

Radiation Sources

• Problem 1.1. Radiation Energy Spectra: Line vs. Continuous

Line (or discrete energy): a, c, d, e, f, and i.

Continuous energy: b, g, and h.

• Problem 1.2. Conversion electron energies compared.

Since the electrons in outer shells are bound less tightly than those in closer shells, conversion electrons from outer shells will have greater emerging energies. Thus, the M shell electron will emerge with greater energy than a K or L shell electron.

• Problem 1.3. Nuclear decay and predicted energies.

We write the conservation of energy and momentum equations and solve them for the energy of the alpha particle. Momentum is given the symbol "p", and energy is "E". For the subscripts, "a" stands for alpha, while "b" denotes the daughter nucleus.

$$p_a + p_b = 0 \quad \frac{p_a^2}{2m_a} = E_a \quad \frac{p_b^2}{2m_b} = E_b \quad E_a + E_b = Q \quad \text{and} \quad Q = 5.5 \text{ MeV}$$

Solving our system of equations for E_a , E_b , p_a , p_b , we get the solutions shown below. Note that we have two possible sets of solutions (this does not effect the final result).

$$E_b = 5.5 \left(1 - \frac{m_a}{m_a + m_b} \right) \quad E_a = \frac{5.5 m_a}{m_a + m_b}$$

$$p_a = \pm \frac{3.31662 \sqrt{m_a} \sqrt{m_b}}{\sqrt{m_a + m_b}} \quad p_b = \pm \frac{3.31662 \sqrt{m_a} \sqrt{m_b}}{\sqrt{m_a + m_b}}$$

We are interested in finding the energy of the alpha particle in this problem, and since we know the mass of the alpha particle and the daughter nucleus, the result is easily found. By substituting our known values of $m_a = 4$ and $m_b = 206$ into our derived E_a equation we get:

$$E_a = 5.395 \text{ MeV}$$

Note : We can obtain solutions for all the variables by substituting $m_b = 206$ and $m_a = 4$ into the derived equations above :

$$E_a = 5.395 \text{ MeV} \quad E_b = 0.105 \text{ MeV} \quad p_a = \pm 6.570 \sqrt{amu + \text{MeV}} \quad p_b = \pm 6.570 \sqrt{amu + \text{MeV}}$$

• Problem 1.4. Calculation of Wavelength from Energy.

Since an x-ray must essentially be created by the de-excitation of a single electron, the maximum energy of an x-ray emitted in a tube operating at a potential of 195 kV must be 195 keV. Therefore, we can use the equation $E=h\nu$, which is also $E=hc/\lambda$, or $\lambda=hc/E$. Plugging in our maximum energy value into this equation gives the minimum x-ray wavelength.

$$\lambda = \frac{h \times c}{E} \quad \text{where we substitute } h = 6.626 \times 10^{-34} \text{ J} \cdot \text{s}, \quad c = 299\,792\,458 \text{ m/s and } E = 195 \text{ keV}$$

Students Solution Manual Radiation Detection

Morton M. Sternheim



Students Solution Manual Radiation Detection:

Student Solutions Manual to accompany Radiation Detection and Measurement, 4e Glenn F. Knoll, 2012-03-20 Contains solutions to odd numbered problems from the textbook by Glenn Knoll Radiation Detection and Measurement 4th edition as well as solutions for additional Supplemental Problems developed by David Wehe **Student Solutions Manual for Physical Chemistry** C. A. Trapp, Peter Atkins, Julio dePaula, 2009-12-18 With its modern emphasis on the molecular view of physical chemistry its wealth of contemporary applications vivid full color presentation and dynamic new media tools the thoroughly revised new edition is again the most modern most effective full length textbook available for the physical chemistry classroom Available in Split Volumes For maximum flexibility in your physical chemistry course this text is now offered as a traditional text or in two volumes Volume 1 Thermodynamics and Kinetics ISBN 1 4292 3127 0 Volume 2 Quantum Chemistry Spectroscopy and Statistical Thermodynamics ISBN 1 4292 3126 2 Study Guide and Student Solutions Manual for Wilson College Physics David Cordes, Jerry D. Wilson, John Kinard, 1990 This reader friendly book presents the fundamental principles of physics in a clear and concise manner Emphasizing conceptual understanding as the basis for mastering a variety of problem solving tools it provides a wide range of relevant applications and illustrative examples This book discusses mechanics thermodynamics and oscillations and wave motion For anyone wishing to learn more about the fundamentals of physics and how physical principles apply to a variety of real world situations devices and topics *Quantitative Chemical Analysis Student Solutions Manual* Daniel C. Harris, 2006-06-09 The manual contains the solutions to every question in the book with additional and more detailed steps than in previous editions **Student Study Guide and Solutions Manual for General Physics** Morton M. Sternheim, 1986 Student Solutions Manual to Accompany Atkins' Physical Chemistry Charles Trapp, M. P. Cady, Carmen Giunta, 2014 The Student Solutions Manual to accompany Atkins Physical Chemistry 10th edition provides full worked solutions to the exercises and the odd numbered discussion questions and problems presented in the parent book The manual is intended for students and instructors alike and provides helpful comments and friendly advice to aid understanding **Student Study Guide and Solutions Manual to accompany General Organic and Biological Chemistry, 1e** Kenneth W. Raymond, 2005-10-07 Finally readers have a shorter less intimidating introduction to general organic and biological chemistry Not only is Raymond's text concise it also takes an integrated approach to presenting important topics in a way that makes the material easier to understand In this approach similarities can be exploited and concepts reinforced The result is that readers see the strong connections that exist between these three branches of chemistry **Student Study Guide and Solutions Manual to Accompany General, Organic, and Biochemistry** Katherine J. Denniston, Katherine J. Denniston, 2006 **Student Solutions Manual for Introduction to General, Organic, and Biochemistry** Morris Hein, 2001-07-21 Experienced authors and educators Hein Pattison Best and Arena recognize that both science and mathematics can be daunting subjects They skillfully

