

Handbook Physics Odishaw Condon

Physics and Astronomy of the Moon focuses on the application of principles of physics in the study of the moon, including perturbations, equations, light scattering, and photometry. The selection first offers information on the motion of the moon in space and libration of the moon. Topics include Hill's equations of motion, non-solar perturbations, improved lunar ephemeris, optical and physical libration of the moon, and adjustment of heliometric observations of the moon's libration. The text then elaborates on the dynamics of the earth-moon system, photometry of the moon, and polarization of moonlight. The publication explains lunar eclipses and the topography of the moon. Discussions focus on the photometric model of eclipses, brightness of the solar elementary ring, effects of light scattering, photometry of lunar eclipses, and determination of altitudes on the moon. The text then evaluates the interpretation of lunar craters, luminescence of the lunar surface, and the origin and history of the moon. The selection is a dependable reference for physicists and astronomers interested in the application of principles of physics in the study of the moon. This book consists of material in the first chapter of A Physicist's Desk Reference, updated and supplemented by additional new data. It's a self-contained, quick reference guide to the most commonly used mathematical formulas, tables of data, symbols, units, standard nomenclature, and fundamental constants in physics. A useful bibliography to more complete sources of data is also included.

Publications of the National Bureau of Standards, 1968-1969

Catalog of Books and Reports in the Bureau of Mines Technical Library, Pittsburgh, Pa

An Introduction to Nonlinear Optics

Home Front Heroes [Three Volumes]

U.S. Standard Atmosphere

A surprising collection of writings on the subject of UFOs and alien abduction challenges serious scientists to explore this field, presenting the various recurring themes and unsolved puzzles surrounding our fascination with these unexplained phenomena. This book is presented primarily to record the papers of the Conference on the Exploding Wire Phenomenon conducted by the Air Force Cambridge Research Center in Boston, Massachusetts, on April 2 and 3, 1959. A second and scarcely less important purpose of this book is to serve as a monograph on exploding wires. Nowhere in any language is there a book, or for that matter a section of a book, on electrical wire explosions. The growing interest in and importance of the phenomenon was indicated by the very gratifying response to the Conference invitations. We hope this book, reaching an even larger audience, will fill a gap in the literature as well as serve as a record of the Conference. A logical arrangement of the papers was extremely difficult to accomplish. On whatever basis they were classified, most papers could have been equally well placed in more than one category. This difficulty was solved by arranging them in three broad classes. If this book is to serve as a monograph, some general background in the exploding wire phenomenon (EWP) is needed. The Introduction was written to serve this purpose. It is, of course, impossible to thank all those without whose help the Conference and this book would not have been possible.

Publications of the National Bureau of Standards

Publications

Publications of the National Bureau of Standards ... Catalog

Selected Popular Writings of E.U. Condon

Measures for Progress

E.U. Condon's major contributions were in atomic and molecular physics and spectroscopy; his book with G.H. Shortley on The Theory of Atomic Spectra dominated the field of spectroscopy for half a century and remains an invaluable reference. He also played an important role in the institutions of American science. He served for many years as the editor of Reviews of Modern Physics, and with Hugh Odishaw he edited the still widely used Handbook of Physics. After World War II, Condon became director of the National Bureau of Standards (now NIST), and helped to make it one of the premier research laboratories in the physical sciences in the world. The Selected Scientific Papers reprint many of the most important contributions Condon made to atomic physics, quantum theory, nuclear physics, condensed-matter physics and other fields. The Selected Popular Writings contain articles he wrote on technical topics for such journals as The American Journal of Physics, Science, and Nature, as well as reflections on education, UFO's, and other topics.

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NBS Special Publication

Challenging the Borders of Knowledge

A Compilation of Abstracts and Key Word Author Indexes

Cytology and Cell Physiology

Handbook of Physics. Prepared by a staff of specialists. Edited by E. U. Condon ... H. Odishaw

Cytology and Cell Physiology, Third Edition focuses on cell cytology and physiology as well as recent advances in the techniques in studying cells, including microscopy. It also describes cell membranes, surface, and physiology; cytoplasmic constituents; nucleus and nucleocytoplasmic reactions; enzyme histochemistry and cytochemistry; viruses within cells; and morphology of the cancer cell. Organized into 13 chapters, this edition begins with a historical overview of cytology, the template hypothesis of protein synthesis, and the respiratory function of mitochondria. It then discusses the subcellular components and their centrifugal isolation, some general principles of microscopy, selected physical and physicochemical methods, applications of enzyme histochemistry to electron microscopy, and structure and physical properties of the plasma membrane. The remaining chapters focus on the endoplasmic reticulum, the Golgi apparatus, the nucleus and its role in cell metabolism, RNA synthesis and movement, the behavior of viruses within cells, and pathological changes in cells. The book concludes with a chapter on the function and metabolism of cancer cells. This book is highly recommended to cytologists, investigators in the field of pathology, and graduate students in biology, biochemistry, physiology, and anatomy.

This unique and practical book provides quick and easy access to data on the physical and chemical properties of all classes of materials. The second edition has been much expanded to include whole new families of materials while many of the existing families are broadened and refined with new material and up-to-date information. Particular emphasis is placed on the properties of common industrial materials in each class. Detailed appendices provide additional information, and careful indexing and a tabular format make the data quickly accessible. This book is an essential tool for any practitioner or academic working in materials or in engineering.

Exploding Wires

A History of the National Bureau of Standards

Book Catalog of the Library and Information Services Division: Shelf List catalog

Handbook of Physics , Prepared by a Staff of Specialists. Edited by E. U. Condon and Hugh Odishaw

Handbook of physics, ed

Provides a bibliography of more than three thousand handbooks in various aspects of science and technology, from abrasives and band structures to yield strength and zero defects

Mathematics. Mechanics of particles and rigid bodies. Mechanics of deformable bodies. Electricity and magnetism. Heat and thermodynamic. Optics. Atomic physics. The solid state. Nuclear physics. Appendix: Units and conversion factors.

Handbook of Physics. Prepared by a Staff of Specialists

Physics and Astronomy of the Moon

Annual Report - National Bureau of Standards

Journal of Research of the National Bureau of Standards

U.S. Standard Atmosphere, 1962

Many years spent in an industrial engineering laboratory have convinced me that there is ever-increasing need to present recent and current research in forms which can be easily assimilated by engineers, technical managers, and others concerned with applications and the development of new technology. There is a forbidding gap between the typical research paper, addressed by specialists to other specialists, and the popular-level account addressed to the layman. The second does not adequately prepare the engineer for profitably studying the first; it does not impart sufficient depth of understanding to the manager who must make decisions on the relative merits of various approaches to a problem or on the potential contributions various specialists might make to his program. This book is the outgrowth of a review prepared to fill this need for engineers in a large corporation who were concerned with the industrial application of lasers. That review was written hurriedly, on a fixed budget, to a deadline; consequently, it contained oversimplifications and errors, not all of which were trivial. Nevertheless, the favorable response proved that such a review is indeed needed. It is hoped that this more finished work will prove useful to a wide variety of potential users of laser-centered devices and systems, and may even stimulate the generation of useful ideas.

A Concise Desktop Reference

Publications of the National Institute of Standards and Technology ... Catalog

Technical News Bulletin of the National Bureau of Standards

Annual Report, Fiscal Year 1968

Physics and chemistry