A., "Theory of the Magnetoresistive Effect in Semiconductors."
- Jonker, G. H., "Semiconductors Having a Positive Temperature Coefficient and a Negative Coefficient in Magnetic Fields."
- Justi, E., "The Impurity and Intrinsic Semiconduction of Intermetallic Compounds, II."
- , "The Problem of Magnetic Resistance Changes in Solid Rectifiers."
- Kanai, Y., "On the Galvanomagnetic Effects in n-Type Indium Antimonide."
- , "Oscillatory Magnetoresistance in n-Type PbTe."
- , "Galvanomagnetic Effects in n-Type Indium Antimonide at Very Low Temperatures."
- , "Oscillatory Galvanomagnetic Effects in n-Type Indium Antimonide."

- Karasik, V. R., "Investigation of the Hall Effect and Transverse Magnetoresistance in Germanium in Fields up to 400 kOe."
- Kemney, P. I., "The Magnetoresistance of p-Type Semiconducting Diamond."
- Keyes, R. W., "Elastoresistance and Magnetoresistance in Multivalley Semiconductors With an Axis of Symmetry."
- , "Isotropic Approximation to the Magnetoresistance of a Multivalley Semiconductor."
- King, R. E. I., "Properties and Applications of Indium Antimonide."
- Klinger, M. I., "Remarks on the Low-Temperature Anomalies in the Impurity Semiconductors, I-II."
- , "Galvanomagnetic Effects in n-Type Germanium and Silicon Single Crystals for Strong Magnetic Fields."
- , "Magnetoresistive Effects in n-Ge Type Semiconductors Located in Strong Magnetic Fields."
- Kohnke, E. E., "Electrical Conductivity, Magnetoresistance, and Hall Effect in Gray Tin Filaments."
- Koike, R., "Microwave Measurements on the Magnetoresistance Effect in Semiconductors."
- Komastubara, K., "The Effect of Magnetic Field on the Low-Temperature Breakdown in Highly Compensated Germanium."
- Kuglin, C. D., "Oscillatory Magnetoresistance in n-Type PbTe."
- Laff, R. A., "Magnetoresistance in n-Type Germanium at Low Temperatures."
- Landwehr, G., "Galvanomagnetic Properties of Grain Boundaries in Germanium Bicrystals from 1.25 to 240°K."
- Larrabee, R. D., "Majority Carrier Magnetosurface Effect."
- Launay, J., "Hall Effect and Magnetoresistance of Thin Films of Indium Antimonide."
- Lauts, G., "On the Magnetoresistance of Ge Single Crystals Between 10° and 300°K."
- Lewis, B. F., "The Theory of the Magnetoresistance Effects in Polar Semiconductors."

- Lippmann, H. J., "The Effect of Geometry on Hall Magnetoresistive Effects in Rectangular Semiconductor Specimens."
- , "The Geometrical Effect on the Transverse Magnetoresistance of Rectangular Disks of Semiconductor."
- Long, D., "Galvanomagnetic Effects in p-Type Silicon."
- , "Scattering Anisotropies in n-Type Silicon."
- , "Impurity Compensation and Magnetoresistance in p-Type Silicon."
- , "Weak-Field Magnetoresistance in p-Type Silicon."
- Lorinczy, A., "On the Magnetoresistance of Germanium."
- Love, W. F., "Galvanomagnetic Properties of n-Type Indium Antimonide in Pulsed Magnetic Fields at Low Temperatures."
- , "Longitudinal Magnetoresistance in n-Type Germanium: Experimental."
- Lyashenko, V. I., "Combined Investigation of the Surface Properties of Germanium, I."
- , "Conductivity of a Ge Surface."
- Mac Donald, D. K. C., "Galvanomagnetic Effects in Conductors."
- Mackintosh, I. M., "Low Temperature Magnetoresistance Anomalies in Indium Antimonide."
- Madelung, O., "The Galvanomagnetic Effects in Semiconductors."
- Mansfield, R., "The Magneto-Resistance Effect in Indium Antimonide."
- Masumi, T., "Relaxation Time Anisotropy in Cadmium Sulphide Studied With Electrical Resistivity and Magnetoresistance Effect."
- Matyas, M., "Magnetoresistance Measurements on p-Type GaSb."
- Mavroides, J. G., "Magnetoresistance of Holes in Germanium and Silicon With Warped Energy Surfaces."
- Meiboom, S., "Theory of the Galvanomagnetic Effects in n-Germanium."
- Mikoshiba, N., "Strong-Field Magnetoresistance of Impurity Conduction in n-Type Germanium."

- Mikoshiba, N., "Weak-Field Magnetoresistance of Hopping Conduction in Simple Semiconductors."
- , "Weak-Field Magnetoresistance of Impurity Conduction in n-Type Germanium."
- Miller, S. C., "Longitudinal Magnetoresistance in n-Type Germanium: Theoretical."
- Mirzabaev, M., "Negative Magnetoresistance in Germanium, Strongly Doped With Antimony."
- Mitchell, E. W. J., "The Conductivity and Luminescence of Diamonds— a Review of Work at Reading."
- , "Magnetoresistance of a p-Type Semiconducting Diamond."
- Mrozowski, S., "Hall Effect and Magnetoresistivity in Carbons."
- , "Hall Effect and Magnetoresistivity in Carbons and Polycrystalline Graphites."
- Musychuk, O. M., "Change of Resistance in Polar-Model Semiconductors in a Magnetic Field."
- Nag, B. R., "Hall Mobility and Magnetoresistance of Semiconductors Due to Hot Carriers in High Magnetic Fields."
- Nasledov, D. N., "Electrical Properties of Certain A<sup>III</sup>B<sup>V</sup> Compounds."
- , "Electrical Characteristics of InAs."
- , "Electrical Characteristics of InSb."
- Okada, T., "The Phenomenological Theory of the Galvanomagnetic Effect."
- Owens, G. E., "Thermomagnetic and Galvanomagnetic Properties of Semiconductors and Semimetals."
- Pacault, A., "Electronic Properties of Pre-Graphite Carbons."
- Pačes, J., "Magneto-Resistance Effect in the Region of the Curie Point."
- Parfen'ev, R. V., "The Effect of Annealing on the Anisotropy of Galvanomagnetic Properties of Tellurium."
- Pataki, G., "Phenomena Observed in Heterogeneous Semiconductors."

- Pearson, G. L., "The Magnetoresistance Effect in Oriented Single Crystals of Germanium."
- , "Magneto-Resistance Effect and the Band Structure of Single-Crystal Silicon."
- , "The Magneto-Resistance Effect in Oriented Single Crystals of Germanium."
- , "The Magnetoresistance Effect in InSb."
- Pergola, G. C. Della, "Galvanomagnetic Effects in Germanium."
- Pergola, G. D., "Apparatus for Measurement of Hall Effect and Magnetoresistance in Semiconductors."
- , "Mass Ratio and Magnetoresistance in n-Type Germanium."
- Petriz, R. L., "Theory on an Experiment for Measuring the Mobility and Density of Carriers in the Space-Charge Region of a Semiconductor Surface."
- Pikus, G. E., "Thermo- and Galvanomagnetic Effects in Semiconductors Taking Account of Variations in Carrier Concentration, I-II."
- Pollak, M., "Magnetoresistance of p-Type Si in the Hopping Region."
- Poltinnikov, S. A., "The Influence of Recombination Processes on Galvanomagnetic Effects."
- Portis, A. M., "Microwave Faraday Rotation: Measurement of the Conductivity Tensor."
- Putley, E. H., "The Hall Coefficient, Electrical Conductivity and Magnetoresistance Effect of Lead Sulphide, Selenide and Telluride."
- , "An Oscillatory Transverse Magnetoresistance Effect in n-Type InSb."
- , "Thermo and Galvano-Magnetic Coefficients for Semiconductors."
- Rigaux, C., "The Phenomenon of Negative Magnetoresistance in Semiconductors."
- Rollin, B. V., "The Electrical Properties of InSb at Low Temperatures."
- Roth, H., "Measurement of the Galvanomagnetic Effects in Pure Tellurium."

- Rothkirch, L., "On the Magneto-Resistive Change in Anisotropic Semiconductors."
- Rupprecht, H., "The Galvanomagnetic Properties of InSb Single Crystals Doped With Te."
- Ryabinin, M. N., "The Longitudinal Magnetoresistance of Semiconductors of the n-Germanium Type in the Quantum Limit."
- Rybalka, V. V., "Effect of Heat Treatment of Ge on Its Magnetoresistance."
- Sadasiv, G., "Magnetoresistance in Germanium in the Impurity Conduction Range."
- Sakata, T., "Magnetoresistance of Cesium Antimonide Photocathodes."
- Sasaki, W., "Galvanomagnetic Effects of a Heavily Doped Germanium Crystal."
- , "On the Anomalous Magnetoresistance Effect in n-InSb."
- , "Negative Magnetoresistance Effect in Semiconductors."
- Schultz, H., "The Magnetoresistance of Germanium in the Temperature Range of 10 to 20°K."
- Seits, F., "Note on the Theory of Resistance of a Cubic Semiconductor in a Magnetic Field."
- Severne, G., "Magneto-Resistance in Superfluid Liquid Helium."
- Shalyt, S. S., "Change and Heat Transport in n-Type Indium Arsenide at Low Temperatures."
- , "Galvanomagnetic Properties and Hole Conduction in Tellurium."
- , "Galvanomagnetic Properties of Tellurium at Low Temperatures."
- Shibuya, M., "Magnetoresistance Effect in Cubic Semiconductors With Spheroidal Energy Surfaces."
- Shockley, W., "Cyclotron Resonances, Magnetoresistance, and Brillouin Zones in Semiconductors."
- , "Effect of Magnetic Fields on Conduction—'Tube Integrals.'"
- Shogenji, K., "On Galvanomagnetic Effects in p-Type Crystals of PbTe."

- , "The Galvanomagnetic Effects in Single Crystals of PbTe."
- Simmons, C. A., "Influence of the Hall Effect Upon the Transverse Magnetoresistance in Indium Antimonide."
- Sladek, R. J., "Magnetoresistance of High Purity InSb in the Quantum Limit."
- , "Magnetoresistance Oscillations in Single Crystal and Polycrystalline Indium Arsenide."
- , "Galvanomagnetic Effects in n-Ge in the Impurity Conduction Range."
- Sorokin, O. V., "A Method of Measuring the Bulk Lifetime and Diffusion Coefficient of Charge Carriers by the Measurement of the Change of Resistance of a Semiconductor in a Magnetic Field."
- , "A Comparative Study of the Magnetoresistance and Photoelectric Methods of Measuring the Rates of Surface Recombination."
- Soule, D. E., "Analysis of Galvanomagnetic De Haas-Van Alphen Type Oscillations in Graphite."
- , "Magnetic Field Dependence of the Hall Effect and Magnetoresistance in Graphite Single Crystals."
- , "Band Structure and Transport Properties of Single Crystal Graphite."
- Spry, W. J., "Magnetoresistance and Hall Coefficient of a Graphite Single Crystal at 4.2°K Between Zero and 200 Kgauss."
- Stafeev, V. I., "Change in Germanium Resistance in a Magnetic Field."
- Steele, M. C., "Low-Field Electrical Breakdown in n-Indium Phosphide."
- , "High Electric Field Effects in n-Indium Antimonide."
- Stevens, K. W. H., "Population Changes With Magnetic Field."
- Suge, Y., "Magnetoresistance Effect in Cadmium Sulphide."
- Sugiyama, K., "Piezoresistance and Magnetoresistance in Impurity Conduction of Germanium."
- Suhl, H., "Measurements of Magnetoresistance of Germanium in Very Intense Magnetic Fields."
- Swanson, J. A., "Saturation Hall Constant of Semiconductors."

- Sytenko, T. N., "Effect of the State of the Surface on the Hall Effect and the Magnetoresistance of Germanium."
- Tanaka, S., "Magnetoresistive Effect in Cadmium Sulfide."
- Tanenbaum, M., "The Magnetoresistance Effect in InSb."
- , "Magnetoresistance in InSb and GaSb Single Crystals."
- Templeton, I. M., "The Electrical Conductivity and Current Noise of Carbon Resistors."
- Teutsch, W. B., "Measurement of the Galvanomagnetic Effects in Moderately Doped Tellurium."
- Toyosawa, Y., "Localized Spins and Negative Magnetoresistance in the Impurity Conduction at High Concentrations."
- , "Theory of Localized Spins and Negative Magnetoresistance in the Metallic Impurity Conduction."
- Tsymburska, A. T., "Semiconductor Magnetoresistance Effect in the Case of Weak Fields."
- Tufts, O. N., "Magnetoresistance of Oriented Gray Tin Single Crystals."
- Volger, J., "Solid-State Research at Low Temperatures."
- Volekobinskaya, N. I., "Electrical and Magnetoelectric Properties of p-Type Indium Antimonide."
- Walton, A. K., "The Theory of Electrical and Photoelectric Effects for Three Carriers in a Magnetic Field."
- Wei, W. F., "Longitudinal Magnetoresistance of n-Type Germanium in a Strong Magnetic Field."
- Weiss, H., "Galvanomagnetic Properties of InSb."
- , "The Magnetoresistance of InAs."
- , "On the Electrical Properties of InSb."
- , "Transversal Magnetic Resistance Change of InSb."
- Whitesell, W. J., II, "Magnetoresistive Effect in Impurity Semiconductors."
- Willardson, R. K., "Large Magnetoresistive Effects in InSb for Specialized Boundary Conditions."

- , "Magnetoresistance in Gallium Arsenide."
- , "Transverse Hall and Magnetoresistance Effects in p-Type Germanium."
- Wright, R. W., "The Characteristic Temperature and Effective Electron Mass for Conduction Processes in Cadmium Oxide."
- Yamada, E., "A Note on the Magnetoresistance of PbTe at High Magnetic Fields."
- , "On the Electrical and Optical Properties of n-Type Cadmium Telluride Crystals."
- Yamanouchi, C., "Magnetoresistance in the Impurity Conduction of n-Type Germanium."
- Zavadskii, E. A., "Electrical Conductivity of Germanium in Strong Pulsed Magnetic Fields in the Region of Mixed Conduction."
- , "Electrical Conductivity of n-Ge in Strong Magnetic Fields."
- , "Variation in the Electrical Conductivity on n-Ge in Strong Pulsating Magnetic Fields."
- Zdanowicz, W., "Electrical Properties of  $Cd_3As_2$ ."
- Zemel, J. N., "Magneto-Surface Experiments on Germanium."
- , "Magneto-Surface Properties of Near Intrinsic Germanium."
- Zhuze, V. P., "A Method for Measuring the Rate of Surface Recombination in Accordance With the Variation of the Resistance of a Semiconductor in a Magnetic Field."
- Zook, J. D., "Galvanomagnetic Effects in Cadmium Sulfide."

#### BIBLIOGRAPHY

- Abeles, B., and S. Meiboom. "Galvanomagnetic Effects in Bismuth," Phys. Rev., Vol. 101 (15 Jan. 1956), pp. 544-50.
- , "Theory of the Galvanomagnetic Effects in Germanium," Phys. Rev., Vol. 95 (1 July 1954), pp. 31-37.
- Abeles, B. See also Meiboom, S.

- Adams, E. N., and R. W. Keyes. "Galvanomagnetic Phenomena in Very Strong Magnetic Fields," Progress in Semiconductors, Vol. 6. London: Heywood, 1962. Pp. 85-142.
- Adams, E. N. See also Argyres, P. N., and Goldberg, C.
- Adenstedt, H. See Grüneisen, E.
- Adrianov, D. G., and V. I. Fistul. "Magnetoresistance of Degenerate n-Type Germanium and Silicon," Fiz. Tverdogo Tela, Vol. 5 (May 1963), pp. 1480-83. English translation in Soviet Phys. — Solid State, Vol. 5 (Nov. 1963), pp. 1077-79.
- Aerts, E., S. Amelinckx, and J. Vennik. "Field Effect Measurements in a Transverse Magnetic Field," J. Electronics and Control, Vol. 7 (Dec. 1959), pp. 497-504.
- Agarwal, D. B. "Magnetoresistance in Nondegenerate Semiconductors Considering Electron-Electron Scattering," Progr. Theoret. Phys., Vol. 25 (May 1961), pp. 851-83.
- Akhieser, A. "Change of Resistance of Metals in a Magnetic Field," J. Exptl. Theoret. Phys. (U. S. S. R.), Vol. 9, No. 4 (1939), pp. 426-31. (In Russian.)
- Akulov, N. "Theory of Galvanomagnetic and Galvanoelastic Effects," Z. Physik, Vol. 80 (16 Feb. 1933), pp. 693-98.
- Alam, M. S. "Electrical Resistance of Cobalt in a Longitudinal Magnetic Field," Z. Physik, Vol. 93 (7 Feb. 1935), pp. 556-60.
- . "Occurrence of Negative Minimum in Resistance Hysteresis Curves for Nickel in Longitudinal Magnetic Fields," Z. Physik, Vol. 87 (23 Dec. 1933), pp. 255-57.
- Alam, M. S. See also Gupta, M. M. S.
- Albers, W. A., Jr. "Effective Mobilities of Surface Carriers in Germanium," J. Phys. Chem. Solids, Vol. 23 (Sept. 1962), pp. 1249-68.
- Albers, W. A., Jr., and J. E. Thomas, Jr. "Observations of Surface Transverse Magnetoresistance Effects on n-Type Germanium," J. Phys. Chem. Solids, Vol. 14 (July 1960), pp. 181-85.
- Alekseevskii, N. E., and others. "Galvanomagnetic Properties of Single Crystals of Transition Metals," Zhur. Eksp. i Teoret. Fiz., Vol. 43 (Aug. 1962), pp. 731-33. English translation in Soviet Phys. — JETP, Vol. 16 (Feb. 1963), pp. 519-20.

- Alekseevskii, N. E., N. B. Brandt, and T. I. Kostina. "Effects of Small Amounts of Admixtures on Bismuth Galvanomagnetic Properties," Doklady Akad. Nauk S. S. S. R., Vol. 105 (1955), pp. 46-49.
- . "Investigation of the Effect of Pressure on the Galvanomagnetic Properties of Tellurum at Low Temperatures," Zhur. Eksp. i Teoret. Fiz., Vol. 31, No. 6 (1956), pp. 943-46. English translation in Soviet Phys. — JETP, Vol. 4 (July 1957), pp. 813-16.
- Alekseevskii, N. E., and Yu. P. Gaidukov. "The Anisotropy of Magnetoresistance and the Topology of the Fermi Surfaces of Metals," Zhur. Eksp. i Teoret. Fiz., Vol. 37 (Sept. 1959), pp. 672-77. English translation in Soviet Phys. — JETP, Vol. 10 (March 1960), pp. 481-84.
- . "Galvanomagnetic Properties of Gold," Zhur. Eksp. i Teoret. Fiz., Vol. 31, No. 6 (1956), pp. 947-50. English translation in Soviet Phys. — JETP, Vol. 4 (July 1957), pp. 807-10.
- Alers, P. B. "De Haas-Van Alphen Oscillations in the Thermal and Electrical Magnetoresistance of Tin," Phys. Rev., Vol. 107 (15 Aug. 1957), pp. 959-60.
- . "Thermal Magnetoresistance of Zinc at Low Temperatures," Phys. Rev., Vol. 101 (1956), pp. 41-48.
- Alers, P. B., and R. T. Webber. "The Anomalous Magnetoresistance of Bismuth at Low Temperatures," Phys. Rev., Vol. 84 (16 Nov. 1951), pp. 863-64.
- . "The Magnetoresistance of Bismuth Crystals at Low Temperatures," Phys. Rev., Vol. 91 (1 Sept. 1953), pp. 1060-65.
- Allanazarov, A. See Annaev, R. G.
- Allgaier, R. S. "Galvanomagnetic Effects and Band Structure in PbS, PbSe and PbTe," International Conference on Semiconductor Physics, Prague, 1960. New York: Academic Press, 1961. Pp. 1037-39.
- . "Magnetoresistance in a Multivalley Model With  $\langle 110 \rangle$  Ellipsoids of General Shape," Phys. Rev., Vol. 115 (Sept. 1959), pp. 1185-88.
- . "Magnetoresistance in PbS, PbSe, and PbTe at 295°, 77.4°, and 4.2°K," Phys. Rev., Vol. 112 (1 Nov. 1958), pp. 828-36.
- . "Weak-Field Magnetoresistance in p-Type Lead Telluride at Room Temperature and 77°K," Phys. Rev., Vol. 119 (15 July 1960), pp. 554-61.