anticipate areas of difficulty and pace the text accordingly Particular emphasis is placed on the understanding of how chemical principles relate to the readers lives and future careers Nonlinear Dynamics and Chaos with Student Solutions Manual Steven H. Strogatz,2018-09-21 This textbook is aimed at newcomers to nonlinear dynamics and chaos especially students taking a first course in the subject The presentation stresses analytical methods concrete examples and geometric intuition The theory is developed systematically starting with first order differential equations and their bifurcations followed by phase plane analysis limit cycles and their bifurcations and culminating with the Lorenz equations chaos iterated maps period doubling renormalization fractals and strange attractors Student Solutions Manual for Whitten, Davis, Peck, and Stanley's General Chemistry, 7th Ed Wendy L. Keeney-Kennicutt,2004 Contains answers and solutions to all even numbered end of chapter exercises Solutions are divided by section for easy reference by students *Radioanalytical Chemistry Experiments* Moses Attrep,Bernd Kahn,2007-11-24 This Manual accompanies the Textbook teaching radioanalytical chemistry to seniors and graduate students The manual can be used in conjunction with the textbook to teach a 3 hour lecture course and a 6 hour laboratory The experiments address a range of practical aspects in the radiochemistry laboratory use of laboratory and radiation detection equipment performing specific analyses for radio iodine radio strontium uranium and plutonium **Radiation Detection and Measurement** Glenn F. Knoll,2010-08-16 Known for its comprehensive coverage and up to date literature citations this classic text provides students and instructors with the most complete coverage available of radiation detection and measurement Over the decade that has passed since the publication of the 3rd edition technical developments continue to enhance the instruments and techniques available for the detection and spectroscopy of ionizing radiation The Fourth Edition of this invaluable resource incorporates the latest developments and cutting edge technologies to make this the most up to date guide to the field available Covers many new materials that are emerging as scintillators that can achieve energy resolution that is better by a factor of two compared with traditional materials Presents new material on ROC curves micropattern gas detectors new sensors for scintillation light thick film semiconductors and digital techniques in detector pulse processing Includes updated discussions on TLDs neutron detectors cryogenic spectrometers radiation backgrounds and the VME instrumentation standard *Student Solutions Manual to Accompany a Conceptual Introduction to Chemistry* Rich Bauer,James Birk,Pamela S. Marks,Pamela Marks,2006-02 The Student Solutions Manual contains detailed solutions and explanations for all odd numbered problems in the text

Monthly Catalog of United States Government Publications United States. Superintendent of Documents,1967-07

Study Guide and Student Solutions Manual Douglas Brandt,2000 Physics for Scientists and Engineers combines outstanding pedagogy with a clear and direct narrative and applications that draw the reader into the physics The new edition features an unrivaled suite of media and on line resources that enhance the understanding of physics Many new topics have been incorporated such as the Otto cycle lens combinations three phase alternating current and many more New

