

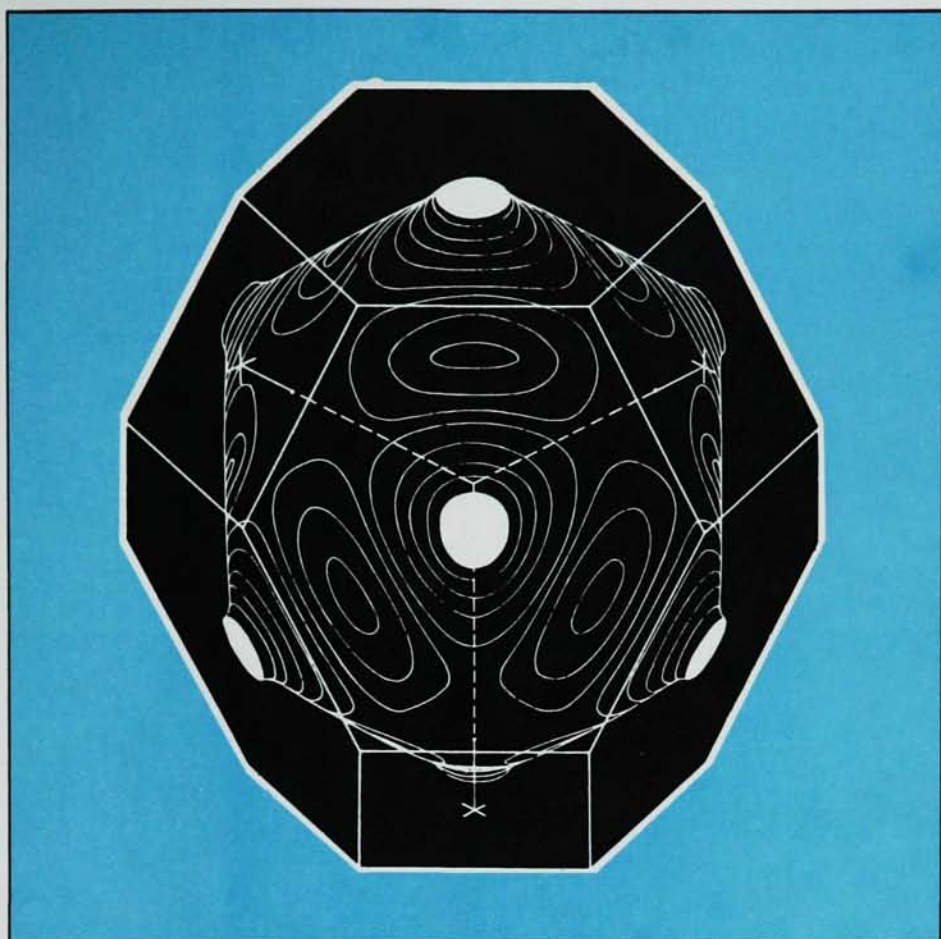
to the available periodical literature other than manufacturers' catalogs. Names are often cited, but the author does not give any reference to the work of the men whose names he mentions.

Section 1.2 of this book is titled "Criteria of Strain Measurement Methods." It is only two pages long but provides an excellent summary of the desired properties and design goals for any type of measurement transducer or system.

The theory of strain gauging is not given in any depth, but the book is full of practical hints and lists of procedures. There is much more descriptive material than mathematical development, and therefore the book is an excellent source for those who are interested in experimental methods.

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FERMI SURFACE for copper is formed by electrons in the half-filled 4s band. (From *The Fermi Surface*, edited by W. A. Harrison and M. B. Webb (Wiley, 1960).)

Electron-transport theory

PHYSICS OF ELECTRONIC CONDUCTION IN SOLIDS. By Frank J. Blatt. 446 pp. McGraw-Hill, New York, 1968. \$14.50

by C. S. KOONCE

The author states in the preface, "This book was written with the expectation that it could be read profitably by seniors or beginning graduate students in physics, graduate students in material science, electrical engineering and physical metallurgy, and research scientists working in these fields." Indeed this book should prove rewarding to scientists in all of these fields because the author has succeeded in developing an introductory text that treats comprehensively a subject common to all of these disciplines: electronic conduction in solids.

Although the emphasis of the book is on electronic transport, the applications of electronic conduction cover many topics generally treated in introductory solid-state physics textbooks; thus the book is ideally suited for supplementary reading by students in introductory solid-state physics courses. The subject of the book is the research field of the author, a professor of physics at Michigan State University.

The book is a finished product: The chapters are organized into a cohesive and logical development of electronic conduction, and a preface explains this presentation. There is a rather complete index, numerous figures and tables and helpful problems. The first four chapters provide a brief background in solid-state physics, enabling the reader to understand the theory of electronic transport. The book assumes no previous training in solid-state physics and little knowledge of quantum mechanics. The theory of electronic conduction is developed in the next three chapters. The remaining five chapters deal with applica-

tions in both metals and semiconductors. All parts of the book are marked by an outstanding ease of expression.

A student reading this book will have the advantage of seeing the theory of electronic transport presented and its limitations discussed before applying the theory to specific cases in materials. In addition he will see the theory applied to both metals and semiconductors so that he may note both the similarities and differences.

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Value of groups

APPLIED GROUP THEORY. By Arthur P. Cracknell. 417 pp. Pergamon Press, Oxford, 1968. Cloth \$7.50, paper \$6.00

by GERALD ROTHBERG

Arthur P. Cracknell's book *Applied Group Theory* is published in a series

(*Selected Readings in Physics*) intended primarily to provide undergraduate students with reprints of important papers in the development of a subject, along with introductory material illustrating present-day applications. In meeting these objec-