- Alocco, G., and A. Drigo. "Discontinuities in the Magnetic Resistance in Ferromagnetism," Nuovo cimento, Vol. 11 (April 1934), pp. 224-26.
- Amelinckx, S. See Aerts, E.
- Amirkhanov, Kh. I., R. I. Bashirov, and Yu. E. Zakiev. "Galvanomagnetic Effects in n-Type InSb in Magnetic Pulsed Fields," Doklady Akad. Nauk S. S. S. R., Vol. 132 (1 June 1960), pp. 793-96. English translation in Soviet Phys. —Doklady, Vol. 5 (Nov. -Dec. 1960), pp. 556-59.
- . "Quantum Galvanomagnetic Effects in n-InAs," Soviet Phys. —JETP, Vol. 14 (June 1962), pp. 1209-12.
- . "Quantum Oscillations of the Magnetoresistance of n-Type InSb in Strong Pulsed Magnetic Fields," Doklady Akad. Nauk S. S. S. R., Vol. 148 (21 Feb. 1963), pp. 1279-82. English translation in Soviet Phys. —Doklady, Vol. 8 (Aug. 1963), pp. 182-84.
- Andrianov, D. G., and V. I. Fistul. "Magnetoresistance of Degenerate n-Type Germanium and Silicon," Soviet Phys. —Solid State, Vol. 5 (1963), pp. 1077-79.
- Andronik, I. K., and M. V. Kot. "Anisotropy of Electrical Properties of Cadmium Antimonide Monocrystals," Fiz. Tverdogo Tela, Vol. 2 (June 1960), pp. 1128-33. English translation in Soviet Phys. —Solid State, Vol. 2 (Dec. 1960), pp. 1022-26.
- Annaev, R. G. "Change of the Electrical Resistance and of Thermoelectric Electromotive Force in a Longitudinal Magnetic Field of the Ni<sub>3</sub>Mn Alloy as a Function of the Amount of the Ordered Phase," Doklady Akad. Nauk S. S. S. R., Vol. 61 (1948), pp. 1009-12.
- . "Change of the Electric Resistance of a Superstructure Alloy in a Longitudinal Magnetic Field," Doklady Akad. Nauk S. S. S. R., Vol. 66 (1949), pp. 1071-74.
- . "Effect of Mechanical Deformation on the Change of Electrical Resistance in a Longitudinal Magnetic Field (Galvanomagnetic Thomson Effect) of the Alloy Ni<sub>3</sub>Mn," Doklady Akad. Nauk S. S. S. R., Vol. 64 (1949), pp. 45-47.
- Annaev, R. G., and A. Allanazarov. "Anisotropy of the Galvanomagnetic Effect in a Crystal of n-Type Germanium at Temperatures of the Transitional Region of Conductivity," Doklady Akad. Nauk S. S. S. R., Vol. 132 (21 May 1960), pp. 557-60. English translation in Soviet Phys. —Doklady, Vol. 5 (Nov.-Dec. 1960), pp. 540-43.

- Annaev, R.G., V.G. Dubrovskii, and E.K. Kapustyan. "Change of the Electrical Resistance of the Fe<sub>3</sub>Pt Alloy in a Longitudinal Magnetic Field," Doklady Akad. Nauk S. S. S. R., Vol. 82 (1952), pp. 549-52.
- Annaev, R.G., and M.V. Kolodin. "Measurement of the Electrical Resistance and Thermoelectric E. M. F. of the Alloy Fe<sub>3</sub>Pt in Longitudinal and Transverse Magnetic Fields," Doklady Akad. Nauk S. S. S. R., Vol. 87, No. 2 (1953), pp. 195-96. (In Russian.)
- Appel, J. "Influence of the Orbital Quantization in a Magnetic Field on the Longitudinal Resistance-Variation of Covalent Semiconductors," Z. Naturforsch., Vol. 11a (Nov. 1956), pp. 689, 892-901.
- . "The Transverse Galvanomagnetic Effects in Semiconductors," Z. Naturforsch., Vol. 9a (Feb. 1954), pp. 167-74. (In German.)
- Argyres, P.N. "Quantum Theory of Longitudinal Magnetoresistance," J. Phys. Chem. Solids, Vol. 4, No. 1-2 (1958), pp. 19-26.
- Argyres, P.N., and E.N. Adams. "Longitudinal Magnetoresistance in the Quantum Limit," Phys. Rev., Vol. 104 (15 Nov. 1956), pp. 900-908.
- Armstrong, J.A. See Beer, A.C.
- Armstrong, J.E. "Magneto-Resistance of Liquid Sodium-Potassium Alloy," Phys. Rev., Vol. 47 (1 March 1935), pp. 391-92.
- Assenheim, J.G. See Clark, D.E.
- Auwers, O. v. "Experiments in Strong Magnetic Fields," Naturwiss., Vol. 24 (31 Jan. 1936), pp. 65-73.
- . "Magnetic Change of Resistance and Hall Effect in Cuprous Oxide With and Without External Illumination," Wiss. Veröff. a.d. Siemens-Konzern, Vol. 9, No. 2 (1930), pp. 294-99.
- Azbel, M. Ya. See Lifshits, I.M.
- Babiskin, J., and P.G. Siebenmann. "New Type of Oscillatory Magnetoresistance in Metals," Phys. Rev., Vol. 107 (1 Sept. 1957), pp. 1249-54.
- Babiskin, J. See also Steele, M.C.
- Babushkina, N.A. See Kikoin, I.K.
- Banta, H.E. "Thermomagnetic and Galvanomagnetic Properties of a Bismuth Crystal," Phys. Rev., Vol. 41 (15 July 1932), pp. 239-50.

- Barieau, R. E. See Stout, J. W.
- Barlow, H. E. M. See Koike, R.
- Barrie, R. "Magnetoresistance in Strong Magnetic Fields," Proc. Phys. Soc., Vol. 70B (Oct. 1957), pp. 1008-10.
- . "Negative and Oscillatory Longitudinal Magnetoresistance," Can. J. Phys., Vol. 37 (July 1959), pp. 893-96.
- Barrie, R. See also Broom, R., and Hilsun, C.
- Barron, T. H. K., and D. K. C. MacDonald. "Problems of Currents in Magnetic Fields," Physica, Vol. 24, Supplement (Sept. 1958), pp. S102-8.
- Bartlett, B. E. See King, R. E. J
- Bartlett, B. W. See Sommerfeld, A.
- Bashirov, R. I. See Amirkhanov, Kh. I.
- Bass, F. G., and I. M. Tsidilkovskii. "The Theory of Isothermal Galvano- and Thermo-Magnetic Phenomena in Semiconductors," Zhur. Eksp. i Teoret. Fis., Vol. 31, No. 4 (1956), pp. 672-83. English translation in Soviet Phys. —JETP, Vol. 4 (May 1957), pp. 565-74.
- Bastin, J. A. See Wright, R. W.
- Bate, R. T., and A. C. Beer. "Galvanomagnetic Effects in Semiconductors Containing Impurity Gradients," International Conference on Semiconductor Physics, Prague, 1960. New York: Academic Press, 1961. Pp. 177-81.
- . "Influence of Conductivity Gradients on Galvanomagnetic Effects in Semiconductors," J. Appl. Phys., Vol. 32 (May 1961), pp. 800-5.
- Bate, R. T., I. C. Bell, and A. C. Beer. "Influence on Magnetoconductivity Discontinuities on Galvanomagnetic Effects in Indium Antimonide," J. Appl. Phys., Vol. 32 (May 1961), pp. 806-14. Also in: Battelle Memorial Institute Technical Note No. 4 on Contract AF 49(638)222 (16 Oct. 1960), AFOSR-TN-60-1226, ASTIA AD 246424.
- Bate, R. T., and R. K. Willardson. "Hall Coefficient and Magnetoresistance in Semiconducting Diamond," Air Force Office of Scientific Research, Report TN-58-916. ASTIA AD 204565. Also in: Proc. Phys. Soc., Vol. 74 (Sept. 1959), pp. 363-67.

- Bate, R. T., R. K. Willardson, and A. C. Beer. "Transverse Magnetoresistance and Hall Effect in n-Type Indium Antimonide," Air Force Office of Scientific Research, Report TN-58-641 (15 July 1958). ASTIA AD 162173. Also in: J. Phys. Chem. Solids, Vol. 9 (1959), pp. 119-28.
- BATES, L. F. "The Magneto-Resistance of High Coercivity Alloys," Proc. Phys. Soc. (London), Vol. 58 (March 1946), pp. 153-64.
- . "Resistance of Manganese Arsenide," Phil. Mag., Vol. 17 (April 1934), pp. 783-92.
- Becker, W. M., A. K. Ramdas, and H. Y. Fan. "Energy Band Structure of Gallium Antimonide," J. Appl. Phys., Vol. 32 (Oct. 1961), pp. 2094-102.
- Beer, A. C. "Galvanomagnetic Effects in III-V Compound Semiconductors," J. Appl. Phys., Vol. 32 (Oct. 1961), pp. 2107-12.
- Beer, A. C., and others. "Final Report on Investigation of the Effects of the Valence Band Degeneracy on the Conduction Processes in Germanium," Air Force Office of Scientific Research, Report TR-58-9 (31 Dec. 1957). ASTIA AD148077.
- Beer, A. C., J. A. Armstrong, and I. N. Greenberg. "Evaluation of Transport Integrals for Mixed Scattering and Application to Galvanomagnetic Effect," Phys. Rev., Vol. 107 (1957), pp. 1506-13.
- Beer, A. C., and R. K. Willardson. "Hall and Transverse Magnetoresistance Effects for Warped Bands and Mixed Scattering," Air Force Office of Scientific Research, Report TN-58-98 (30 Dec. 1957). ASTIA AD 148147. Also in: Phys. Rev., Vol. 110 (15 June 1958), pp. 1286-94.
- Beer, A. C. See also Bate, R. T., Harman, T. C., and Willardson, R. K.
- Bell, J. C. See Bate, R. T.
- Bellia, C. "Effect of Pressure on Galvanomagnetic Phenomena," Nuovo cimento, Vol. 10 (June 1933), pp. 221-229.
- . "Galvanomagnetic Phenomena in Thin Metallic Pellicles," Nuovo cimento, Vol. 13 (Dec. 1936), pp. 441-50.
- Belov, K. P., A. N. Goryaga, and Lin Chshan-Da. "The Electrical and Galvanomagnetic Properties of Lithium Ferrite-Chromite Near the Compensation Point," Zhur. Eksp. i Teoret. Fiz., Vol. 38 (June 1960), pp. 1914-15. English translation in Soviet Phys. — JETP, Vol. 11 (1960), pp. 1376-78.

- Belov, K. P., A. S. Pakhomov, and E. V. Talalaeva. "Measurement of Magnetoresistance in Ferrites Near the Curie Point," Fiz. Tverdogo Tela, Vol. 3 (Feb. 1961), pp. 436-40. English translation in Soviet Phys.—Solid State, Vol. 3 (1961), pp. 319-21.
- Belov, K. P., and A. V. Ped'ko. "On Galvanomagnetic Properties of Ferromagnetics Near the Absolute Zero of Temperature," Zhur. Eksp. i Teoret. Fiz., Vol. 33, No. 3 (1958), pp. 815-17. English translation in Soviet Phys.—JETP, Vol. 6 (1958), pp. 628-29.
- Belov, K. P., A. A. Popova, and E. V. Talalaeva. "Electrical and Magnetoresistance Properties of Single Crystals of Manganese Ferrite," Kristallografiya, Vol. 3 (Nov.-Dec. 1959), pp. 733-39. English translation in Soviet Phys.—Cryst., Vol. 3 (Jan. 1960), pp. 738-43.
- Belov, K. P., and E. V. Talalaeva. "Galvanomagnetic Properties of Manganese Ferrite," Zhur. Eksp. i Teoret. Fiz., Vol. 33, No. 6 (1957), pp. 1517-19. English Translation in Soviet Phys.—JETP, Vol. 6 (June 1958), pp. 1171-73.
- Bemski, G., and B. Szymanski. "Observations of Oscillatory Magnetoresistance in InAs at Microwave Frequencies," J. Phys. Chem. Solids, Vol. 17 (Jan. 1961), pp. 335-36.
- Benedek, G. B., W. Paul, and H. Brooks. "Conductivity, Hall Effect, and Magnetoresistance in n-Type Germanium and Their Dependence on Pressure," Phys. Rev., Vol. 100 (15 Nov. 1955), pp. 1129-39.
- Bergeron, C. J., C. G. Grenier, and J. M. Reynolds. "Galvanomagnetic and Thermomagnetic Potentials in Zinc at Liquid Helium Temperatures," Phys. Rev., Vol. 119 (1 Aug. 1960), pp. 925-34.
- Berlincourt, T. G. "Hall Effect, Magnetoresistance, and Size Effects in Copper," Phys. Rev., Vol. 112 (15 Oct. 1958), pp. 381-87.
- . "Hall Effect, Resistivity, and Magnetoresistivity of Th, U, Zr, Ti, and Nb," Phys. Rev., Vol. 114 (15 May 1959), pp. 969-77.
- . "Relation Between the De Haas-Van Alphen Effect and the Magnetoresistance in Bismuth," Phys. Rev., Vol. 91 (1953), pp. 1277-78.
- Berlincourt, T. G., R. R. Hake, and A. C. Thorsen. "Pulsed Magnetic Field Studies of the Negative Magnetoresistivities of Dilute Ti-Mn and Cu-Mn Alloys at Low Temperatures," Phys. Rev., Vol. 127 (1 Aug. 1962), pp. 710-13.
- Berlincourt, T. G., and J. K. Logan. "Further Correlation Between Magnetoresistance Variations and the De Haas-Van Alphen Effect," Phys. Rev., Vol. 93 (15 Jan. 1954), pp. 348-49.

- Berlincourt, T. G., and M. C. Steele. "Oscillatory Hall Effect, Magneto-resistance, and Magnetic Susceptibility of a Graphite Single Crystal," Phys. Rev., Vol. 98 (15 May 1955), pp. 956-61.
- Berlincourt, T. G. See also Hake, R. R.
- Black, J., S. M. Ku, and H. T. Minden. "Some Semiconducting Properties of HgTe," J. Electrochem. Soc., Vol. 105 (Dec. 1958), pp. 723-28.
- Blom, J. W. "The Change of the Resistance of Single Crystals of Gallium in a Magnetic Field," Physica, Vol. 16 (Feb. 1950), pp. 144-51. (In English.)
- . "The Fourier Analysis of the Magnetic Increase of the Resistance of Gallium. Fourier Components in the Kohler Diagram," Physica, Vol. 16 (Feb. 1950), pp. 171-82. (In English.)
- . "The Kohler Diagram for the Magnetic Increase of the Resistance of Gallium Single Crystals," Physica, Vol. 16 (Feb. 1950), pp. 152-69. (In English.)
- Blom, J. W. See also De Haas, W. J.
- Blunt, R. F. "The A. C. Magneto-Resistance of Bismuth," Phys. Rev., Vol. 73 (1948), p. 654.
- Böhringer, E. "The Influence of Spontaneous, True, and Ferromagnetic Magnetization on Electrical Resistance," Z. Physik, Vol. 146, No. 1 (1956), pp. 65-74. (In German.)
- Bolton, R. See Stevenson, R.
- Bordoloi, K., C. G. Grenier, and J. M. Reynolds. "Galvanomagnetic Effects in Sn at Low Temperature," Bull. Am. Phys. Soc., Ser. II, Vol. 8 (1963), p. 110.
- Borovik, E. S. "Change of the Electric Resistance of Metals in a Magnetic Field at Low Temperatures," Zhur. Eksp. i Teoret. Fiz., Vol. 23, No. 1 (1952), pp. 91-100.
- . "The Hall Effect and the Change in Resistance for Lead, Copper, and Magnesium in a Magnetic Field," Zhur. Eksp. i Teoret. Fiz., Vol. 27, No. 3 (1954), pp. 355-68.
- . "Variation of the Electric Resistance of Tin and of Indium in the Magnetic Field," Doklady Akad. Nauk S. S. S. R., Vol. 69, No. 6 (1949), pp. 767-69.

- Borovik, E. S., and B. G. Lazarev. "The Effect of Form on the Resistance of Single Crystals of Bismuth in a Magnetic Field," Zhur. Eksp. i Teoret. Fiz., Vol. 21 (1951), pp. 857-63.
- . "Effect of Shape on the Electrical Resistance of Single Crystals of Bismuth in a Magnetic Field," Doklady Akad. Nauk S. S. S. R., Vol. 62 (1948), pp. 611-14. Also in: Zhur. Eksp. i Teoret. Fiz., Vol. 21, No. 8 (1951), pp. 857-63.
- Borovik, E. S., and V. G. Volotskaya. "Galvanomagnetic Phenomena in Pt at Low Temperatures," Fiz. Metallov i Metallovedenie, Vol. 6, No. 1 (1958), pp. 60-66. (In Russian.)
- . "Investigation of Galvanomagnetic Phenomena in Chromium at Low Temperatures," Zhur. Eksp. i Teoret. Fiz., Vol. 36 (June 1959), pp. 1650-5. English translation in Soviet Phys.—JETP, Vol. 9 (Dec. 1959), pp. 1175-78.
- Bothorel, P. "Apparatus for the Measurement of the Hall Effect in Powdered Solids," Acad. Sci. (Paris), Compt. rend., Vol. 250 (25 April 1960), pp. 2892-94.
- Bosorth, R. M. "Magnetoresistance and Domain Theory of Iron-Nickel Alloys," Phys. Rev., Vol. 70 (1-15 Dec. 1946), pp. 923-32.
- Brandt, N. B. See Alekseevskii, N. E.
- Bray, R., and R. W. Cunningham. "Optical and Magnetic Surface Studies on Germanium," J. Phys. Chem. Solids, Vol. 8 (Jan. 1959), pp. 99-102, 121-22.
- Breckenridge, R. G. "Magnetoresistance and Hall Effect Studies in Graphite," Semiconductors and Phosphors (Halbleiter und Phosphore). Brunswick: Vieweg, 1958. Pp. 456-62.
- Brooks, H. See Benedek, G. B.
- Broom, R. F. "Magnetoresistance of n-Type InSb at 4.2° K," Proc. Phys. Soc., Vol. 71 (March 1958), pp. 470-5.
- . "A Source of Error in Magnetoresistance Measurements," Proc. Phys. Soc., Vol. 71 (March 1958), pp. 500-502.
- Broom, R., R. Barrie, and I. M. Ross. "Magnetoresistance Effects in Gallium Arsenide," Semiconductors and Phosphors (Halbleiter und Phosphore). Brunswick: Vieweg, 1958. Pp. 453-56.
- Broom, R. F. See also Edmond, J. T.

- Broudy, R. M. "Galvanomagnetic Coefficients for Arbitrary Geometry," J. Appl. Phys., Vol. 29 (May 1958), pp. 853-55.
- Broudy, R. M., and J. D. Venables. "D. C. Magnetoconductivity and Energy Band Structure in Semiconductors," Phys. Rev., Vol. 103 (15 Aug. 1956), pp. 1129-30, and Vol. 105 (15 March 1957), pp. 1757-63.
- Brown, F. C. See Kobayashi, K., and Tippins, H. H.
- Bullis, W. M. "Galvanomagnetic Effects in Oriented Single Crystals of n-Type Germanium," Phys. Rev., Vol. 109 (15 Jan. 1958), pp. 292-301.
- Busch, G., and J. Wieland. "Mechanism of Electric Conduction of Gray Tin," Helv. Phys. Acta, Vol. 26 (1953), pp. 697-730.
- Busch, G., J. Wieland, and H. Zoller. "Electrical Properties of Grey Tin," Helv. Phys. Acta, Vol. 24, No. 1 (1951), pp. 49-62. (In German.)
- . "Electronic Properties of Gray Tin," Semi-Conducting Materials (Proc. Conf., Univ. of Reading, England, 1950). New York: Academic Press, 1951.
- Busch, G. A., and R. Kern. "Semiconducting Properties of Grey Tin," Solid State Phys.—Adv. Res. and Appl., Academic Press (1960), Vol. 11, pp. 1-40.
- Butler, E. H., Jr., and E. M. Pugh. "Galvano and Thermomagnetic Phenomena in Fe and Ni," Phys. Rev., Vol. 57 (15 May 1940), pp. 916-21.
- Chaberski, A. See Mrozowski, S.
- Chalileew, P. A. "Change of Resistance of Magnetite in a Magnetic Field at Low Temperature," Physik. Z. Sowjetunion, Vol. 7, No. 1 (1935), pp. 108-14. (In German.)
- Chambers, R. G. "The Conductivity of Thin Wires in a Magnetic Field," Proc. Roy. Soc., Vol. 202A (7 Aug. 1950), pp. 378-93.
- . "Magnetoresistance," The Fermi Surface, ed. W. A. Harrison and M. B. Webb. New York: Wiley, 1960. Pp. 100-124, 141-44.
- . "Magneto-Resistance Effects in the Group I Metals at High Fields," Proc. Roy. Soc., Vol. 238A (8 Jan 1957), pp. 344-57.