developments and discoveries in physics have been added including the Hubble space telescope age and inflation of the universe and distant planets Modern physics topics are often discussed within the framework of classical physics where appropriate For scientists and engineers who are interested in learning physics **Solutions Manual to Accompany General Chemistry with Qualitative Analysis, Second Edition** Ralph H. Petrucci, Robert K. Wismer, 1987 *Radiation Protection In The Health Sciences (With Problem Solutions Manual) (2nd Edition)* Marilyn E Noz, Gerald Q Maguire Jr, 2007-04-12 This book takes a very practical approach to radiation protection and presents very readable information for anyone working in the radiation field or with radioactive material Offering information rarely found elsewhere the authors describe in detail both the basic principles and practical implementation recommendations of radiation protection Each chapter includes self assessment review questions and problems with answers provided to help readers master important information Coupled with a teacher s manual this book is highly suitable as an undergraduate text for students preparing for careers as X ray radiation oncology or nuclear medicine technologists It can also be used as a reference for residents in radiology and radiation oncology medical personnel or anyone working with radioactive materials such as those involved in homeland security emergency services or employed at a nuclear power plant *Radiation on Detection and Measurement* Glenn F. Knoll, 1989-01-01 *Radioactive Waste Processing and Disposal* , 1958

Right here, we have countless ebook **Students Solution Manual Radiation Detection** and collections to check out. We additionally manage to pay for variant types and furthermore type of the books to browse. The within acceptable limits book, fiction, history, novel, scientific research, as skillfully as various supplementary sorts of books are readily manageable here.

As this Students Solution Manual Radiation Detection, it ends up living thing one of the favored books Students Solution Manual Radiation Detection collections that we have. This is why you remain in the best website to see the unbelievable ebook to have.

<https://hersolutiongelbuy.com/About/detail/Documents/World%20Geography%20And%20Culture%20Student%20Workbook%20Answer.pdf>

Table of Contents Students Solution Manual Radiation Detection

1. Understanding the eBook Students Solution Manual Radiation Detection
 - The Rise of Digital Reading Students Solution Manual Radiation Detection
 - Advantages of eBooks Over Traditional Books
2. Identifying Students Solution Manual Radiation Detection
 - Exploring Different Genres
 - Considering Fiction vs. Non-Fiction
 - Determining Your Reading Goals
3. Choosing the Right eBook Platform
 - Popular eBook Platforms
 - Features to Look for in an Students Solution Manual Radiation Detection
 - User-Friendly Interface
4. Exploring eBook Recommendations from Students Solution Manual Radiation Detection
 - Personalized Recommendations
 - Students Solution Manual Radiation Detection User Reviews and Ratings
 - Students Solution Manual Radiation Detection and Bestseller Lists

5. Accessing Students Solution Manual Radiation Detection Free and Paid eBooks
 - Students Solution Manual Radiation Detection Public Domain eBooks
 - Students Solution Manual Radiation Detection eBook Subscription Services
 - Students Solution Manual Radiation Detection Budget-Friendly Options
6. Navigating Students Solution Manual Radiation Detection eBook Formats
 - ePub, PDF, MOBI, and More
 - Students Solution Manual Radiation Detection Compatibility with Devices
 - Students Solution Manual Radiation Detection Enhanced eBook Features
7. Enhancing Your Reading Experience
 - Adjustable Fonts and Text Sizes of Students Solution Manual Radiation Detection
 - Highlighting and Note-Taking Students Solution Manual Radiation Detection
 - Interactive Elements Students Solution Manual Radiation Detection
8. Staying Engaged with Students Solution Manual Radiation Detection
 - Joining Online Reading Communities
 - Participating in Virtual Book Clubs
 - Following Authors and Publishers Students Solution Manual Radiation Detection
9. Balancing eBooks and Physical Books Students Solution Manual Radiation Detection
 - Benefits of a Digital Library
 - Creating a Diverse Reading Collection Students Solution Manual Radiation Detection
10. Overcoming Reading Challenges
 - Dealing with Digital Eye Strain
 - Minimizing Distractions
 - Managing Screen Time
11. Cultivating a Reading Routine Students Solution Manual Radiation Detection
 - Setting Reading Goals Students Solution Manual Radiation Detection
 - Carving Out Dedicated Reading Time
12. Sourcing Reliable Information of Students Solution Manual Radiation Detection
 - Fact-Checking eBook Content of Students Solution Manual Radiation Detection
 - Distinguishing Credible Sources
13. Promoting Lifelong Learning