- Champness, C. H. "High-Field Magnetoresistance Measurements at Room Temperature in Indium Antimonide," High Magnetic Fields. Wiley, 1962. Pp. 528-33.
- . "High Pulsed Field Magnetoresistance in Indium Antimonide and Indium Arsenide," Can. J. Phys., Vol. 41 (June 1963), pp. 890-922.
- . "Interpretation of the Transverse Magnetoresistance in p-Type Indium Antimonide at Liquid Nitrogen Temperature," Phys. Rev. Letters, Vol. 1 (15 Dec. 1958), pp. 439-40.
- . "Magnetoresistance and Hall Effect in Oriented Single Crystal Samples of n-Type Indium Antimonide," Can. J. Phys., Vol. 39 (March 1961), pp. 452-67.
- . "Magnetoresistance Effect in Indium Antimonide," Bull. Am. Phys. Soc., Ser. II, Vol. 5 (1960), p. 374.
- . "The Transverse Magnetoresistance Effect in Indium Antimonide," J. Electronics and Control, Vol. 4 (March 1958), pp. 201-18.
- Champness, C. H., and R. P. Chasmar. "The Transverse Magnetoresistance Effect in Indium Arsenide," J. Electronics and Control, Vol. 3 (Nov. 1957), pp. 494-99.
- Chasmar, R. P. See Champness, C. H.
- Chentsov, R. A. "Change of the Electric Resistance of Tellurium in a Magnetic Field at Low Temperatures," Zhur. Eksp. i Teoret. Fiz., Vol. 18 (April 1948), pp. 374-85.
- Chih-ch'ao, Lien, and D. N. Nasledov. "Electrical and Galvanomagnetic Properties of n-Type InSb at Low Temperatures," Fiz. Tverdogo Tela, Vol. 3 (April 1961), pp. 1185-89. English translation in Soviet Phys.—Solid State, Vol. 3 (Oct. 1961), pp. 861-64.
- Chih-ch'ao, L., and D. N. Nasledov. "Influence of the Electric Field on the Electrical Conductivity, Hall Coefficient, and Magnetoresistance of n-Type InSb at Low Temperatures," Fiz. Tverdogo Tela, Vol. 2 (May 1960), pp. 793-98. English translation in Soviet Phys.—Solid State, Vol. 2 (1960), 729-33.
- Chikvashvili, Ya. M. "Variation in the Resistivity of Bismuth in a Strong Magnetic Field," Fiz. Metallov i Metallovedenie, Vol. 11 (June 1961), pp. 817-19.
- Chzhan-Da, Lin. See Belov, K. P.

- Clark, D. E., and J. G. Assenheim. "Sensitive Method for Measurement of Magneto-Resistance Effect With Direct Currents and With Microwaves," Brit. J. Appl. Phys., Vol. 11 (Jan. 1960), pp. 35-38.
- Cochran, J. F., and M. Yaqub. "Magnetoresistance Effects in Small, Gallium Single Crystals," Bull. Am. Phys. Soc., Ser. II, Vol. 8 (1963), p. 65.
- Coldwell-Horsfall, R. A., and D. ter Haar. "Influence of Collective Effects on the Magnetoresistance of Metals," Phys. Rev., Vol. 115 (15 Aug. 1959), pp. 891-93.
- . "On the Magnetoresistance Effect in Metals," Phil. Mag., Vol. 46 (Oct. 1955), p. 1149.
- Colombani, A., and P. Huet. "Magnetoresistance of Thin Plates of Bismuth," Comptes Rendus Acad. Sci., Vol. 256 (March 1963), pp. 2357-60.
- . "Thermal Evolution of the Magnetoresistance of Thin Films of Bismuth," Comptes Rendus Acad. Sci., Vol. 256 (7 Jan. 1963), pp. 406-9.
- Colombani, A., P. Huet, and C. Vautier. "Measurement of Small Variations of Resistance. Applications to the Magnetoresistance of Thin Films," Comptes Rendus Acad. Sci. (Paris), Vol. 246 (19 May 1958), pp. 2869-72. (In French.)
- Colombani, A., C. Vautier, and P. Huet. "Electric and Magnetic Properties of Thin Films of Antimony," Comptes Rendus Acad. Sci. (Paris), Vol. 247 (24 Nov. 1958), pp. 1838-41. (In French.)
- Colombani, A. See also Goureaux, G., and Huet, P.
- Conn, G. K. T., and B. Donovan. "Anomalous Magnetoresistance Effects in Bismuth," Nature, Vol. 162 (28 Aug. 1948), p. 336.
- Conn, G. K. T. See also Donovan, B.
- Connell, R. A., and J. A. Marcus. "Hall Effect and Magnetoresistance of Bi Single Crystals at He Temperatures," Phys. Rev., Vol. 100 (1955), p. 1256.
- Coover, R. E. "Surface Magnetoconductivity Experiments on Silicon," Diss. Abstr., Vol. 21 (1960), p. 1604.
- Coren, R. L., and H. J. Juretschke. "Magnetoresistance and Domain Structure in Thin Nickel Films," Phys. Rev., Vol. 126 (15 May 1962), pp. 1378-85.

- Coren, R. L., and H. J. Juretschke. "Magnetoresistance and Magnetic Switching in Permalloy Films"; Sixth Conference on Magnetism and Magnetic Materials, New York, 14-17 Nov. 1960. In J. Appl. Phys., Suppl. to Vol. 32, No. 3 (1961), pp. 292S-93S.
- Cotti, P. "Measurement of Magnetoresistance of Rectangular Plates," Helv. Phys. Acta, Vol. 34, No. 8 (1961), pp. 777-79.
- , "Size Effects in High Magnetic Fields," High Magnetic Fields. Wiley, 1962. Pp. 539-43.
- Cotti, P., B. Luthi, and J. L. Olsen. "Pulsed Field Magnetoresistance Measurements in Metals," ibid., pp. 523-27.
- Csavinszky, P. "Low-Temperature Impurity Conduction and Magnetoresistivity in n-Type Germanium," Phys. Rev., Vol. 119 (1 Sept. 1960), pp. 1605-9.
- Cuff, K. F., M. R. Ellett, and C. D. Kuglin. "Oscillatory Magnetoresistance in the Conduction Band of PbTe," J. Appl. Phys., Vol. 32 (Oct. 1961), pp. 2179-85.
- Cuff, K. F. See also Kuglin, C. D.
- Cunnell, F. A. See Edmond, J. T.
- Cunningham, R. W. See Bray, R.
- Curtiss, L. F. See Richtmyer, F. K.
- Das, P. See Nag, B. R.
- Datars, W. R., and P. C. Eastman. "A New Effect in the Magnetoresistance of Antimony at 4.2° K," Can. J. Phys., Vol. 40 (May 1962), pp. 670-72.
- Datars, W. R. See also Eastman, P. C.
- Davis, L., Jr. "Change of Resistance in Magnetic Field," Phys. Rev., Vol. 56 (1 July 1939), pp. 93-98.
- Davis, R. E., and C. Goldberg. "Magnetoresistance and Planar Hall Effects in n-Type Germanium," Phys. Rev., Vol. 96 (1954), p. 833.
- Davis, R. E. See also Goldberg, C.
- De Bock, A. See Van Itterbeek, A.

- De Haas, W. J., and J. W. Blom. "Change of Resistance of Single Crystals of Gallium in a Magnetic Field," Parts I-IV, Physica. Part I: Vol. 1 (Dec. 1933), pp. 134-44. Part II: Vol. 1 (April 1934), pp. 465-74. Part III: Vol. 2 (Nov. 1935), pp. 952-58. Part IV: Vol. 4 (Oct. 1937), pp. 778-90. (Parts II, III, and IV in English.)
- . "Influence of Magnetic Field and Temperature on Resistance of Gallium Single Crystals," Physica, Vol. 4 (Oct. 1937), pp. 767-77. (In English.)
- De Haas, W. J., J. W. Blom, and L. Schubnikow. "Variation of Resistance of Bi Crystals in Magnetic Fields at Low Temperatures," Physica, Vol. 2 (Nov. 1935), pp. 901-14.
- De Haas, W. J., and P. M. van Alphen. "Change of Resistance of Metals in a Magnetic Field at Low Temperatures," K. Akad. Amsterdam, Proc., Vol. 36, No. 3 (1933), pp. 253-62.
- De Haas, W. J., and J. Voogd. "Electrical Resistance at Low Temperatures and Effect of Magnetic Field," K. Akad. Amsterdam, Proc., Vol. 34, No. 1 (1931), pp. 51-55.
- De Haas, W. J. See also Schubnikow, L.
- De Launay, J., R. L. Dolecek, and R. T. Webber. "Magnetoresistance of Copper," J. Phys. Chem. Solids, Vol. 11 (Sept. 1959), pp. 37-42, and Physica, Vol. 24, Supplement (Sept. 1958), p. S172.
- De Mandrot, R. "Magnetoresistance of Cobalt and Temperature," Helv. Phys. Acta, Vol. 26 (1953), pp. 563-65.
- De Nobel, J. "Thermal and Electrical Resistance of a Tungsten Single Crystal at Low Temperatures and in High Magnetic Fields," Physica, Vol. 15 (July 1949), pp. 532-40. (In English.)
- Dexter, R. N. See Zook, J. D.
- Diesel, T. J., and W. F. Love. "High-Field Transverse Magnetoresistance of n-Type Germanium," Bull. Am. Phys. Soc., Ser. II, Vol. 5 (1960), p. 408.
- . "Transverse Magnetoresistance of Germanium in the Quantum Limit," Phys. Rev., Vol. 124 (1 Nov. 1961), pp. 666-68.
- Doherty, W. R. See Matthews, H.
- Dolecek, R. L. "Effect of Oxygen on the Magnetoresistance of Copper," Phys. Rev., Vol. 119 (1 Sept. 1960), pp. 1501-2.

- Dolecek, R. L. See also De Launay, J.
- Donoghue, J. J., and W. P. Eatherly. "A New Method for Precision Measurement of the Hall and Magneto-Resistive Coefficients," Rev. Sci. Instr., Vol. 22 (July 1951), pp. 513-16.
- Donoghue, J. J. See also Eatherly, W. P.
- Donovan, B. "The Magneto-Resistance Effect in Metals at High Frequencies," Proc. Phys. Soc. (London), Vol. 67A (April 1954), pp. 305-14.
- Donovan, B., and G. K. T. Conn. "The Electrical Conductivity of Bismuth Fibers," Parts I and II, Phil. Mag. I: "Magneto Resistance and the Crystalline Structure," Vol. 40 (March 1949), pp. 283-96. II: "Anomalies in the Magneto Resistance," Vol. 41 (Aug. 1950), pp. 770-82.
- Donovan, B. See also Conn, G. K. T.
- Döring, W. "Dependence of Resistance of Nickel Crystal on Direction of Magnetisation," Ann. Physik, Vol. 32 (June 1938), pp. 259-76.
- Drabble, J. R. "Galvanomagnetic Effects in p-Type Bismuth Telluride," Proc. Phys. Soc., Vol. 72 (Sept. 1958), pp. 380-90.
- Drabble, J. R., R. D. Groves, and R. Wolfe. "Galvanomagnetic Effects in n-Type Bismuth Telluride," Proc. Phys. Soc., Vol. 71 (March 1958), pp. 430-43.
- Drabble, J. R., and R. Wolfe. "Anisotropic Galvanomagnetic Effects in Semiconductors," Proc. Phys. Soc., Vol. 69B (Nov. 1956), pp. 1101-8.
- . "Geometrical Effects in Transverse Magnetoresistance Measurements," J. Electronics and Control, Vol. 3 (Sept. 1957), pp. 259-66.
- Drigo, A. "Electrical Resistance of Ferromagnetic Metals in Relation to the Magnetic Properties," Nuovo cimento, Vol. 10 (April 1933), pp. 172-87.
- . "On the Magneto-Resistance of Thin Ferromagnetic Films," Nuovo cimento, Vol. 7 (July 1950), pp. 527-29. (In Italian.)
- . "Resistance of Nickel in Transverse Magnetic Fields at Various Temperatures," Nuovo cimento, Vol. 9 (July 1932), pp. 201-23.
- Drigo, A., and M. Pizzo. "Particular Aspects of the Magnetization of Thin Ferromagnetic Films," Nuovo cimento, Vol. 5 (June 1948), pp. 196-206.

Drigo, A. See also Alocco, G.

Drozhhina, V.I., and Ya. S. Shur. "The Change in the Electrical Resistance of Ferrosilicon in the Magnetic Field (Thomas Effect)," Doklady Akad. Nauk S. S. S. R., Vol. 58, No. 6 (1947), pp. 1017-18.

Drozhhina, V.I., and Y. S. Shur. "On the Variation of the Electric Resistance in a Magnetic Field (Thomson Effect) in Highly Coercive Alloys," J. Tech. Phys. (U. S. S. R.), Vol. 18 (Feb. 1948), pp. 149-52.

Dubrovskii, V.G. See Annaev, R.G.

Duga, J. J. See Willardson, R. K.

Dunlap, W. C., Jr. "Hall Effect and Magnetoresistance in Germanium," Phys. Rev., Vol. 71 (1947), p. 471.

Dykman, I. M., and E. I. Tolpygo. "Magnetoresistance and the Hall Effect in Semiconductors With Hot Electrons and in Plasma," Fiz. Tverdogo Tela, Vol. 4 (April 1962), pp. 896-908. English translation in Soviet Phys.—Solid State, Vol. 4 (Oct. 1962), pp. 659-67.

Eastman, P. C., and W. R. Datars. "Thermal Origin of Nonohmic Magnetoresistance Effects in Semimetals," Can. J. Phys., Vol. 41 (1963), pp. 161-66.

Eastman, P. C. See also Datars, W. R.

Eatherly, W. P., and J. J. Donoghue. "Precision Measurement of the Hall and Magneto-Resistivity Coefficients With Some Results for Graphite," Phys. Rev., Vol. 81 (1951), p. 663.

Eatherly, W. P. See also Donoghue, J. J.

Eck, T. G. See Stark, R. W.

Edmond, J. T., R. F. Broom, and F. A. Cunnell. "The Properties of Gallium Arsenide," Report of the Meeting on Semiconductors, April 1956, Physical Society, London (1957), pp. 109-17.

Efros, A. L. See Gurevich, V. L.

Ellett, M. R. See Cuff, K. F., and Kuglin, C. D.

Emel'yanenko, O. V., and D. N. Nasledov. "The Electrical Properties of GaAs at Low Temperatures," Zhur. Tekh. Fiz., Vol. 28, No. 6 (1958), pp. 1177-87. English translation in Soviet Phys.—Tech. Phys., Vol. 3 (June 1958), pp. 1094-1103.

- Epstein, S., and H. J. Juretschke. "Galvanomagnetic Effects and Band Structure of Pure and Tin-Doped Single-Crystal Antimony," Phys. Rev., Vol. 129 (1963), pp. 1148-59.
- Erfling, H. D., and E. Grüneisen. "Further Investigations With Be Crystals in the Transverse and Longitudinal Magnetic Field," Ann. Phys., Lpz., Vol. 41, No. 2 (1942), pp. 89-99.
- Erfling, H. D. See also Grüneisen, E.
- Esaki, L. "New Effect in Magnetoresistance of Bismuth at Low Temperature," Bull. Am. Phys. Soc., Ser. II, Vol. 7 (24 Jan. 1962), p. 74.
- . "New Phenomenon in Magnetoresistance of Bismuth at Low Temperature," Phys. Rev. Letters, Vol. 8 (1 Jan. 1962), pp. 4-7.
- Estermann, I., and A. Foner. "Magnetoresistance of Germanium Samples Between 20° and 300° K," Phys. Rev., Vol. 79 (15 July 1950), pp. 365-72.
- Ewald, A. W., and E. E. Kohnke. "Measurements of Electrical Conductivity and Magnetoresistance of Gray Tin Filaments," Phys. Rev., Vol. 97 (1 Feb. 1955), pp. 607-13.
- Ewald, A. W., and O. N. Tufté. "Growth and Properties of Gray Tin Single Crystals," International Conference on Semiconductors, Rochester, N. Y., 18-22 August 1958.
- Ewald, A. W. See also Tufté, O. N.
- Fakidov, I. G., and N. P. Grazhdankina. "The Influence of a Magnetic Field on the Electrical Resistance of Ferromagnetic Alloys of Mn and Sb," Doklady Akad. Nauk S. S. S. R., Vol. 66, No. 5 (1949), pp. 847-49. (In Russian.)
- . "The Physical Properties of the Chromium-Germanium Alloys, I," Fiz. Metallov i Metallovedenie, Vol. 6, No. 1 (1958), pp. 67-73. (In Russian.)
- Fakidov, I. G., and V. P. Krasovskii. "The Galvanomagnetic Properties of the Phosphides of Manganese," Fiz. Metallov i Metallovedenie, Vol. 7, No. 2 (1959), pp. 302-4.
- Fakidov, I. G., and E. A. Zavadskii. "Oscillation of the Electric Resistance of n-Type Germanium in Strong Magnetic Fields," Zhur. Eksp. i Teoret. Fiz., Vol. 34 (1958), pp. 1036-37. English translation in Soviet Phys.—JETP, Vol. 7 (Oct. 1958), pp. 716-17.

- Fakidov, I. G. See also Samokhvalov, A. A., and Zavadskii, E. A.
- Fan, H. Y. See Becker, W. M., and Laff, R. A.
- Fawcett, E. "Magnetoresistance of Molybdenum and Tungsten," Phys. Rev., Vol. 128 (1 Oct. 1962), pp. 154-60.
- . "Magnetoresistance of Transition Metals in the High-Field Limit," Phys. Rev. Letters, Vol. 7 (15 Nov. 1961), pp. 370-72.
- Feldmann, W. L. See Tanenbaum, M.
- Firsov, Yu. A. See Gurevich, V. L.
- Fischer, G., and D. K. C. Mac Donald. "Hall Effect and Magneto-Resistance in Indium Antimonide," Phil. Mag., Vol. 2 (Nov. 1957), pp. 1393-95.
- . "Magnetoresistance and Field Dependence of the Hall Effect in Indium Antimonide," Can. J. Phys., Vol. 36 (May 1958), pp. 527-36.
- Fistul, V. I. See Andrianov, D. G.
- Foner, A. See Estermann, I.
- Foroud, A., and E. Justi. "Influence of Strong Magnetic Fields on Resistance of Mo Single Crystals," Phys. Zeits., Vol. 40 (1 Aug. 1939), pp. 501-6.
- Foroud, A., E. Justi, and J. Kramer. "Magneto-Resistance of In," Phys. Zeits., Vol. 41 (15 March 1940), pp. 113-21.
- Frank, N. H. "Change of Metallic (Electrical) Resistance in Intense Magnetic Fields," Z. Physik, Vol. 64, No. 9-10 (1930), pp. 650-56.
- . "Theory of Change of Metallic Resistance in a Magnetic Field," Z. Physik, Vol. 60, No. 9-10 (1930), pp. 682-85.
- Franken, B., and others. "Influence of a Magnetic Field on the Electrical Resistance of Iron Films," Physica, Vol. 18 (Oct. 1952), pp. 771-79. (In English.)
- Frederikse, H. P. R., and W. R. Hosler. "Galvanomagnetic Effects in n-Type Indium Antimonide," Phys. Rev., Vol. 108 (1 Dec. 1957), pp. 1136-45.
- . "Galvanomagnetic Effects in n-Type InSb at 4.2° K," Can. J. Phys., Vol. 34 (Dec. 1956), pp. 1377-78.

Frederikse, H. P. R., and W. R. Hosler. "Galvanomagnetic Effects in p-Type Indium Antimonide," Phys. Rev., Vol. 103 (1 Dec. 1957), pp. 1146-51.

———. "Magnetoresistive Effects in Indium Antimonide and Indium Arsenide," Solid State Phys. in Electronics and Telecommun., Vol. 2 (1960), pp. 651-58.

Frederikse, H. P. R., W. R. Hosler, and D. E. Roberts. "Electrical Conduction in Magnesium Stanide at Low Temperatures," Phys. Rev., Vol. 103 (1 July 1956), pp. 67-72.

Frederikse, H. P. R. See also Hosler, W. R.

Frenkel, J., and T. Kontorowa. "Galvanomagnetic Phenomena in Crystals," Physik. Z. Sowjetunion, Vol. 7, No. 4 (1935), pp. 452-63. (In English.)

Fritzsche, H., and K. Lark-Horovitz. "Electrical Properties of p-Type Indium Antimonide at Low Temperatures," Phys. Rev., Vol. 99 (15 July 1955), pp. 400-405.

Fukuroi, T., S. Tanuma, and Y. Muto. "Electrical Properties of Tellurium Crystals at Very Low Temperatures," Science Repts. Research Insts., Tohoku Univ., Vol. 6A (Feb. 1954), pp. 18-29.

Fukuroi, T., S. Tanuma, and S. Tobisawa. "Electric Resistance, Hall Effect, Magnetoresistance, and Seebeck Effect in a Pure Tellurium Film," Science Repts. Research Insts., Tohoku Univ., Ser. A, Vol. 1 (Dec. 1949), pp. 365-72. (In English.)

———. "The Electromagnetic Properties of Single Crystals of Tellurium. I. Electric Resistance, Hall Effect, Magnetoresistance, and Thermoelectric Power," Science Repts., Research Insts., Tohoku Univ., Ser. A, Vol. 1 (Dec. 1949), pp. 373-86. (In English.)

Fukuroi, T., and C. Yamanouchi. "Electrical Properties of p-Type Indium Antimonide," Science Repts., Research Insts., Tohoku Univ., Sec. A, Vol. 9 (Aug. 1957), pp. 262-66.

Funatogawa, Z. See Gondo, Y.

Furth, H. P., and R. W. Waniek. "High-Field Longitudinal Magnetoresistance of Germanium," Phys. Rev., Vol. 104 (15 Oct. 1956), pp. 343-45.

Furukawa, Y. "Magnetoresistance in Heavily Doped n-Type Germanium," J. Phys. Soc. Japan, Vol. 17 (April 1962), pp. 630-38.

**BLANK PAGE**

- . "Magnetoresistance of Heavily Doped Germanium at Low Temperatures," J. Phys. Soc. Japan, Vol. 18 (May 1963), p. 737.
- Gaidukov, Yu. P. See Alekseevskii, N. E.
- Galavanov, V. V. See Volokobinskaya, N. I.
- Gans, R., and J. V. Harlem. "Resistance Variation in Ferromagnetic Crystals," Ann. Physik, Vol. 15 (Dec. 1932), pp. 516-26.
- García-Moliner, F. "Magnetoresistance and Fermi Surface of Alkali Metals," Proc. Phys. Soc., Vol. 72 (Dec. 1958), pp. 996-1000.
- Gartner, W. W. See Hambleton, G. E.
- Gerber, J. F. See Green, M.
- Gerlach, W. "Change of Electrical Resistance With Magnetisation," Physik. Z., Vol. 33 (15 Dec. 1932), pp. 953-57.
- Gerritsen, A. N. "Low Temperature Resistance and Magnetoresistance of Dilute Alloys of Gold With Cobalt," Physica, Vol. 25 (June 1959), pp. 489-502.
- . "The Magnetoresistances of Alloys of a Noble Metal and a Transition Metal at Low Temperatures," Physica, Vol. 19 (Jan. -Feb. 1953), pp. 61-73. (In English.)
- . "Resistance and Magneto-Resistance of Dilute Alloys of Gold With Iron at Low Temperatures," Physica, Vol. 23 (Dec. 1957), pp. 1087-99.
- Gerritsen, A. N., and J. O. Linde. "The Electrical Resistance of Silver-Manganese Alloys at Low Temperatures. II. The Resistance in a Magnetic Field," Physica, Vol. 17 (June 1951), pp. 584-95. (In English.)
- Gerritsen, A. N. See also Los, G. J.
- Gielessen, J. See Grüneisen, E.
- Gitterman, M. Sh., and others. "Impurity Band Conduction in n-Type GaAs," Fiz. Tverdogo Tela, Vol. 4 (May 1962), pp. 1383-85. English translation in Soviet Phys.—Solid State, Vol. 4 (Nov. 1962), pp. 1017-18.

- Gitsu, D. V., and G. A. Ivanov. "Electrical Properties of Monocrystals of Bismuth and Its Alloys," Parts I and II, Fiz. Tverdogo Tela, Vol. 2 (July 1960). Part I: "Magnetolectric Properties of Pure Bismuth," pp. 1457-63; Part II: "Magnetolectric Properties of Bismuth-Tellurium Alloys (Solid Solutions)," pp. 1464-76. English translation in Soviet Phys.—Solid State, Vol. 2 (Jan. 1961). Part I: pp. 1323-29; Part II: pp. 1330-40.
- Glaubergerman, A. E., and O. M. Muzychuk. "The Theory of Semiconductor Resistance in Strong Magnetic Fields," Ukrain. Fiz. Zhur., Vol. 3 (1958), pp. 178-84.
- Glicksman, M. "Effect of Impurity Scattering on the Magnetoresistance of n-Type Germanium," Phys. Rev., Vol. 108 (15 Oct. 1957), pp. 264-67.
- . "Galvanomagnetic Effects in a Semiconductor With Two Sets of Spheroidal Energy Surfaces," Phys. Rev., Vol. 102 (15 June 1956), pp. 1496-1501.
- . "The Magnetoresistance of Electrons in InP and GaAs," J. Phys. Chem. Solids, Vol. 8 (Jan. 1959), pp. 511-15, 530.
- . "Magnetoresistance of Germanium-Silicon Alloys," Phys. Rev., Vol. 100 (15 Nov. 1955), pp. 1146-47.
- . "The Magnetoresistivity of Germanium and Silicon," Progress in Semiconductors, Vol. 3. London: Heywood, 1958. Pp. 1-25.
- Glicksman, M., and M. C. Steele. "High Electric Field Effects in n-Indium Antimonide," Phys. Rev., Vol. 110 (1 June 1958), pp. 1204-5.
- Glicksman, M. See also Steele, M. C.
- Gold, L., and L. M. Roth. "Galvanomagnetic Theory for Electrons in Germanium and Silicon: Magnetoresistance in the High-Field Saturation Limit," Phys. Rev., Vol. 103 (1 July 1956), pp. 61-66.
- . "Galvanomagnetic Theory for n-Type Germanium and Silicon: Hall Theory and General Behavior of Magnetoresistance," Phys. Rev., Vol. 107 (15 July 1957), pp. 358-64.
- Goldberg, C. "Relaxation Time Anisotropy in n-Type Germanium," Phys. Rev., Vol. 109 (1958), pp. 331-35.
- Goldberg, C., E. N. Adams, and R. E. Davis. "Magnetoconductivity in p-Type Germanium," Phys. Rev., Vol. 105 (1 Feb. 1957), pp. 865-76.

- Goldberg, C., and R. E. Davis. "New Galvanomagnetic Effect," Phys. Rev., Vol. 94 (1 June 1954), pp. 1121-25.
- . "Weak Field Magnetoresistance of n-Type Germanium," Phys. Rev., Vol. 102 (1 June 1956), pp. 1254-57.
- Goldberg, C., and W. E. Howard. "Magnetoresistance Symmetry Relation in n-Germanium," Phys. Rev., Vol. 110 (1 June 1958), pp. 1035-39.
- Goldberg, C. See also Davis, R. E.
- Gonda, S. See Mikoshiba, N.
- Gondo, Y., and Z. Funatogawa. "On the Temperature Dependency of Magnetoresistance Effect of Iron Single Crystal," J. Phys. Soc. Japan, Vol. 7 (Jan. -Feb. 1952), pp. 41-43.
- Gordon, R. B. "Magnetoresistance of the Alloy  $Cu_3Au$ ," Yale Univ. (Feb. 1963), Atomic Energy Commission, TID-18341.
- Gorkun, Yu. I. "The Effect of Current Electrodes on Magnetoresistance," Fiz. Tverdogo Tela, Vol. 3 (Jan. 1961), pp. 236-42. English translation in Soviet Phys.—Solid State, Vol. 3 (July 1961), pp. 173-77.
- Gorter, C. J. "Electrical Resistance of Some Ferromagnetic Metals and Alloys in a Magnetic Field at Low Temperatures," J. phys. radium, Vol. 12 (March 1951), pp. 279-80. (In French.)
- Gorter, C. J. See also Van Elst, H. C.
- Goryaga, A. N. See Belov, K. P.
- Goto, M. See Tatsumoto, E.
- Goureaux, G. "Magnetoresistance of Thin Films of Nickel: Longitudinal Effect," Comptes Rendus Acad. Sci. (Paris), Vol. 252 (6 Feb. 1961), pp. 858-60.
- . "Magnetoresistance of Thin Nickel Films: Consequences," Electrical and Magnetic Properties of Thin Metallic Layers, Proceedings of an International Conference, Liege, 1961. Brussels: Koninklijke Vlaamse Academie voor Wetenschappen, 1961. Pp. 77-90. (In French.)
- Goureaux, G., and A. Colombani. "Magnetoresistance of Thin Films of Nickel: Perpendicular Effect," Comptes Rendus Acad. Sci. (Paris), Vol. 250 (27 June 1960), pp. 4310-12.

- Gray, V. "Tables of the Conductivity Coefficients in Transverse Magnetic Fields  $K(\gamma)$  and  $L(\gamma)$ ," J. Appl. Phys., Vol. 34 (1963), pp. 291-93.
- Grazhdankina, N. P. See Fakidov, I. G.
- Green, M. "Corbino Disk Magnetoresistivity Measurements on InSb," J. Appl. Phys., Vol. 32 (July 1961), pp. 1286-89.
- . "Electrode Geometries for Which the Transverse Magnetoresistance Is Equivalent to That of a Corbino Disk," Solid State Electronics, Vol. 3 (Nov. -Dec. 1961), pp. 314-16.
- Green, M., and J. F. Gerber. "Magnetoresistance in Thin Films of Bismuth and Antimony," Bull. Am. Phys. Soc., Ser. II, Vol. 8 (1963), p. 52.
- Greenberg, I. N. See Beer, A. C.
- Grenier, C. G. See Bergeron, C. J., and Bordoloi, K.
- Griffiths, J. H. E. "Anomalous High-Frequency Resistance of Ferromagnetic Metals," Nature, Vol. 158 (9 Nov. 1946), pp. 670-71.
- Grinberg, A. A., and S. R. Novikov. "Application of the Longitudinal and Transverse Magneto-Concentration Effects in the Determination of the Magnetoresistance Coefficients in Anisotropic Crystals of Cubic Symmetry," Fiz. Tverdogo Tela, Vol. 2 (Nov. 1960), pp. 2713-17. English translation in Soviet Phys.—Solid State, Vol. 2 (May 1961), pp. 2415-19.
- Groetzinger, G. See Wiener, B.
- Gross, F. "Change of Resistance of Thin Sheets of Bismuth in the Magnetic Field," Z. Physik, Vol. 64, No. 7-8 (1930), pp. 520-36.
- Groves, R. D. See Drabble, J. R.
- Grum-Grzhimailo, N. V. "Electrical Resistance of Iron, Copper and Nickel Alloys in a Longitudinal Magnetic Field," Izvest. Sektora Fiz.—Khim. Anal., Akad. Nauk S. S. S. R., Vol. 23 (1953), pp. 101-9.
- Grüneisen, E. "Effect of Transverse Magnetic Field on Thermal Resistance of Pure Metals," Ann. Physik, Vol. 32 (May 1938), pp. 219-24.
- Grüneisen, E., and H. Adenstedt. "Influence of Transverse Magnetic Fields on Electrical and Thermal Conductivity of Pure Metals at Low Temperatures," Ann. Physik, Vol. 31 (April 1938), pp. 714-44.

- Grüneisen, E., and H. D. Erfing. "Electric and Thermal Resistance of Be Crystals in Transverse Magnetic Fields," Ann. Phys., Lpz., Vol. 38, No. 5 (1940), pp. 399-420.
- Grüneisen, E., and J. Gielessen. "Thermal and Electrical Conduction of Bismuth Crystals in Transverse Magnetic Fields," Ann. Physik, Vol. 26 (July 1936), pp. 449-64.
- Grüneisen, E., K. Rausch and K. Weiss. "Electrical and Thermal Conduction of Single Crystals of Bismuth in Transverse Magnetic Fields," Ann. Phys., Lpz., Vol. 7, No. 1-2 (1950), pp. 1-17. (In German.)
- Grüneisen, E. See also Erfing, H. D.
- Gugan, D., and B. K. Jones. "The Magnetoresistance of Lithium," Helv. Phys. Acta, Vol. 36, No. 1 (1963), pp. 7-11.
- Gupta, M. M. S., and M. S. Alam. "Physical Significance of Apparent Irregularities in the Magneto-Resistance Curves of Nickel," Indian J. Phys., Vol. 8 (15 July 1933), pp. 9-17.
- Gupta, M. M. S., H. B. Mohanti, and S. Sharan. "A. C. Resistance of Nickel in a Longitudinal Magnetic Field," Z. Physik, Vol. 98 (14 Dec. 1935), pp. 262-66.
- Gupta, M. S. "Theory of Semiconductors in Magnetic Fields," Indian J. Phys., Vol. 11 (Dec. 1937), pp. 319-32.
- Gurevich, V. L., Yu. A. Firsov, and A. L. Efros. "New Type of Magnetoresistivity Oscillations in Semiconductors and Semimetals," Fiz. Tverdogo Tela, Vol. 4 (July 1962), pp. 1813-19. English translation in Soviet Phys.—Solid State, Vol. 4 (Jan. 1963), pp. 1331-34.
- Hajdu, J. "Theory of Magnetoresistance," Parts I-III, Z. Physik. Part I: Vol. 160, No. 1 (1960), pp. 47-58; Part II: Vol. 160, No. 5 (1960), pp. 481-90; Part III: Vol. 163, No. 1 (1961), pp. 108-18.
- Hake, R. R., D. H. Leslie, and T. G. Berlincourt. "Low-Temperature Resistivity Minima and Negative Magnetoresistivities in Some Dilute Superconducting Ti Alloys," Phys. Rev., Vol. 127 (1 July 1962), pp. 170-79.
- Hake, R. R. See also Berlincourt, T. G.
- Halpern, L., and K. M. Koch. "The Corbino Effect and Magnetoresistance in Bismuth," Acta Phys. Austriaca, Vol. 5, No. 1 (1951), pp. 129-33. (In German.)

- Hambleton, G. E., and W. W. Gartner. "Microwave Hall Effect in Germanium and Silicon at 20 kMc," International Conference on Semiconductors, Rochester, N. Y., 18-22 Aug. 1958.
- Handler, P. See Landwehr, G.
- Harding, J. W. "Change of Resistance of a Semi-Conductor in a Magnetic Field," Roy. Soc., Proc., Vol. 140 (1 April 1933), pp. 205-22.
- Harlem, J. V. See Gans, R.
- Harman, T. C. "Angular Dependence of Magnetoresistance in HgSe," J. Appl. Phys., Vol. 32 (Sept. 1961), pp. 1800-1801.
- Harman, T. C., R. K. Willardson, and A. C. Beer. "Analysis of Magnetoresistance and Hall Coefficient in p-Type Indium-Antimonide and p-Type Germanium," Phys. Rev., Vol. 95 (1 Aug. 1954), pp. 699-702.
- Harman, T. C. See also Willardson, R. K.
- Harper, H. T. See Teutsch, W. B.
- Hasegawa, H. See Kubo, R.
- Hashitsume, N. See Kubo, R.
- Hasiguti, R. R., E. Matsuura, and K. Matsui. "Magneto-Resistance of  $\gamma$ -Irradiated n-Type Silicon," International Conference on Semiconductor Physics, Prague, 1960. New York: Academic Press, 1961. Pp. 312-16.
- Haslett, J. See Love, W. F.
- Hatoyama, G. M. See Sasaki, W.
- Hatton, J., and B. V. Rollin. "The Electrical Properties of Indium Antimonide at Low Temperatures," Proc. Phys. Soc. (London), Vol. 67A (April 1954), pp. 385-86.
- Hayashi, J. F. "Forced Magnetoresistance in Ferromagnetic Alloys," Mem. Coll. Sci. Univ. Kyoto, Vol. 30A (Aug. 1962), pp. 39-50.
- Heaps, C. W. "Discontinuities of Resistance Associated With the Barkhausen Effect," Phys. Rev., Vol. 45 (1 March 1934), pp. 320-23.
- . "Magnetoresistance of Bismuth at 3000 Megacycles," Phys. Rev., Vol. 80 (1 Dec. 1950), pp. 872-94.

- . "The Magnetoresistance of Nickel in Large Fields," Phys. Rev., Vol. 55 (1 June 1939), pp. 1069-71.
- Hellenthal, W. "The Dependence of Magnetoresistance Changes in Evaporated Nickel Films on Thickness and Structure," Z. Physik, Vol. 151, No. 4 (1958), pp. 421-30. (In German.)
- . "The Determination of the Curie Temperature of Thin Films by Means of the Magnetoresistance Effect," Z. Naturforsch., Vol. 13a (July 1958), pp. 566-67.
- . "On the Frequency Dependence of the Coercivity of Thin Evaporated Nickel Films, Measured in an Alternating Magnetic Field," Z. Naturforsch., Vol. 14a (Dec. 1959), pp. 1077-78.
- Herring, C. "Effect of Random Inhomogeneities on Electrical and Galvanomagnetic Measurements," J. Appl. Phys., Vol. 31 (Nov. 1960), pp. 1939-53.
- . "Transport Properties of a Many-Valley Semiconductor," Bell Syst. Tech. J., Vol. 34 (March 1955), pp. 237-90.
- Herring, C. See also Pearson, G. L.
- Hilsum, C. "Galvanomagnetic Effects and Their Application," Brit. J. Appl. Phys., Vol. 12 (March 1961), pp. 85-91.
- Hilsum, C., and R. Barrie. "Properties of  $\gamma$ -Type Indium Antimonide. I. Electrical Properties," Proc. Phys. Soc., Vol. 71 (1958), pp. 676-85.
- Hirsch, A. A. "Electrical Resistivity of Thin Ferromagnetic Layers at Low Temperatures," Physica, Vol. 24, Supplement (Sept. 1958), S173.
- . "Influence of a Magnetic Field on the Electrical Resistance of Thin Ferromagnetic Layers at Low Temperatures," Physica, Vol. 25 (July 1959), pp. 581-89.
- Hopfield, J. J. "Classical Explanation of the Anomalous Magnetoresistance of Bismuth," Phys. Rev. Letters, Vol. 8 (15 April 1962), pp. 311-12.
- Hosler, W. R., and H. P. R. Frederikse. "Galvanomagnetic Effects in InSb," Phys. Rev., Vol. 98 (1955), p. 1532.
- Hosler, W. R. See also Frederikse, H. P. R.
- Howard, W. E. See Goldberg, C.

- Huet, P., and A. Colombani. "Magnetoresistance in Thin Films of Bismuth," Comptes Rendus, Vol. 244 (18 March 1957), pp. 1626-29. (In French.)
- Huet, P. See also Colombani, A.
- Igosheva, T. N. See Kikoin, I. K.
- Irie, T. "Magnetoresistance Effect of Lead Sulfide Group of Semiconductors. I. Measurements on Natural Specimens of Lead Sulphide," J. Phys. Soc. Japan, Vol. 11 (Aug. 1956), pp. 840-46.
- Ivanov, G. A. See Gitsu, D. V.
- Jacobs, I. S. See Schmitt, R. W.
- Jaffee, H. "Electrical Conductivity and Galvanomagnetic Effect in a Metallic Compound of Li and  $\text{NH}_3$ ," Z. Physik, Vol. 93 (26 Feb. 1935), pp. 741-61.
- Jan, J. P. "The Phenomenological Treatment of Electrical and Thermal Conduction and Its Application to Transverse Galvanomagnetic and Thermomagnetic Phenomena," Helv. Phys. Acta, Vol. 26, No. 3-4 (1953), pp. 281-90. (In French.)
- Johnson, V. A., and W. J. Whitesell. "Theory of the Magnetoresistive Effect in Semiconductors," Phys. Rev., Vol. 89 (1 March 1953), pp. 941-47.
- Johnson, V. A. See also Whitesell, W. J., II.
- Jones, B. K. See Guban, D.
- Jones, H. "Galvanomagnetic Effects in Bismuth," Roy. Soc., Proc., Vol. 155A (1 July 1936), pp. 653-63.
- Jones, H., and C. Zener. "Theory of Change of Resistance in a Magnetic Field," Roy. Soc., Proc., Vol. 145 (2 June 1934), pp. 268-77.
- Jongenburger, P. "The Influence of Plastic Deformation on the Transverse Magnetoresistance of Polycrystalline Copper, Silver and Gold," Acta Met., Vol. 9 (Nov. 1961), pp. 985-91.
- Jonker, G. H., J. H. van Santen, and J. Volger. "Semiconductors Having a Positive Temperature Coefficient and a Negative Coefficient in Magnetic Fields," German Patent 808,851 (to N. V. Philips' Gloeilamp-fabrieken), 19 July 1951.

- Juretschke, H. J. "Electromagnetic Theory of D.C. Effects in Ferromagnetic Resonance," J. Appl. Phys., Vol. 31 (Aug. 1960), pp. 1401-6.
- . "Galvanomagnetic and Magnetic Properties of Thin Nickel-Iron Films," U. S. Gov. Res. Rep., Vol. 35 (1961), p. 796. (PB 171 569.)
- Juretschke, H. J. See also Coren, R. L., and Epstein, S.
- Justi, E. "Electrical Resistance, Magnetic Variation of Resistance and Hall Effect of Alkali Metals," Ann. Physik, Vol. 3 (1948), pp. 183-98. (In German.)
- . "Electrical Resistance of Polycrystalline Au, Pb, Nb, and Ta Under Strong Magnetic Crossfields at Low Temperatures," Physik. Z., Vol. 41 (15 Nov. 1940), pp. 486-98.
- . "Resistance Increase in Magnetic Fields and Conduction Types of the Metals," Physik. Z., Vol. 41 (15 Dec. 1940), pp. 563-70. Also Z. Techn. Physik., Vol. 21, No. 12 (1940), pp. 315-21.
- Justi, E., and J. Kramer. "Anisotropy of Electrical Resistance of Na in Magnetic Field," Physik. Z., Vol. 41 (1 March 1940), pp. 105-6.
- Justi, E., and G. Lautz. "The Impurity and Intrinsic Semiconduction of Intermetallic Compounds, II," Z. Naturforsch., Vol. 7a (1952), pp. 602-13.
- Justi, E., and H. Scheffers. "Change of Resistance of Aluminum Single Crystals in Strong Magnetic Fields at Low Temperatures," Physik. Z., Vol. 39 (1 Feb. 1938), pp. 105-9.
- Justi, E., and G. Vieweg. "The Problem of Magnetic Resistance Changes in Solid Rectifiers," Z. Naturforsch., Vol. 5a (April 1950), pp. 231-33.
- Justi, E. See also Foroud, A.
- Kaganov, M. I., and V. G. Peschanskii. "Galvanomagnetic Effects in Metals With Nearly Equal Numbers of Electrons and Holes," Zhur. Eksp. i Teoret. Fiz., Vol. 35 (Oct. 1958), pp. 1052-53. English translation in Soviet Phys. - JETP, Vol. 8 (April 1959), p. 734.
- Kaganov, M. I. See also Lifshits, I. M.
- Kanai, Y. "On the Galvanomagnetic Effects in n-Type Indium Antimonide," J. Phys. Soc. Japan, Vol. 10 (Aug. 1955), pp. 718-19.
- Kanai, Y., R. Nii, and N. Watanabe. "Oscillatory Magnetoresistance in n-Type PbTe," J. Phys. Soc. Japan, Vol. 15 (1960), p. 1717.

Kanai, Y., and W. Sasaki. "Galvanomagnetic Effects in n-Type Indium Antimonide at Very Low Temperatures," J. Phys. Soc. Japan, Vol. 12 (Oct. 1957), p. 1169.

———. "Oscillatory Galvanomagnetic Effects in n-Type Indium Antimonide," J. Phys. Soc. Japan, Vol. 11 (Sept. 1956), pp. 1017-18.

Kanai, Y. See also Sasaki, W.

Kapitza, P. "Change of Resistance in Strong Magnetic Fields," Z. Physik, Vol. 69 (12 May 1931), pp. 421-23.

———. "Change of Resistance of Gold Crystals at Very Low Temperatures in a Magnetic Field and Superconductivity," Roy. Soc., Proc., Vol. 126 (3 March 1930), pp. 683-95. Also Physik. Z., Vol. 31 (1 Aug. 1930), pp. 713-20.

Kapustyan, E. K. See Annaev, R. G.

Karasik, V. R. "Investigation of the Hall Effect and Transverse Magnetoresistance in Germanium in Fields Up to 400 kOe," Doklady Akad. Nauk S. S. S. R., Vol. 130 (Jan. 1960), pp. 521-22. English translation in Soviet Phys. —Doklady, Vol. 5 (July-Aug. 1960), pp. 100-101.

Kaye, G. W. C. "Thermal and Electrical Resistance of Bismuth Single Crystals. Effects of Temperature and Magnetic Fields," Roy. Soc., Proc., Vol. 170A (21 April 1939), pp. 561-83.

Kemmey, P. J., and E. W. J. Mitchell. "The Magnetoresistance of p-Type Semi-Conducting Diamond," Proc. Roy. Soc., Vol. 263A (19 Sept. 1961), pp. 420-32.

Kern, R. See Busch, G. A.

Keyes, R. W. "Elastoresistance and Magnetoresistance in Multivalley Semiconductors With an Axis of Symmetry," J. Electronics, Vol. 2 (Nov. 1956), pp. 279-92.

———. "Isotropic Approximation to the Magnetoresistance of a Multivalley Semiconductor," Phys. Rev., Vol. 109 (1 Jan. 1958), pp. 43-46.

Keyes, R. W. See also Adams, E. N., and Sladek, R. J.

Khalilov, A. Yu. See Nasledov, D. N.

Kikoin, I. K., N. A. Babushkina, and T. N. Igosheva. "On the Magnetic Change in Resistance of Ferromagnetics Above the Curie Point," Zhur. Eksp. i Teoret. Fiz., Vol. 39 (Oct. 1960), pp. 1172-74. English translation in Soviet Phys. —JETP, Vol. 12 (April 1961), pp. 816-17.

- Kimura, H., and E. Tatsumoto. "Temperature Dependence of Magnetoresistance Coefficients in Silicon-Iron," J. Sci. Hiroshima Univ., Vol. 23A (April 1959), pp. 113-22.
- King, R. E. J., and B. E. Bartlett. "Properties and Applications of Indium Antimonide," Philips Tech. Rev., Vol. 22, No. 7 (1960-61), pp. 217-25.
- Klauder, J. R., and J. E. Kunzler. "Higher Order Open Orbits and the Interpretation of Magnetoresistance and Hall Effect Data for Copper," The Fermi Surface, ed. W. A. Harrison and M. B. Webb. New York: Wiley, 1960. Pp. 125-33, 141-44.
- Klinger, M. I. "Remarks on the Low-Temperature Anomalies in the Impurity Semiconductors, I-II," Zhur. Tekh. Fiz., Vol. 27, No. 8 (1957), pp. 1915-19, 1919-22. English translation in Soviet Phys. — Tech. Phys., Vol. 2 (Aug. 1957), pp. 1782-88.
- Klinger, M. I., and P. I. Voronyuk. "Galvanomagnetic Effects in n-Type Germanium and Silicon Single Crystals for Strong Magnetic Fields," Zhur. Tekh. Fiz., Vol. 27, No. 7 (1957), pp. 1609-13. English translation in Soviet Phys. — Tech. Phys., Vol. 2 (1957), pp. 1491-4.
- . "Magnetoresistive Effects in n-Ge Type Semiconductors Located in Strong Magnetic Fields," Zhur. Eksp. i Teoret. Fiz., Vol. 33, No. 1 (1957), pp. 77-87. English translation in Soviet Phys. — JETP, Vol. 6 (Jan. 1958), pp. 59-66.
- Knook, B. "The Electrical Resistance and the Magnetoresistance of Dilute Alloys of Gold With Rhodium, Palladium and Molybdenum and of Silver with Palladium at Low Temperatures," Physica, Vol. 24, Supplement (Sept. 1958), pp. S174-75.
- Kobayashi, A. See Sugiyama, K.
- Kobayashi, K., and F. C. Brown. "Hall Effect for Electrons in Silver Chloride," Air Force Office of Scientific Research, Report TN-58-743, Aug. 1958. (ASTIA AD 201 509.)
- Koch, K. M. "The Corbino Effect and the Change of Resistance in a Magnetic Field," Phys. Rev., Vol. 82 (1 May 1951), p. 460.
- Koch, K. M. See also Halpern, L., and Nedoluha, A.
- Koenigsberg, E. "Conductivity of Thin Films in a Longitudinal Magnetic Field," Phys. Rev., Vol. 91 (1 July 1953), pp. 8-9.

Kohler, M. "Change of Electrical Resistance of Different Conductors in a Magnetic Field," Naturwiss., Vol. 36, No. 3 (1949), p. 86. (In German.)

———, "Influence of Magnetic Fields on Electrical Resistance of Pure Metals," Ann. Physik, Vol. 32 (May 1938), pp. 211-18.

———, "Magnetic Resistance Change and Conductivity Types, I-II," Ann. Phys., Lpz., Vol. 5, No. 1-2 (1949), pp. 89-107. (In German.)

———, "Resistance Changes in Crystalline Media in Magnetic Fields," Ann. Physik, Vol. 20 (Sept. 1934), pp. 891-908.

———, "Resistivity Changes of Bivalent Metals, Having Body-Centered Cubic Structure, in Transverse and Longitudinal Fields," Physik. Z., Vol. 39 (1 Jan. 1938), pp. 9-23.

———, "Theory of Magnetic Resistance Effects in Metals," Ann. Phys., Lpz., Vol. 6 (1949), pp. 18-38. (In German.)

Kohnke, E. E. "Electrical Conductivity, Magnetoresistance, and Hall Effect in Gray Tin Filaments," Univ. Microfilms, Publ. No. 15141, Dissertation Abstr., Vol. 16 (1956), pp. 142-43.

Kohnke, E. E. See also Ewald, A. W.

Koike, R., and H. E. M. Barlow. "Microwave Measurements on the Magnetoresistance Effect in Semiconductors," Proc. Instn. Elect. Engrs., Vol. 1093 (1962), pp. 137-44.

Kojima, H. See Okamura, T.

Kolodin, M. V. See Annaev, R. G.

Komar, A. "The Spontaneous Magnetization and Electrical Resistance of the Alloy  $Ni_3Mn$ ," J. Phys. (U. S. S. R.), Vol. 7, No. 5 (1943), pp. 229-34.

Komar, A., and I. Portnyagin. "The Anomalous Change of the Electric Resistivity of the  $Ni_3Mn$  Alloy in the Magnetic Field," Doklady Akad. Nauk S. S. S. R., Vol. 60, No. 4 (1948), pp. 569-70.

———, "Electric Resistance of the  $Cu_3Pd$  Alloy in a Transverse Magnetic Field and the Long-Range Order of Atoms," Doklady Akad. Nauk S. S. S. R., Vol. 60 (1948), pp. 365-66.

Komastubara, K., and H. Kurono. "The Effect of Magnetic Field on the Low-Temperature Breakdown in Highly Compensated Germanium," J. Phys. Soc. Japan, Vol. 18 (May 1963), pp. 660-66.

- Kondo, J. "Anomalous Hall Effect and Magnetoresistance of Ferromagnetic Metals," Progr. Theoret. Phys. (Kyoto), Vol. 27 (April 1962), pp. 772-92.
- Kondo, K. "On the Properties of a Ferromagnetic Alloy of Manganese and Bismuth at Low Temperatures. II. Electrical Conduction and Galvanomagnetic Effects," J. Phys. Soc. Japan, Vol. 5 (Sept. -Oct. 1950), pp. 307-10.
- Kontorowa, T. See Frenkel, J.
- Koretz, M. "Change of the Resistance of Alkali Metals in a Magnetic Field," Physik. Z. Sowjetunion, Vol. 5, No. 6 (1934), pp. 877-86. (In English.)
- Kosevich, A. M. See Lifshits, I. M.
- Koshel, O. N. See Sytenko, T. N.
- Kostina, T. I. See Alekseevskii, N. E.
- Kot, M. V. See Andronik, I. K.
- Kramer, J. See Foroud, A., and Justi, E.
- Krasovskii, V. P. See Fakidov, I. G.
- Ku, S. M. See Black, J.
- Kubo, R., H. Hasegawa, and N. Hashitsume. "Theory of Galvanomagnetic Effect at High Magnetic Field," Phys. Rev. Letters, Vol. 1 (15 Oct. 1958), pp. 279-81.
- Kubo, R. See also Miyake, S. J.
- Kuglin, C. D., M. R. Ellett, and K. F. Cuff. "Oscillatory Magnetoresistance in n-Type PbTe," Phys. Rev. Letters, Vol. 6 (15 Feb. 1961), pp. 177-79.
- Kuglin, C. D. See also Cuff, K. F.
- Kuhr, F. See Lippmann, H. J.
- Kunzler, J. E. See Klauder, J. R.
- Kurono, H. See Komastubara, K.
- Kuwahara, I. K. "Longitudinal Magneto-Resistance Effect of Narrow Single Crystal Strips of Iron," J. Sci. Hiroshima Univ., Vol. 18A (June 1954), pp. 87-94.

- Kuwahara, K. "Magnetoresistance Effect in Aluminum-Iron," J. Sci. Hiroshima Univ., Vol. 22A (Dec. 1958), pp. 267-80.
- Kuwahara, K. See also Tatsumoto, E.
- Laff, R. A., and H. Y. Fan. "Magnetoresistance in n-Type Germanium at Low Temperatures," Phys. Rev., Vol. 112 (1958), pp. 317-21.
- Landwehr, G., and P. Handler. "Galvanomagnetic Properties of Grain Boundaries in Germanium Bicrystals From 1.25 to 240°K," J. Phys. Chem. Solids, Vol. 23 (July 1962), pp. 891-906.
- Lark-Horovitz, K. See Fritzsche, H.
- Larrabee, R. D. "Majority Carrier Magnetosurface Effect," J. Appl. Phys., Vol. 32 (Oct. 1961), pp. 2019-26.
- Lasarew, B. G., and M. M. Noskov. "Change of Resistance of Zn Single Crystals in a Magnetic Field," Physik. Z. Sowjetunion, Vol. 13, No. 1 (1938), pp. 130-32. (In English.)
- Launay, J. "Hall Effect and Magnetoresistance of Thin Films of Indium Antimonide," Comptes Rendus Acad. Sci. (Paris), Vol. 245 (30 Sept. 1957), pp. 1122-24.
- Lautz, G., and W. Ruppel. "Low Temperature Measurements of the Magnetoresistance and the Reduced Kohler Diagram of Rhenium Wires," Z. Naturforsch., Vol. 11a (May 1956), pp. 379-82.
- . "On the Magnetoresistance of Ge Single Crystals Between 10° and 300°K," Z. Naturforsch., Vol. 10a, No. 7 (1955), pp. 521-26.
- Lautz, G., and E. Tittes. "Experimental Investigation of the Magnetoresistance Effect in Corbino Discs of Copper and Gold at Low Temperatures," Z. Naturforsch., Vol. 13a (Oct. 1958), pp. 866-74.
- Lautz, G. See also Justi, E.
- Lax, B. See Mavroides, J. G.
- Lazarev, B. G. See Borovik, E. S.
- Lerner, L. S. "Shubnikov-De Haas Effect in Bismuth," Phys. Rev., Vol. 127 (1 Sept. 1962), pp. 1480-92.
- Leslie, D. H. See Hake, R. R.

- Lewis, B. F., and E. H. Sondheimer. "The Theory of the Magnetoresistance Effects in Polar Semiconductors," Proc. Roy. Soc. (London), Vol. 227A (7 Jan. 1955), pp. 241-51.
- Lifshits, I. M. "Quantum Theory of Electrical Conductivity of Metals in a Magnetic Field," Zhur. Eksp. i Teoret. Fiz., Vol. 32, No. 6 (1957), pp. 1509-18. English translation in Soviet Phys. - JETP, Vol. 5 (1957), pp. 1227-34. Also in J. Phys. Chem. Solids, Vol. 4, No. 1-2 (1958), pp. 11-18.
- Lifshits, I. M., M. Ya. Azbel, and M. I. Kaganov. "On the Theory of Galvanomagnetic Phenomena in Metals," Zhur. Eksp. i Teoret. Fiz., Vol. 31, No. 1 (1956), pp. 63-79. English translation in Soviet Phys. - JETP, Vol. 4 (Feb. 1957), pp. 41-54.
- Lifshits, I. M., and A. M. Kosevich. "On the Theory of the Shubnikov-De Haas Effect," Zhur. Eksp. i Teoret. Fiz., Vol. 33, No. 1 (1957), pp. 88-100. English translation in Soviet Phys. - JETP, Vol. 6 (Jan. 1958), pp. 67-77.
- Likhter, A. I. See Sekoyan, S. S.
- Linde, J. O. See Gerritsen, A. N.
- Lippmann, H. J., and F. Kuhrt. "The Effect of Geometry on Hall Magnetoresistive Effects in Rectangular Semiconductor Specimens," Naturwissenschaften, Vol. 45, No. 7 (1958), pp. 156-57. (In German.)
- . "The Geometrical Effect on the Transverse Magnetoresistance of Rectangular Disks of Semiconductor," Z. Naturforsch., Vol. 13A (June 1958), pp. 462-74. (In German.)
- Logan, J. K. "Low-Temperature Magnetoresistance of Gold in Fields Up to 50 Kilogausses," Phys. Rev., Vol. 94 (1954), pp. 1433-34.
- Logan, J. K. See also Berlincourt, T. G.
- Long, D. "Galvanomagnetic Effects in p-Type Silicon," Phys. Rev., Vol. 107 (1 Aug. 1957), pp. 672-77.
- Long, D., C. D. Motchenbacher, and J. Myers. "Impurity Compensation and Magnetoresistance in p-Type Silicon," J. Appl. Phys., Vol. 30 (March 1959), pp. 353-62.
- Long, D., and J. Myers. "Scattering Anisotropies in n-Type Silicon," Phys. Rev., Vol. 120 (1960), pp. 39-44.

- Long, D., and J. Myers. "Weak-Field Magnetoresistance in p-Type Silicon," Phys. Rev., Vol. 109 (15 Feb. 1958), pp. 1098-1102.
- Lőrinczy, A., and P. Szebeni. "On the Magnetoresistance of Germanium," Acta Phys. Hungar., Vol. 11, No. 2 (1960), pp. 209-11. (In German.)
- Los, G. J., and A. N. Gerritsen. "Resistance and Magneto-Resistance of Dilute Alloys of Copper and Gold With Nickel at Low Temperatures," Physica, Vol. 23 (July 1957), pp. 633-40.
- Love, W. F., and J. Haslett. "Galvanomagnetic Properties of n-Type Indium Antimonide in Pulsed Magnetic Fields at Low Temperatures," International Conference on Semiconductors, Rochester, N. Y., 18-22 Aug. 1958.
- Love, W. F., and W. F. Wei. "Longitudinal Magnetoresistance in n-Type Germanium: Experimental," Phys. Rev., Vol. 123 (1 July 1961), pp. 67-73.
- Love, W. F. See also Diesel, T. J., and Wei, W. F.
- Lüthi, B. "Longitudinal Magnetoresistance of Metals in High Fields," Phys. Rev. Letters, Vol. 2 (15 June 1959), pp. 503-4.
- . "Magnetoresistance of Metals in High Magnetic Fields," Physica, Vol. 24, Supplement (Sept. 1958), p. S173.
- . "Variation of the Resistance of Metals in High Magnetic Fields," Helv. Phys. Acta, Vol. 33, No. 2 (1960), pp. 161-82.
- Lüthi, B., and J. L. Olsen. "A New Effect in the Magnetoresistance of Aluminium," Nuovo cimento, Ser. 10, Vol. 3 (April 1956), pp. 840-41.
- Lüthi, B. See also Cotti, P.
- Lyashenko, V. I., O. V. Snitko, and T. N. Sytenko. "Combined Investigation of the Surface Properties of Germanium. I. The Effect of an External Electric Field on the Electrical Conductivity, Hall Constant and Magnetoresistance of Germanium," Fiz. Tverdogo Tela, Sbornik (Supplement) 1 (1959), pp. 3-10.
- Lyashenko, V. I., and T. N. Sytenko. "Conductivity of a Ge Surface," Ukrain. Fiz. Zhur., Vol. 3, No. 1 (1958), pp. 64-70. (In Ukrainian.)
- Mac Alpine, W. W. "Resistance of Bismuth in Alternating Magnetic Fields," Phys. Rev., Vol. 37 (1 March 1931), pp. 624-33.
- McClure, J. W. See Soule, D. E.

- McCollum, R. See Wiener, B.
- MacDonald, D. K. C. "Influence of a Magnetic Field on the Size Variation of Electrical Conductivity," Nature, Vol. 163 (23 April 1949), pp. 637-38.
- . "Magneto-Resistance in Metals," Phil. Mag., 8th ser., Vol. 2 (Jan. 1957), pp. 97-112.
- . "The Magneto-Resistance of the Alkali Metals," Proc. Phys. Soc. (London), Vol. 63A (March 1950), pp. 290-92.
- . "Properties of Metals at Low Temperatures," Progr. in Metal Phys., Vol. 3 (1952), pp. 42-75.
- MacDonald, D. K. C., and K. Sarginson. "Galvanomagnetic Effects in Conductors," Rep. Phys. Soc. Progr. Phys., Vol. 15 (1952), pp. 249-74.
- Mac Donald, D. K. C. See also Barron, T. H. K., Fischer, G., and Sarginson, K.
- MacDonald, J. R., and J. E. Robinson. "A. C. Hall and Magnetoresistive Effects in Photoconducting Alkali Halides," Phys. Rev. (1 July 1954), pp. 44-50.
- McKeehan, L. W. "Electrical Resistance of Nickel and Permalloy Wires as Affected by Longitudinal Magnetisation and Tension," Phys. Rev., Vol. 36 (1 Sept. 1930), pp. 948-77.
- . "Magneto-Strain and Magneto-Resistance," Phys. Rev., Vol. 39 (15 Jan. 1932), pp. 368-71.
- Mackintosh, A. R., L. E. Spanel, and R. C. Young. "Magnetoresistance and Fermi Surface Topology of Thallium," Phys. Rev. Letters, Vol. 10 (15 May 1963), pp. 434-37.
- Mackintosh, I. M. "Low Temperature Magnetoresistance Anomalies in Indium Antimonide," Proc. Phys. Soc., Vol. 69 (1956), pp. 403-6.
- Madelung, O. "The Galvanomagnetic Effects in Semiconductors," Naturwissenschaften, Vol. 42, No. 14 (1955), pp. 406-10.
- Mansfield, R. "The Magneto-Resistance Effect in Indium Antimonide," J. Electronics, Vol. 1 (Sept. 1955), pp. 175-77.
- Marchand, A. See Pacault, A.

- Marcus, J. A. "Oscillatory Hall Effect and Magnetoresistance of Bismuth," Phys. Rev., Vol. 98 (1955), p. 1540.
- Marcus, J. A. See also Connell, R. A., and Reed, W. A.
- Masumi, T. "Relaxation Time Anisotropy in Cadmium Sulphide Studied With Electrical Resistivity and Magnetoresistance Effect," J. Phys. Soc. Japan, Vol. 14 (Jan. 1959), pp. 47-56.
- Masumi, T. See also Suge, Y., and Tanaka, S.
- Masumoto, H., and Y. Shirakawa. "The Change in the Electric Resistance of a Single Crystal of Magnetite by Magnetic Field at Low Temperatures," Phys. Rev., Vol. 60 (1 Dec. 1941), p. 835.
- . "Longitudinal Magneto-Resistance Effect in Nickel-Copper Alloys," Tohoku Univ., Sci. Reports, Vol. 25 (April 1936), pp. 104-27.
- Matsui, K. See Hasiguti, R. R.
- Matsuura, E. See Hasiguti, R. R.
- Matthews, H., and W. R. Doherty. "Magnetoresistance Measurements by Means of Arbitrarily Shaped Flat Samples," J. Electronics and Control, Vol. 10 (April 1961), pp. 273-76.
- Matuyama, Y. "Magneto-Resistance of Bismuth, Nickel, Iron, Cobalt and Heusler Alloy," Tohoku Univ., Sci. Reports, Vol. 23 (Nov. 1934), pp. 537-588. (In English.)
- Matyas, M., and J. Skacha. "Magnetoresistance Measurements on p-Type GaSb," Czech. J. Phys., Vol. 12, No. 7 (1962), pp. 566-67.
- Mavroides, J. G., and B. Lax. "Magnetoresistance of Holes in Germanium and Silicon With Warped Energy Surfaces," Phys. Rev., Vol. 107 (15 Sept. 1957), pp. 1530-34.
- Meiboom, S., and B. Abeles. "Theory of the Galvanomagnetic Effects in n-Germanium," Phys. Rev., Vol. 93 (1 March 1954), p. 1121.
- Meiboom, S. See also Abeles, B.
- Meissner, W., and H. Scheffers. "Electrical Resistance of Gold in Magnetic Fields at Low Temperatures," Physik. Z., Vol. 31 (15 June 1930), pp. 574-78.

———. "Measurements With the Aid of Liquid Helium. Part IV. Electrical Resistance of Gold in Magnetic Fields, With Remarks on Kapitza's Work," Physik. Z., Vol. 30 (15 Nov. 1929), pp. 827-36.

Meixner, J. "Effect of Reversal of Magnetic Field on Galvanomagnetic and Thermomagnetic Effects," Ann. Physik, Vol. 36 (Sept. 1939), pp. 105-12.

Mikoshiba, N. "Strong-Field Magnetoresistance of Impurity Conduction in n-Type Germanium," Phys. Rev., Vol. 127 (15 Sept. 1962), pp. 1962-69.

———. "Weak-Field Magnetoresistance of Hopping Conduction in Simple Semiconductors," J. Phys. Chem. Solids, Vol. 24 (March 1963), pp. 341-46.

Mikoshiba, N., and S. Gonda. "Weak-Field Magnetoresistance of Impurity Conduction in n-Type Germanium," Phys. Rev., Vol. 127 (15 Sept. 1962), pp. 1954-61.

Miller, S. C., and M. A. Omar. "Longitudinal Magnetoresistance in n-Type Germanium: Theoretical," Phys. Rev., Vol. 123 (1 July 1961), pp. 74-80.

Milner, C. J. "Magneto-Resistance Effect in Cadmium at Low Temperatures," Proc. Roy. Soc., Vol. 160A (18 May 1937), pp. 207-29.

———. "Magneto-Resistance Effect in Single Crystals of Cadmium," Proc. Cambridge Phil. Soc., Vol. 33 (Jan. 1937), pp. 145-53.

Minden, H. T. See Black, J.

Miroschnitschenko, F. D. See Steinberg, D. S.

Mirzabaev, M., V. M. Tuchkevich, and Yu. V. Shmartsev. "Negative Magnetoresistance in Germanium, Strongly Doped With Antimony," Fiz. Tverdogo Tela, Vol. 5 (June 1963), pp. 1625-29. English translation in Soviet Phys. — Solid State, Vol. 5 (Dec. 1963), pp. 1179-82.

Mitchell, E. W. J. "The Conductivity and Luminescence of Diamonds—a Review of Work at Reading," International Conference on Semiconductors, Rochester, N. Y., 18-22 Aug. 1958.

Mitchell, E. W. J., and P. T. Wedepohl. "Magnetoresistance of a p-Type Semiconducting Diamond," Proc. Phys. Soc., Vol. 70B (May 1957), pp. 527-30.

Mitchell, E. W. J. See also Kemmey, P. J.

Miyake, S. J., and R. Kubo. "Nonlinear Magnetoresistance in Bismuth," Phys. Rev. Letters, Vol. 9 (15 July 1962), pp. 62-63.

Mohanti, H. B. See Gupta, M. M. S.

Moore, E. J. "An Analogy Between the Effects of Fluctuating Electric Fields and Steady Magnetic Fields in Isotropic Conductors When a Universal Relaxation Time Cannot Be Defined," Australian J. Phys., Vol. 13 (March 1960), pp. 95-97.

Moss, T. S. See Walton, A. K.

Motchenbacher, C. D. See Long, D.

Mrosowski, S., and A. Chaberski. "Hall Effect and Magnetoresistivity in Carbons," Phys. Rev., Vol. 94 (1954), pp. 1427-28.

———. "Hall Effect and Magnetoresistivity in Carbons and Polycrystalline Graphites," Phys. Rev., Vol. 104 (1 Oct. 1956), pp. 74-83.

Müller, J. "Change of Resistance of Nickel, Iron and Bismuth in L.F. A.C. Fields," Z. Physik, Vol. 88 (3 April 1934), pp. 277-94.

Munesue, S. See Sakata, T.

Muto, Y. "Magnetoresistances of Dilute Alloys of Manganese in Copper, Manganese in Zinc and Chromium in Zinc at Liquid Helium Temperatures," Tohoku Univ., Sci. Reports, Ser. A, Vol. 13 (Feb. 1961), pp. 1-7.

Muto, Y. See also Fukuroi, T.

Musychuk, O. M. "Change of Resistance in Polar-Model Semiconductors in a Magnetic Field," Ukrain. Fiz. Zhur., Vol. 2, No. 1 (1957), pp. 43-52.

Musychuk, O. M. See also Glauberman, A. E.

Myers, J. See Long, D.

Nachimovich, N. M. "The Anomalous Dependence of the Resistance of Zinc on a Magnetic Field," J. Phys. (U. S. S. R.), Vol. 6, No. 3-4 (1942), pp. 111-13.

Nag, B. R., P. Das, and H. Paria. "Hall Mobility and Magnetoresistance of Semiconductors Due to Hot Carriers in High Magnetic Fields," Proc. Phys. Soc., Vol. 81 (April 1963), pp. 736-40.

Nakamura, M. "Magnetoresistance and Magnetostriction in Ferrites, I," Bull. Elektrotech. Lab., Vol. 24 (June 1960), pp. 457-66. (In Japanese.)

Nakhimovich, N. M. "Dependence of the Electrical Resistance of Gold and Several of Its Alloys on a Magnetic Field at Low Temperatures," J. Phys. (U. S. S. R.), Vol. 5, No. 2-3 (1941), pp. 141-50.

Nanney, C. "An Explanation for the New Effect in the Magnetoresistance of Antimony," Appl. Phys. Letters, Vol. 1 (Nov. 1962), pp. 71-73.

Nasledov, D. N. "Electrical Properties of Certain A<sup>III</sup>B<sup>V</sup> Compounds," J. Chim. Phys., Vol. 57 (June 1960), pp. 479-85.

Nasledov, D. N., and A. Yu. Khalilov. "Electrical Characteristics of InAs," Zhur. Tekh. Fiz., Vol. 26 (1956), pp. 251-54.

———. "Electrical Characteristics of InSb," ibid., Vol. 26, No. 1 (1956), pp. 6-14.

Nasledov, D. N. See also Chih-ch'ao, Lien, Emel'yanenko, O. V., and Volokobinskaya, N. I.

Nedoluha, A., and K. M. Koch. "The Mechanism of Resistance Changes in a Magnetic Field," Z. Physik, Vol. 132, No. 5 (1952), pp. 608-20. (In German.)

Nii, R. See Kanai, Y.

Noskov, M. M. See Lasarew, B. G.

Novikov, S. R. See Grinberg, A. A.

Obrastsov, Yu. N. See Shalyt, S. S.

Ohara, T. "Longitudinal Magnetoresistance Effect of Single-Crystals of Biogen-Iron at Low Temperatures," Tohoku Univ., Sci. Reports, Ser. A, Vol. 15 (April 1963), pp. 55-66.

Okada, T. "The Phenomenological Theory of the Galvanomagnetic Effect," Mem. Fac. Sci. Kyusyu Univ., Vol. 1B (Sept. 1955), pp. 157-68.

Okamoto, T., H. Tange, and E. Tatsumoto. "Forced Magnetoresistance in Silicon Iron at Low Temperatures," J. Sci. Hiroshima Univ., Vol. 26A (March 1963), pp. 101-11.

Okamoto, T. See also Tatsumoto, E.

- Okamura, T., Y. Torizuka, and H. Kojima. "The Ferromagnetic Property and Electrical Conductivity of Magnetite," Tohoku Univ., Sci. Reports, Ser. A, Vol. 1 (1949), pp. 479-83. (In English.)
- Olsen, J. L. "Magnetoresistance and Size-Effects in Indium," Physica, Vol. 24, Supplement (Sept. 1958), p. S172.
- . "Magnetoresistance and Size Effects in Indium at Low Temperatures," Helv. Phys. Acta, Vol. 31, No. 7 (1958), pp. 713-26.
- Olsen, J. L., and L. Rinderer. "Magneto-Resistance of Copper to 150000 Oersted at 4.2°K," Nature, Vol. 173 (10 April 1954), p. 682.
- Olsen, J. L. See also Cotti, P., and Lüthi, B.
- Olson, R., and S. Rodriguez. "Magnetoresistance of Single Crystals of Copper," Phys. Rev., Vol. 108 (1 Dec. 1957), pp. 1212-18.
- Omar, M. A. See Miller, S. C.
- Owens, G. E. "Thermomagnetic and Galvanomagnetic Properties of Semiconductors and Semimetals. An Annotated Bibliography," Lockheed Aircraft Corp. Special Bibliography SB 62-1. (ASTIA AD 276 871.)
- Pacault, A., and A. Marchand. "Electronic Properties of Pre-Graphite Carbons," J. Chim. Phys., Vol. 57 (Oct. 1960), pp. 873-91.
- Pačes, J. "Magneto-Resistance Effect in the Region of the Curie Point," Czech. J. Phys., Vol. 7, No. 6 (1957), pp. 729-43. (In Russian.)
- Pakhomov, A. S. See Belov, K. P.
- Parfen'ev, R. V., and others. "The Effect of Annealing on the Anisotropy of Galvanomagnetic Properties of Tellurium," Soviet Phys. - Solid State, Vol. 3 (Feb. 1962), pp. 1820-21.
- Paria, H. See Nag, B. R.
- Parker, R. "An Analysis of the Magnetization Processes in Iron Single Crystals by an Electrical Method," Phil. Mag., 8th ser., Vol. 1 (Dec. 1956), pp. 1133-46.
- . "The Magnetoresistance of Ferromagnetic Aluminum-Silicon-Iron Alloys," Proc. Phys. Soc. (London), Vol. 65B (Aug. 1952), pp. 616-20.

- . "The Magneto-Resistance of Silicon-Iron," ibid., Vol. 63B (Dec. 1950), pp. 996-1004.
- . "The Magnetoresistance of the Nickel-Zinc Ferrite Systems," ibid., Vol. 70B (May 1957), pp. 531-33.
- . "The Saturation Magneto-Resistance of Ferromagnetic Alloys," ibid., Vol. 64A (May 1951), pp. 447-52.
- . "The Saturation Magnetoresistance of Iron-Aluminum Alloys," ibid., Vol. 64B (1951), pp. 930-31.
- Pataki, G., and P. Sebeni. "Phenomena Observed in Heterogeneous Semiconductors," Acta Phys. Hungar., Vol. 10, No. 3 (1959), pp. 301-4. (In Russian.)
- Paul, W. See Benedek, G. B.
- Pearson, G. L. "The Magnetoresistance Effect in Oriented Single Crystals of Germanium," Phys. Rev., Vol. 78 (1950), p. 646.
- Pearson, G. L., and C. Herring. "Magneto-Resistance Effect and the Band Structure of Single-Crystal Silicon," Physica, Vol. 20 (Nov. 1954), pp. 975-78.
- Pearson, G. L., and H. Suhl. "The Magnetoresistance Effect in Oriented Single Crystals of Germanium," Phys. Rev., Vol. 83 (15 Aug. 1951), pp. 768-76.
- Pearson, G. L., and M. Tanenbaum. "The Magnetoresistance Effect in InSb," Phys. Rev., Vol. 90 (1 April 1953), p. 153.
- Pearson, G. L. See also Tanenbaum, M.
- Ped'ko, A. V. See Belov, K. P.
- Peierls, R. "Theory of the Change of Resistance in Magnetic Fields," Ann. Physik, Vol. 10 (24 June 1931), pp. 97-110.
- Pereverzyeva, A. V. See Rybalka, V. V.
- Pergola, G. C. Della, and D. Sette. "Galvanomagnetic Effects in Germanium," Nuovo cimento, Ser. 10, Vol. 5 (June 1957), pp. 1670-78.
- Pergola, G. D., and D. Sette. "Apparatus for Measurement of Hall Effect and Magnetoresistance in Semiconductors," Alta Frequenza, Vol. 25 (April 1956), pp. 140-51.

- Pergola, G. D., and D. Sette. "Mass Ratio and Magnetoresistance in n-Type Germanium," Phys. Rev., Vol. 104 (1 Nov. 1956), pp. 598-99.
- Perrier, A. "Magnetoresistance and Directional Relations of Spontaneous Magnetization," Helv. Phys. Acta, Vol. 26 (1953), pp. 565-67.
- . "New Theoretical Magnitudes and Formulae for Galvanomagnetic and Thermomagnetic Phenomena," Helv. Phys. Acta, Vol. 3, No. 5-6 (1930), pp. 317-28.
- . "Theory to the Second Approximation of the Magnetoresistance of Microcrystalline Cobalt," Helv. Phys. Acta, Vol. 26 (1953), pp. 387-89.
- Peschanskii, V. G. See Kaganov, M. I.
- Petford, A. D. See Rollin, B. V.
- Petriz, R. L. "Theory of an Experiment for Measuring the Mobility and Density of Carriers in the Space-Charge Region of a Semiconductor Surface," Phys. Rev., Vol. 110 (1958), pp. 1254-62.
- Petriz, R. L. See also Zemel, J. N.
- Pikus, G. E. "Thermo- and Galvanomagnetic Effects in Semiconductors Taking Account of Variations in Carrier Concentration. I. Thermo- and Galvanomagnetic Effects in Weak Fields," Zhur. Tekh. Fiz., Vol. 26, No. 1 (1956), pp. 22-35. English translation in Soviet Phys. - Tech. Phys., Vol. 1 (Jan. 1956), pp. 17-31.
- . "Thermo- and Galvanomagnetic Effects in Semiconductors Taking Account of Variations in Carrier Concentration. II. Galvanomagnetic Effects in Strong Fields. Thermal Conductivity of Electrons and Excitons," Zhur. Tekh. Fiz., Vol. 26, No. 1 (1956), pp. 36-50. English translation in Soviet Phys. - Tech. Phys., Vol. 1 (Jan. 1956), pp. 32-46.
- Pikus, G. E. See also Zhuzh, V. P.
- Pizzo, M. See Drigo, A.
- Pollak, M., and D. H. Watt. "Magnetoresistance of p-Type Si in the Hopping Region," Phys. Rev., Vol. 129 (1963), pp. 1508-9.
- Poltinnikov, S. A., and L. S. Stil'bans. "The Influence of Recombination Processes on Galvanomagnetic Effects," Zhur. Tekh. Fiz., Vol. 27, No. 1 (1957), pp. 30-34. English translation in Soviet Phys. - Tech. Phys., Vol. 2 (Jan. 1957), pp. 23-26.

Popova, A. A. See Belov, K. P.

Portis, A. M. "Microwave Faraday Rotation: Measurement of the Conductivity Tensor," International Conference on Semiconductors, Rochester, N. Y., 18-22 Aug. 1958.

Portnyagin, I. See Komar, A.

Potter, H. H. "Change of Resistance of Nickel in a Magnetic Field," Proc. Roy. Soc., Vol. 132 (1 Aug. 1931), pp. 560-69.

———. "Magneto-Resistance and Magneto-Caloric Effects in Iron and Heusler Alloys," Phil. Mag., Vol. 13 (Feb. 1932), pp. 233-48.

Priestley, M. G. "Magnetoresistance of Copper, Silver and Gold," Phil. Mag., 8th Ser., Vol. 5 (Feb. 1960), pp. 111-14.

Pugh, E. M. See Butler, E. H., Jr.

Putley, E. H. "The Hall Coefficient, Electrical Conductivity and Magneto-Resistance Effect of Lead Sulphide, Selenide and Telluride," Proc. Phys. Soc. (London), Vol. 68B (Jan. 1955), pp. 22-34.

———. "An Oscillatory Transverse Magnetoresistance Effect in n-Type InSb," Proc. Phys. Soc., Vol. 73 (Jan. 1959), pp. 131-33.

———. "Thermo and Galvano-Magnetic Coefficients for Semiconductors," Proc. Phys. Soc. (London), Vol. 65B (Dec. 1952), pp. 991-93.

Ramdas, A. K. See Becker, W. M.

Rappeneau, T. "Effect of a Magnetic Field on the Electrical Resistance of Thin Films of Nickel," Comptes Rendus, Vol. 243 (5 Nov. 1956), pp. 1403-6. (In French.)

———. "Study of the Magnetoresistance of Thin Evaporated Nickel Films," Cahiers de Phys., Vol. 12 (May-June 1958), pp. 185-237.

Rausch, K. "Investigations on Antimony Single Crystals in a Transverse Magnetic Field. (Electric and Thermal Resistance; Thermal e. m. f.)," Ann. Phys., Lpz., Ser. 6, Vol. 1, No. 4-5 (1947), pp. 190-206.

Rausch, K. See also Grüneisen, E.

Reed, W. A., and J. A. Marcus. "Topology of the Fermi Surface of Gallium," Phys. Rev., Vol. 126 (15 May 1962), pp. 1298-1307.

Reynolds, J. M. See Bergeron, C. J., and Bordoloi, K.

- Richtmyer, F.K., and L. F. Curtiss. "Magnetoresistance Effects in Films of Bismuth," Phys. Rev., Vol. 14 (1919), pp. 536-37.
- Rigaux, C., and J. Thuillier. "The Phenomenon of Negative Magnetoresistance in Semiconductors," Comptes Rendus, Vol. 242 (4 June 1956), pp. 2710-12.
- Rinderer, L. See Olsen, J. L.
- Roberts, D. E. See Frederikse, H. P. R.
- Robinson, J. E. See MacDonald, J. R.
- Rodine, M. T. "Thermal and Electrical Conductivities of Bismuth Single Crystals in a Magnetic Field," Phys. Rev., Vol. 46 (15 Nov. 1934), pp. 910-16.
- Rodriguez, S. See Olson, R.
- Rollin, B. V., and A. D. Petford. "The Electrical Properties of InSb at Low Temperatures," J. Electronics, Vol. 1 (1955), pp. 171-74.
- Rollin, B. V. See also Hatton, J.
- Ross, I. M. See Broom, R.
- Roth, H. "Measurement of the Galvanomagnetic Effects in Pure Tellurium," International Conference on Semiconductors, Rochester, N. Y., 18-22 Aug. 1958.
- Roth, H. See also Teutsch, W. B.
- Roth, L. M. See Gold, L.
- Rothkirch, L. "On the Magneto-Resistive Change in Anisotropic Semiconductors," Z. Naturforsch., Vol. 14a (July 1959), pp. 683-84. (In German.)
- Rumer, Y. B. "On the Theory of Electric Conduction of Metals in a Magnetic Field," Zhur. Eksp. i Teoret. Fiz., Vol. 22, No. 2 (1952), pp. 214-22. (In Russian.)
- Ruppel, W. See Lutz, G.
- Rupprecht, H., R. Weber, and H. Weiss. "The Galvanomagnetic Properties of InSb Single Crystals Doped With Te," Z. Naturforsch., Vol. 15a (Sept. 1960), pp. 783-94.

Ryabinin, M. N. "The Longitudinal Magnetoresistance of Semiconductors of the n-Germanium Type in the Quantum Limit," Fiz. Tverdogo Tela, Vol. 3 (May 1961), pp. 1310-13. English translation in Soviet Phys. -Solid State, Vol. 3 (Nov. 1961), pp. 947-49.

Rybalka, V. V., and A. V. Pereverzyeva. "Effect of Heat Treatment of Ge on Its Magnetoresistance," Ukrain. Fiz. Zhur., Vol. 6, No. 3 (1961), pp. 424-25.

Sadasiv, G. "Magnetoresistance in Germanium in the Impurity Conduction Range," Phys. Rev., Vol. 128 (1 Nov. 1962), pp. 1131-35.

Sakata, T., and S. Munesue. "Magnetoresistance of Cesium Antimonide Photocathodes," J. Phys. Soc. Japan, Vol. 9 (Jan.-Feb. 1954), pp. 141-42.

Samoilovich, A. G., and V. A. Yakovlev. "The Additional Resistance of Ferromagnetic Metals," Zhur. Eksp. i Teoret. Fiz., Vol. 22, No. 3 (1952), pp. 350-55. (In Russian.)

Samokhvalov, A. A., and I. G. Fakidov. "The Hall Effect and the Effect of a Magnetic Field on Resistance of Magnetite," Fiz. Metallov i Metallovedenie, Vol. 4, No. 2 (1957), pp. 249-56. (In Russian.)

———. "Magnetoelectric Properties of a Magnetite Monocrystal in the 0-100°C Region," Fiz. Tverdogo Tela, Vol. 2 (March 1960), pp. 414-19. English translation in Soviet Phys. -Solid State, Vol. 2 (Sept. 1960), pp. 386-90.

Sanderson, R. A. See Williams, S. R.

Sarginson, K., and D. K. C. MacDonald. "Influence of a Magnetic Field on the Size Variation of Electrical Conductivity," Nature, Vol. 164 (26 Nov. 1949), pp. 921-22.

Sarginson, K. See also MacDonald, D. K. C.

Sasaki, W., and Y. Kanai. "Galvanomagnetic Effects of a Heavily Doped Germanium Crystal," J. Phys. Soc. Japan, Vol. 11 (Aug. 1956), pp. 894-95.

Sasaki, W., and C. Yamanouchi. "On the Anomalous Magnetoresistance Effect in n-InSb," J. Phys. Soc. Japan, Vol. 14 (June 1959), p. 849.

Sasaki, W., C. Yamanouchi, and G. M. Hatoyama. "Negative Magnetoresistance Effect in Semiconductors," International Conference on Semiconductor Physics, Prague, 1960. New York: Academic Press, 1961. Pp. 159-62.

- Sasaki, W. See also Kanai, Y., and Yamanouchi, C.
- Scheffers, H. See Justi, E., and Meissner, W.
- Schmitt, R. W., and I. S. Jacobs. "Magnetization and Magnetoresistance of Some Dilute Alloys of Mn in Cu," Can. J. Phys., Vol. 34 (Dec. 1956), pp. 1285-89.
- Schubnikow, L., and W. J. de Haas. "Increase of Electrical Resistance of Bismuth Monocrystals Due to Magnetic Fields at Low Temperatures," K. Akad. Amsterdam, Proc., Vol. 33, No. 2 (1930), pp. 130-33.
- . "Resistance Changes of Bismuth Crystals in a Magnetic Field at the Temperature of Liquid Hydrogen," K. Akad. Amsterdam, Proc., Vol. 33, No. 4 (1930), pp. 363-78.
- Schubnikow, L. See also De Haas, W. J.
- Schuler, C. "Magnetoresistance in Thin Evaporated Gadolinium Films," Electrical and Magnetic Properties of Thin Metallic Layers. Proceedings of an international conference held at Liège, 4-7 Sept. 1961. Brussels: Koninklijke Vlaamse Academie voor Wetenschappen, 1961. Pp. 30-36.
- Schultz, H. "The Magnetoresistance of Germanium in the Temperature Range of 10 to 20°K," Semiconductors and Phosphors (Halbleiter und Phosphore). Brunswick: Vieweg, 1958. Pp. 451-52.
- Schwed, P. See Wiener, B.
- Sebeni, P. See Pataki, G.
- Seitz, F. "Note on the Theory of Resistance of a Cubic Semiconductor in a Magnetic Field," Phys. Rev., Vol. 79 (15 July 1950), pp. 372-75.
- Sekoyan, S. S., and A. I. Likhter. "The Effect of Pressure on Magneto-electric Properties of Bismuth," Fiz. Tverdogo Tela, Vol. 2 (Aug. 1960), pp. 1940-42. English translation in Soviet Phys. —Solid State, Vol. 2 (Feb. 1961), pp. 1748-50.
- Sette, D. See Pergola, G. C. Della, and Pergola, G. D.
- Severne, G. "Magneto-Resistance in Superfluid Liquid Helium," Physica, Vol. 27 (May 1961), pp. 465-78.
- Shalyt, S. S. "Charge and Heat Transport in n-Type Indium Arsenide at Low Temperatures," Soviet Phys. —Solid State, Vol. 4 (1963), pp. 1403-11.

- . "Galvanomagnetic Properties and Hole Conduction in Tellurium," Doklady Akad. Nauk S. S. S. R., Vol. 109, No. 4 (1956), pp. 750-52.
- Shalyt, S. S., and Yu. N. Obratsov. "Galvanomagnetic Properties of Tellurium at Low Temperatures," Zhur. Tekh. Fiz., Vol. 27, No. 1 (1957), pp. 189-203. English translation in Soviet Phys.—Tech. Phys., Vol. 2 (Jan. 1957), pp. 166-78.
- Sharan, S. "Magneto-Resistance Change of Ferromagnetics in Alternating Magnetic Field," Indian J. Phys., Vol. 12 (May 1938), pp. 203-10.
- Sharan, S. See also Gupta, M. M. S.
- Shibuya, M. "Magnetoresistance Effect in Cubic Semiconductors With Spheroidal Energy Surfaces," Phys. Rev., Vol. 95 (15 Sept. 1954), pp. 1385-93. Also in J. Phys. Soc. Japan, Vol. 9 (Jan.-Feb. 1954), pp. 134-35.
- Shibuya, Y., and others. "Some Physical Properties of Alloys of 0.007 ~ 5.4% Mn in Cu," Physica, Vol. 24, Supplement (Sept. 1958), p. S175.
- Shirakawa, Y. "Longitudinal Magneto-Resistance Effect in Fe-Si Alloys," Tohoku Imp. Univ., Sci. Reports, Vol. 27 (Jan. 1939), pp. 255-77.
- . "Longitudinal Magneto-Resistance Effects at Various Temperatures in Iron-Cobalt Alloys," ibid., 1st Ser., Vol. 27 (April 1939), pp. 532-60. (In English.)
- . "Longitudinal Magnetoresistance Effect at Various Temperatures in Iron-Nickel Alloys," ibid., 1st Ser., Vol. 27 (April 1939), pp. 485-531. (In English.)
- . "Longitudinal Magnetoresistance Effect at Various Temperatures in Nickel-Cobalt Alloys," ibid., 1st Ser., K. Honda Anniversary Vol. (1936), pp. 362-87.
- Shirakawa, Y. See also Masumoto, H.
- Shmartsev, Yu. V. See Mirzabaev, M.
- Shockley, W. "Cyclotron Resonances, Magnetoresistance, and Brillouin Zones in Semiconductors," Phys. Rev., Vol. 90 (1 May 1953), p. 491.
- . "Effect of Magnetic Fields on Conduction—'Tube Integrals,'" Phys. Rev., Vol. 79 (1 July 1950), pp. 191-92.

- Shoenberg, D. "Hall and Magneto-Resistance Effects," Cambridge Phil. Soc., Proc., Vol. 31 (April 1935), pp. 271-76.
- Shogenji, K. "On Galvanomagnetic Effects in p-Type Crystals of PbTe," J. Phys. Soc. Japan, Vol. 14 (Oct. 1959), pp. 1360-71.
- Shogenji, K., and S. Uchiyama. "The Galvanomagnetic Effects in Single Crystals of PbTe," J. Phys. Soc. Japan, Vol. 12 (Oct. 1957), p. 1164.
- Shogenji, K. See also Yamada, E.
- Shur, Ya. S. See Drozhshina, V. I., and Zotov, T. D.
- Sidorov, S. K. "Galvano-Magnetic Properties of Some Ordered Alloys," Izvest. Akad. Nauk S. S. S. R., Ser. Fiz., Vol. 11 (1947), pp. 511-17.
- Siebenmann, P. G. See Babiskin, J.
- Simmons, C. A. "Influence of the Hall Effect Upon the Transverse Magnetoresistance in Indium Antimonide," Bull. Am. Phys. Soc., Ser. II, Vol. 6 (1961), p. 18. Also in J. Appl. Phys., Vol. 32 (Oct. 1961), pp. 1970-74.
- Skacha, J. See Matyas, M.
- Sladek, R. J. "Magnetoresistance of High Purity InSb in the Quantum Limit," J. Phys. Chem. Solids, Vol. 16 (Nov. 1960), pp. 1-9.
- . "Magnetoresistance Oscillations in Single Crystal and Polycrystalline Indium Arsenide," Phys. Rev., Vol. 110 (15 May 1958), pp. 817-26.
- Sladek, R. J., and R. W. Keyes. "Galvanomagnetic Effects in n-Ge in the Impurity Conduction Range," Phys. Rev., Vol. 122 (15 April 1961), pp. 437-42.
- Smit, J. "Magnetoresistance of Ferromagnetic Metals and Alloys at Low Temperatures," Physica, Vol. 17 (June 1951), pp. 612-27. (In English.)
- Smith, J. H., and R. Street. "Resistivity and Magnetoresistance of Au<sub>2</sub>Mn," Proc. Phys. Soc., Vol. 70B (Nov. 1957), pp. 1089-92.
- Snitko, O. V. See Lyashenko, V. I.
- Sommerfeld, A., and B. W. Bartlett. "Longitudinal Resistance Change in Magnetic Field," Z. Techn. Physik, Vol. 16, No. 11 (1935), p. 500. Also in Physik. Z., Vol. 36 (1 Dec. 1935), pp. 894-99.

Sondheimer, E. H. "Influence of a Magnetic Field on the Conductivity of Thin Metallic Films," Nature, Vol. 164 (26 Nov. 1949), pp. 920-21.

———. "The Influence of a Transverse Magnetic Field on the Conductivity of Thin Metallic Films," Phys. Rev., Vol. 80 (1 Nov. 1950), pp. 401-6.

Sondheimer, E. H., and A. H. Wilson. "The Theory of the Magneto-Resistance Effects in Metals," Proc. Roy. Soc., Vol. 190A (9 Sept. 1947), pp. 435-55.

Sondheimer, E. H. See also Lewis, B. F.

Sorokin, O. V. "A Method of Measuring the Bulk Lifetime and Diffusion Coefficient of Charge Carriers by the Measurement of the Change of Resistance of a Semiconductor in a Magnetic Field," Zhur. Tekh. Fiz., Vol. 27, No. 12 (1957), pp. 2774-76. English translation in Soviet Phys.-Tech. Phys., Vol. 2 (Dec. 1957), pp. 2572-74.

Sorokin, O. V., and B. T. Tuseen. "A Comparative Study of the Magneto-resistance and Photoelectric Methods of Measuring the Rates of Surface Recombination," Fiz. Tverdogo Tela, Vol. 2 (July 1960), pp. 1533-35. English translation in Soviet Phys.—Solid State, Vol. 2 (Jan. 1961), pp. 1391-93.

Sorokin, O. V. See also Zhuze, V. P.

Soule, D. E. "Analysis of Galvanomagnetic De Haas-Van Alphen Type Oscillations in Graphite," Phys. Rev., Vol. 112 (1 Nov. 1958), pp. 708-14.

———. "Magnetic Field Dependence of the Hall Effect and Magneto-resistance in Graphite Single Crystals," Phys. Rev., Vol. 112 (1 Nov. 1958), pp. 698-707.

Soule, D. E., and J. W. McClure. "Band Structure and Transport Properties of Single Crystal Graphite," International Conference on Semiconductors, Rochester, N. Y., 18-22 Aug. 1958.

Spanel, L. E. See Mackintosh, A. R.

Spry, W. J. "Magnetoresistance and Hall Coefficient of a Graphite Single Crystal at 4.2°K Between Zero and 200 Kgauss," Bull. Am. Phys. Soc., Ser. II, Vol. 5, p. 373.

Stafeev, V. I., and V. M. Tuchkevich. "Change in Germanium Resistance in a Magnetic Field," Zhur. Tekh. Fiz., Vol. 26 (1956), pp. 273-76. English translation in Soviet Phys.—Tech. Phys., Vol. 1 (Feb. 1956), pp. 268-72.

- Stark, R. W. "Oscillatory Magnetic Breakdown in Zinc," Phys. Rev. Letters, Vol. 9 (15 Dec. 1962), pp. 482-85.
- Stark, R. W., and others. "Magnetoresistance Investigation of the Fermi Surface of Magnesium," Phys. Rev. Letters, Vol. 8 (1 May 1962), pp. 360-62.
- Stark, R. W., and T. G. Eck. "Magnetoresistance and Hall Effect in Single Crystals of Aluminum," Case Inst. of Tech., AFOSR-951 (Jan. 1963); ASTIA AD 298 129.
- Steele, M. C. "Anomalous Longitudinal Magnetoresistance of Metal Single Crystals," Phys. Rev., Vol. 97 (15 March 1955), p. 1720.
- . "Hall Effect and Magnetoresistance Oscillations of Antimony Single Crystals in Magnetic Fields at Liquid Helium Temperatures," Phys. Rev., Vol. 98 (1955), pp. 1180-81.
- . "Low-Field Electrical Breakdown in n-Indium Phosphide," J. Phys. Chem. Solids, Vol. 9 (1959), pp. 93-94.
- . "Oscillatory Galvanomagnetic Properties of Antimony Single Crystals at Liquid-Helium Temperatures," Phys. Rev., Vol. 99 (15 Sept. 1955), pp. 1751-59.
- Steele, M. C., and J. Babiskin. "Oscillatory Thermomagnetic Properties of a Bismuth Single Crystal at Liquid Helium Temperatures," Phys. Rev., Vol. 98 (15 April 1955), pp. 359-67.
- Steele, M. C., and M. Glicksman. "High Electric Field Effects in n-Indium Antimonide," International Conference on Semiconductors, Rochester, N. Y., 18-22 Aug. 1958.
- Steele, M. C. See also Berlincourt, T. G., and Glicksman, M.
- Steinberg, D. S., and F. D. Miroschnitschenko. "Effect of Direction of Spontaneous Magnetisation on Resistance," Physik. Z. Sowjetunion, Vol. 5, No. 2 (1934), pp. 241-52. (In German.)
- Stevens, K. W. H. "Population Changes With Magnetic Field," Proc. Phys. Soc., Vol. 69 (1956), pp. 406-7.
- Stevenson, R., and R. Bolton. "Transverse Magnetoresistance of High-Strength Copper Alloys," Can. J. Phys., Vol. 41 (June 1963), pp. 985-89.
- Stierstadt, O. "Change of Conductivity of Ferromagnetics in Magnetic Fields," Z. Techn. Physik, Vol. 13, No. 2, 3, 4 (1932), pp. 65-71, 105-11, 161-65.

- . "Change of Resistance of Bi Single Crystals in Magnetic Fields (New Phenomena)," Phys. Rev., Vol. 43 (April 1933), pp. 577-79.
- . "Change of Resistance of Pure Electrolytic Iron in Transverse Magnetic Fields," Z. Physik, Vol. 67 (25 Feb. 1931), pp. 725-42.
- . "Change of Resistance of Very Pure Electrolytic Iron in Longitudinal Magnetic Fields," ibid., Vol. 65, No. 9-10 (1930), pp. 575-88.
- . "Electrical Conductivity of Ferromagnetic Materials in Longitudinal Magnetic Fields," Physik. Z., Vol. 31 (15 June 1930), pp. 561-74.
- . "Electrical Resistance of Nickel and Iron Wires in Longitudinal Magnetic Fields," Phys. Rev., Vol. 37 (15 May 1931), pp. 1356-66.
- . "Resistance Variation of Bismuth Crystals in a Magnetic Field. Part I. Electrical Method of Crystal Structure Analysis," Z. Physik, Vol. 80 (16 Feb. 1932), pp. 636-65.

Stil'bans, L. S. See Poltinnikov, S. A.

Stinchcombe, R. B. "Quantum Theory of Magnetoresistance. I. Low Fields," Proc. Phys. Soc., Vol. 78 (Aug. 1961), pp. 275-92.

Stout, J. W., and R. E. Barieau. "Effect of Magnetic Field Upon Electrical Resistance of Gold and Silver Between 1 and 20°K," Am. Chem. Soc., J., Vol. 61 (Feb. 1939), pp. 238-41.

Street, R. See Smith, J. H.

Suge, Y., S. Tanaka, and T. Masumi. "Magnetoresistance Effect in Cadmium Sulphide," Solid State Phys. in Electronics and Telecommun., Vol. 2 (1960), pp. 872-79.

Sugiyama, K., and A. Kobayashi. "Piezoresistance and Magnetoresistance in Impurity Conduction of Germanium," J. Phys. Soc. Japan, Vol. 18 (Feb. 1963), pp. 163-74.

Suhl, H. "Measurements of Magnetoresistance of Germanium in Very Intense Magnetic Fields," Phys. Rev., Vol. 78 (1950), pp. 646-47.

Suhl, H. See also Pearson, G. L.

Swanson, J. A. "Saturation Hall Constant of Semiconductors," Phys. Rev., Vol. 99 (1955), pp. 1799-1807.

Symonds, J. L. "Methods of Measuring Strong Magnetic Fields," Rep. Progr. Phys., Vol. 18 (1955), pp. 83-126.

- Sytenko, T. N., and O. N. Koshel. "Effect of the State of the Surface on the Hall Effect and the Magnetoresistance of Germanium," Fiz. Tverdogo Tela, Vol. 3 (April 1961), pp. 1079-84. English translation in Soviet Phys.—Solid State, Vol. 3 (Oct. 1961), pp. 786-89.
- Sytenko, T. N. See also Lyashenko, V. I.
- Szebeni, P. See Lőrinczy, A.
- Szymanski, B. See Bemski, G.
- Talalaeva, E. V. "The Temperature Dependence of Magnetoresistance of Manganese Ferrites," Fiz. Tverdogo Tela, Vol. 3 (Feb. 1961), pp. 441-49. English translation in Soviet Phys.—Solid State, Vol. 3 (Aug. 1961), pp. 322-27.
- Talalaeva, E. V. See also Belov, K. P.
- Tanabe, Y. "The Change of Conductivity of Metals in Strong Magnetic Fields," Tohoku Univ., Res. Insts., Sci. Reports, Ser. A, Vol. 3 (Feb. 1951), pp. 91-106.
- . "The Change of the Electric Resistance of Bismuth Crystals in Strong Magnetic Fields," Parts I-IV, Tohoku Univ., Res. Insts., Sci. Reports, Ser. A. "I. The Method and Apparatus for Observing the Change of Resistance of Bismuth in Strong Magnetic Fields," Vol. 1 (Oct. 1949), pp. 267-74. "II. Experimental Results. The Change of Resistance of Bismuth Crystals in a Magnetic Field With the Current Perpendicular to the Field," Vol. 1 (Oct. 1949), pp. 275-82. "III. Experimental Results. The Change of Resistance of Bismuth Crystals in a Magnetic Field With the Current Parallel and Inclined to the Direction of the Lines of Force of the Magnetic Field," Vol. 2 (April 1950), pp. 341-51. "IV. The Discussion and the Interpretation of the Experimental Results," Vol. 2 (June 1950), pp. 531-48.
- Tanaka, S., and T. Masumi. "Magnetoresistive Effect in Cadmium Sulfide," J. Phys. Soc. Japan, Vol. 13 (March 1958), p. 314.
- Tanaka, S. See also Suge, Y.
- Tanenbaum, M., and G. L. Pearson. "The Magnetoresistance Effect in InSb," Phys. Rev., Vol. 91 (1953), p. 244.
- Tanenbaum, M., G. L. Pearson, and W. L. Feldmann. "Magnetoresistance in InSb and GaSb Single Crystals," ibid., Vol. 93 (1954), p. 912.
- Tanenbaum, M. See also Pearson, G. L.

- Tange, H. See Okamoto, T., and Tatsumoto, E.
- Tanuma, S., and others. "Magnetoresistance of Bismuth Metal and Bismuth-Antimony Alloy Single Crystals," High Magnetic Fields, Wiley, 1962. Pp. 534-38.
- Tanuma, S. See also Fukuroi, T.
- Tatsumoto, E. "Magnetoresistance Coefficients and Their Temperature Dependence in Iron and Silicon-Steel," Phys. Rev., Vol. 109 (1 Feb. 1958), pp. 658-62.
- Tatsumoto, E., K. Kuwahara, and M. Goto. "Magnetoresistance Effect in the Magnetization Reversal of Permalloy Films," J. Phys. Soc. Japan, Vol. 15 (Sept. 1960), p. 1703.
- Tatsumoto, E., H. Tange, and T. Okamoto. "Ordinary Magnetoresistance Effect in Silicon Iron," J. Sci. Hiroshima Univ., Vol. 25A (July 1961), pp. 107-14.
- Tatsumoto, E. See also Kimura, H., and Okamoto, T.
- Ter Haar, D. See Coldwell-Horsfall, R. A.
- Teutsch, W. B., H. Roth, and H. T. Harper. "Measurement of the Galvanomagnetic Effects in Moderately Doped Tellurium," Bull. Am. Phys. Soc., Ser. II, Vol. 6 (1961), p. 27.
- Thomas, J. E., Jr. See Albers, W. A., Jr.
- Thompson, N. "Galvanomagnetic Effects in Bi Alloys," Proc. Roy. Soc., Vol. 164A (7 Jan. 1938), pp. 24-47.
- Thorsen, A. C. See Berlincourt, T. G.
- Thuillier, J. See Rigaux, C.
- Tippins, H. H., and F. C. Brown. "Magnetoresistance of Silver Bromide," Phys. Rev., Vol. 129 (15 March 1963), pp. 2554-62.
- Titeica, S. "Variation of Resistance of Metals in a Magnetic Field," Ann. Phys., Vol. 22 (Feb. 1935), pp. 129-61.
- Tittes, E. See Lautz, G.
- Tobisawa, S. See Fukuroi, T.
- Tolpygo, E. I. See Dykman, I. M.

Torizuka, Y. See Okamura, T.

Toyozawa, Y. "Localized Spins and Negative Magnetoresistance in the Impurity Conduction at High Concentrations," J. Phys. Soc. Japan, Vol. 17 (March 1962), p. 579. Also in International Conference on the Physics of Semiconductors, Exeter, July 1962. London Institute of Physics and the Physical Society (1962), pp. 104-7.

———. "Theory of Localized Spins and Negative Magnetoresistance in the Metallic Impurity Conduction," J. Phys. Soc. Japan, Vol. 17 (June 1962), pp. 986-1004.

Tsidilkovskii, I. M. See Bass, F.G.

Tsymburska, A. I. "Semiconductor Magnetoresistance Effect in the Case of Weak Fields," Ukrain. Fiz. Zhur., Vol.4, No. 2 (1959), pp. 177-82. (In Ukrainian.)

Tuchkevich, V. M. See Mirzabaev, M., and Stafeev, V. I.

Tufts, O. N., and A. W. Ewald. "Magnetoresistance of Oriented Gray Tin Single Crystals," Phys. Rev., Vol. 122 (1 June 1961), pp. 1431-36.

Tufts, O. N. See also Ewald, A. W.

Tunazima, N. "Galvanomagnetic Effects in Ferromagnetic Metals," Proc. Phys.-Math. Soc. Japan, Vol. 16 (March 1934), pp. 85-94.

Tuseen, B. T. See Sorokin, O. V.

Uchiyama, S. See Shogenji, K.

Van Alphen, P. M. See De Haas, W. J.

Van Bergen, F. "Variations of Resistance of Electric Conductor in a Magnetic Field," Comptes Rendus, Vol. 206 (21 Feb. 1938), pp. 588-90.

Van Bueren, H. G. "Influence of Lattice Defects on the Electrical Properties of Cold-Worked Metals," Philips Res. Rep., Vol. 12 (Feb. - June 1957), pp. 1-45, 190-239.

Van Elst, H. C. "The Anisotropy in the Magneto-Resistance of Some Nickel Alloys," Physica, Vol. 25 (Aug. 1959), pp. 708-20.

———. "Magnetoresistance of Some Nickel Alloys," ibid., Vol. 24 Supplement (Sept. 1958), p. S173.

- Van Elst, H. C., and C. J. Gorter. "Ferromagnetic Anisotropy of the Specific Resistance of Some Nickel Alloys," Appl. Sci. Research, Vol. 4B, No. 1-2 (1954), pp. 87-90. (In English.)
- Van Itterbeek, A., and others. "Measurements on the Electrical Resistivity of Thin Nickel Films at Very Low Temperatures," Physica, Vol. 20 (Jan. 1954), pp. 1-6.
- Van Itterbeek, A., and A. de Bock. "Measurements of the Electrical Resistance of Films of Bismuth Under the Action of a Magnetic Field at Low Temperatures," Ann. Phys., Paris, Ser. 11, Vol. 20 (Nov. - Dec. 1945), pp. 636-46.
- , "Electric Resistance of Ag Films in a Magnetic Field at Low Temperatures," Physica, 's Grav., Vol. 12 (June 1946), pp. 163-76. (In French.)
- Van Santen, J. H. See Jonker, G. H.
- Vautier, C. See Colombani, A.
- Venables, J. D. See Broudy, R. M.
- Vennik, J. See Aerts, E.
- Vieweg, G. See Justi, E.
- Volger, J. "Further Experimental Investigations on Some Ferromagnetic Oxidic Compounds of Manganese With Perovskite Structure," Physica, Vol. 20 (Feb. 1954), pp. 49-66.
- , "Solid-State Research at Low Temperatures. II. Electron Conduction in Metals and Semiconductors," Philips Tech. Rev., Vol. 22, No. 7 (1960-61), pp. 226-31.
- Volger, J. See also Jonker, G. H.
- Volokobinskaya, N. I., V. V. Galavanov, and D. N. Nasledov. "Electrical and Magnetoelectric Properties of p-Type Indium Antimonide," Fiz. Tverdogo Tela, Sbornik (Supplement) I (1959), pp. 122-29.
- Volotskaya, V. G. See Borovik, E. S.
- Vonsovski, S. V. "On the Peculiarities of the Variation of the Electric Resistance in a Magnetic Field for Some Ferromagnetic Alloys," J. Tech. Phys. (U. S. S. R.), Vol. 18 (Feb. 1948), pp. 145-48.
- Voogd, J. See De Haas, W. J.

- Voronyuk, P. I. See Klinger, M. I.
- Waller, I. "On the Conductivity of a Metal in a Magnetic Field," Ark. Mat. Astr. Fys., Vol. 28B, No. 15 (1942).
- Walton, A. K., and T. S. Moss. "The Theory of Electrical and Photoelectric Effects for Three Carriers in a Magnetic Field," Proc. Phys. Soc., Vol. 73 (March 1959), pp. 399-412.
- Waniek, R. W. See Furth, H. P.
- Watanabe, N. See Kanai, Y.
- Watt, D. H. See Pollak, M.
- Webber, R. T. "Resistance Minimum in Magnesium: Magnetoresistance," Phys. Rev., Vol. 105 (1 March 1957), pp. 1437-39.
- Webber, R. T. See also Alers, P. B., and De Launay, J.
- Weber, R. See Rupprecht, H.
- Wedepohl, P. T. See Mitchell, E. W. J.
- Wei, W. F., and W. F. Love. "Longitudinal Magnetoresistance of n-Type Germanium in a Strong Magnetic Field," International Conference on Semiconductor Physics, Prague, 1960. New York: Academic Press, 1961. Pp. 163-66.
- Wei, W. F. See also Love, W. F.
- Weiss, H. "Galvanomagnetic Properties of InSb," J. Appl. Phys., Vol. 32 (Oct. 1961), pp. 2064-68.
- . "The Magnetoresistance of InAs," Z. Naturforsch., Vol. 12A (Feb. 1957), p. 80. (In German.)
- . "On the Electrical Properties of InSb," ibid., Vol. 8A (1953), pp. 463-69.
- Weiss, H., and H. Welker. "Transversal Magnetic Resistance Change of InSb," Z. Physik, Vol. 138, No. 3-4 (1954), pp. 322-29.
- Weiss, H. See also Rupprecht, H.
- Weiss, K. See Grüneisen, E.
- Welker, H. See Weiss, H.

- West, F. G. "Magnetoresistive Measurements on Domain Rotation in Nickel-Iron Alloy Films," Nature, Vol. 188 (8 Oct. 1960), pp. 129-30.
- White, G. K., and S. B. Woods. "Electrical and Thermal Magneto-Resistance in Thin Rods of Pure Sodium," Phil. Mag., 8th ser., Vol. 1 (Sept. 1956), pp. 846-53.
- Whitesell, W. J., II, and V. A. Johnson. "Magnetoresistive Effect in Impurity Semiconductors," Phys. Rev., Vol. 85 (1952), p. 724.
- Whitesell, W. J. See also Johnson, V. A.
- Wieland, J. See Busch, G.
- Wiener, B., and G. Groetzinger. "The Variation of Magnetoresistivity and Resistivity of AuCu During Annealing From the Cold-Worked and Thermally Disordered States," Phys. Rev., Vol. 93 (1954), pp. 922-23.
- Wiener, B., G. Groetzinger, and R. McCollum. "Specification of Thermally and Mechanically Induced Nonequilibrium States in AuCu by the Resistivity and Magnetoresistivity," J. Appl. Phys., Vol. 26 (July 1955), pp. 857-62.
- Wiener, B., P. Schwed, and G. Groetzinger. "Variation of Magnetoresistivity of AuCu With Degree of Order," J. Appl. Phys., Vol. 26 (May 1955), pp. 609-12.
- Willardson, R. K., and others. "Large Magnetoresistive Effects in InSb for Specialized Boundary Conditions," Phys. Rev., Vol. 98 (1955), pp. 227-28.
- Willardson, R. K., and J. J. Duga. "Magnetoresistance in Gallium Arsenide," Proc. Phys. Soc., Vol. 75 (Feb. 1960), pp. 280-90.
- Willardson, R. K., T. C. Harman, and A. C. Beer. "Transverse Hall and Magnetoresistance Effects in p-Type Germanium," Phys. Rev., Vol. 96 (15 Dec. 1954), pp. 1512-18.
- Willardson, R. K. See also Bate, R. T., Beer, A. C., and Harman, T. C.
- Williams, S. R., and R. A. Sanderson. "Changes in Resistance of Nickel Due to Magnetism and Hardness," Phys. Rev., Vol. 37 (1 Feb. 1931), pp. 309-14.
- Wilson, A. H. See Sondheimer, E. H.
- Wolfe, R. See Drabble, J. R.

Woods, S. B. See White, G. K.

Wright, R. W., and J. A. Bastin. "The Characteristic Temperature and Effective Electron Mass for Conduction Processes in Cadmium Oxide," Proc. Phys. Soc., Vol. 71 (Jan. 1958), pp. 109-16.

Yakovlev, V. A. See Samoilovich, A. G.

Yamada, E., and K. Shogenji. "A Note on the Magnetoresistance of PbTe at High Magnetic Fields," J. Phys. Soc. Japan, Vol. 16 (July 1961), p. 1475.

Yamada, S. "On the Electrical and Optical Properties of n-Type Cadmium Telluride Crystals," J. Phys. Soc. Japan, Vol. 17 (April 1962), pp. 645-53.

Yamanouchi, C., and W. Sasaki. "Magnetoresistance in the Impurity Conduction of n-Type Germanium," J. Phys. Soc. Japan, Vol. 17 (Oct. 1962), p. 1664.

Yamanouchi, C. See also Fukuroi, T., and Sasaki, W.

Yaqub, M. See Cochran, J. F.

Yntema, G. B. "Magnetoresistance of Mg, Cu, Sb, and Al at Liquid-Helium Temperatures," Phys. Rev., Vol. 91 (15 Sept. 1953), pp. 1388-94.

Yosida, K. "Anomalous Electrical Resistivity and Magnetoresistance Due to an s-d Interaction in Cu-Mn Alloys," Phys. Rev., Vol. 107 (15 July 1957), pp. 396-403.

Young, R. C. See Mackintosh, A. R.

Zakiev, Yu. E. See Amirkhanov, Kh. I.

Zaleskii, A. V. "Anisotropy of the Magnetoresistance Effect in Magnetite Crystals," Kristallografiya, Vol. 6 (March-April 1961), pp. 231-38. English translation in Soviet Phys.-Cryst., Vol. 6 (Sept. - Oct. 1961), pp. 180-85.

Zavadskii, E. A., and I. G. Fakidov. "Electrical Conductivity of Germanium in Strong Pulsed Magnetic Fields in the Region of Mixed Conduction," Fiz. Tverdogo Tela, Vol. 4 (July 1962), pp. 1704-9. English translation in Soviet Phys.-Solid State, Vol. 4 (1963), pp. 1251-54.

———. "Electrical Conductivity of n-Ge in Strong Magnetic Fields," Fiz. Metallov i Metallovedenie, Vol. 10 (Sept. 1960), pp. 495-96.

- . "Variation in the Electrical Conductivity on n-Ge in Strong Pulsating Magnetic Fields," ibid., Vol. 11 (Jan. 1961), pp. 145-47. English translation in Physics of Metals and Metallography, Vol. 11 (Oct. 1961), pp. 141-44.
- Zavadskii, E. A. See also Fakidov, I. G.
- Zaveta, K. "On the Measurement of the Galvanomagnetic Properties of Ferrites," Fiz. Tverdogo Tela, Vol. 2 (Jan. 1960), pp. 106-8.
- Zdanowicz, W. "Electrical Properties of  $Cd_3As_2$ ," International Conference on Semiconductor Physics, Prague, 1960. New York: Academic Press, 1961. Pp. 1095-99.
- Zemel, J. N., and R. L. Petritz. "Magneto-Surface Experiments on Germanium," Phys. Rev., Vol. 110 (15 June 1958), pp. 1263-71.
- . "Magneto-Surface Properties of Near Intrinsic Germanium," J. Phys. Chem. Solids, Vol. 8 (Jan. 1959), pp. 102-5, 121-22.
- Zener, C. See Jones, H.
- Zhuze, V. P., G. E. Pikus, and O. V. Sorokin. "A Method for Measuring the Rate of Surface Recombination in Accordance With the Variation of the Resistance of a Semiconductor in a Magnetic Field," Zhur. Tekh. Fiz., Vol. 27, No. 6 (1957), pp. 1167-73. English translation in Soviet Phys.-Tech. Phys., Vol. 2 (June 1957), pp. 1061-67.
- Zil'berman, G. E. "Electron in a Periodic Electric and Uniform Magnetic Field, II," Zhur. Eksp. i Teoret. Fiz., Vol. 33 (1957), pp. 387-96. English translation in Soviet Phys.-JETP, Vol. 6 (Feb. 1958), pp. 299-306.
- . "Thermal and Galvanometric Effects in Strong Fields at Low Temperatures," Zhur. Eksp. i Teoret. Fiz., Vol. 29, No. 6 (1955), pp. 762-69. English translation in Soviet Phys.-JETP, Vol. 2 (July 1956), pp. 650-56.
- Ziman, J. M. "Galvanomagnetic Properties of Cylindrical Fermi Surfaces," Phil. Mag., 8th ser., Vol. 3 (Oct. 1958), pp. 1117-27.
- Zoller, H. See Busch, G.
- Zook, J. D., and R. N. Dexter. "Galvanomagnetic Effects in Cadmium Sulfide," Phys. Rev., Vol. 129 (1 March 1963), pp. 1980-89.
- Zotov, T. D., and Ya. S. Shur. "Change of the Electric Resistance in a Magnetic Field in Single Crystals of Transformer Steel," Doklady Akad. Nauk S. S. S. R., Vol. 86, No. 2 (1952), pp. 267-69.