- Utilizing eBooks for Skill Development
- Exploring Educational eBooks

14. Embracing eBook Trends

- Integration of Multimedia Elements
- Interactive and Gamified eBooks

Students Solution Manual Radiation Detection Introduction

In today's digital age, the availability of Students Solution Manual Radiation Detection books and manuals for download has revolutionized the way we access information. Gone are the days of physically flipping through pages and carrying heavy textbooks or manuals. With just a few clicks, we can now access a wealth of knowledge from the comfort of our own homes or on the go. This article will explore the advantages of Students Solution Manual Radiation Detection books and manuals for download, along with some popular platforms that offer these resources. One of the significant advantages of Students Solution Manual Radiation Detection books and manuals for download is the cost-saving aspect. Traditional books and manuals can be costly, especially if you need to purchase several of them for educational or professional purposes. By accessing Students Solution Manual Radiation Detection versions, you eliminate the need to spend money on physical copies. This not only saves you money but also reduces the environmental impact associated with book production and transportation. Furthermore, Students Solution Manual Radiation Detection books and manuals for download are incredibly convenient. With just a computer or smartphone and an internet connection, you can access a vast library of resources on any subject imaginable. Whether you're a student looking for textbooks, a professional seeking industry-specific manuals, or someone interested in self-improvement, these digital resources provide an efficient and accessible means of acquiring knowledge. Moreover, PDF books and manuals offer a range of benefits compared to other digital formats. PDF files are designed to retain their formatting regardless of the device used to open them. This ensures that the content appears exactly as intended by the author, with no loss of formatting or missing graphics. Additionally, PDF files can be easily annotated, bookmarked, and searched for specific terms, making them highly practical for studying or referencing. When it comes to accessing Students Solution Manual Radiation Detection books and manuals, several platforms offer an extensive collection of resources. One such platform is Project Gutenberg, a nonprofit organization that provides over 60,000 free eBooks. These books are primarily in the public domain, meaning they can be freely distributed and downloaded. Project Gutenberg offers a wide range of classic literature, making it an excellent resource for literature enthusiasts. Another popular platform for Students Solution Manual Radiation Detection books and manuals is Open Library. Open Library is an initiative of the Internet Archive, a non-profit organization dedicated to digitizing cultural artifacts and making them accessible to the public.

Open Library hosts millions of books, including both public domain works and contemporary titles. It also allows users to borrow digital copies of certain books for a limited period, similar to a library lending system. Additionally, many universities and educational institutions have their own digital libraries that provide free access to PDF books and manuals. These libraries often offer academic texts, research papers, and technical manuals, making them invaluable resources for students and researchers. Some notable examples include MIT OpenCourseWare, which offers free access to course materials from the Massachusetts Institute of Technology, and the Digital Public Library of America, which provides a vast collection of digitized books and historical documents. In conclusion, Students Solution Manual Radiation Detection books and manuals for download have transformed the way we access information. They provide a cost-effective and convenient means of acquiring knowledge, offering the ability to access a vast library of resources at our fingertips. With platforms like Project Gutenberg, Open Library, and various digital libraries offered by educational institutions, we have access to an ever-expanding collection of books and manuals. Whether for educational, professional, or personal purposes, these digital resources serve as valuable tools for continuous learning and self-improvement. So why not take advantage of the vast world of Students Solution Manual Radiation Detection books and manuals for download and embark on your journey of knowledge?

FAQs About Students Solution Manual Radiation Detection Books

What is a Students Solution Manual Radiation Detection PDF? A PDF (Portable Document Format) is a file format developed by Adobe that preserves the layout and formatting of a document, regardless of the software, hardware, or operating system used to view or print it. **How do I create a Students Solution Manual Radiation Detection PDF?**

There are several ways to create a PDF: Use software like Adobe Acrobat, Microsoft Word, or Google Docs, which often have built-in PDF creation tools. Print to PDF: Many applications and operating systems have a "Print to PDF" option that allows you to save a document as a PDF file instead of printing it on paper. Online converters: There are various online tools that can convert different file types to PDF. **How do I edit a Students Solution Manual Radiation Detection PDF?** Editing a PDF can be done with software like Adobe Acrobat, which allows direct editing of text, images, and other elements within the PDF. Some free tools, like PDFescape or Smallpdf, also offer basic editing capabilities. **How do I convert a Students**

Solution Manual Radiation Detection PDF to another file format? There are multiple ways to convert a PDF to another format: Use online converters like Smallpdf, Zamzar, or Adobe Acrobats export feature to convert PDFs to formats like Word, Excel, JPEG, etc. Software like Adobe Acrobat, Microsoft Word, or other PDF editors may have options to export or save PDFs in different formats. **How do I password-protect a Students Solution Manual Radiation Detection PDF?** Most PDF

editing software allows you to add password protection. In Adobe Acrobat, for instance, you can go to "File" -> "Properties" -> "Security" to set a password to restrict access or editing capabilities. Are there any free alternatives to Adobe Acrobat for working with PDFs? Yes, there are many free alternatives for working with PDFs, such as: LibreOffice: Offers PDF editing features. PDFsam: Allows splitting, merging, and editing PDFs. Foxit Reader: Provides basic PDF viewing and editing capabilities. How do I compress a PDF file? You can use online tools like Smallpdf, ILovePDF, or desktop software like Adobe Acrobat to compress PDF files without significant quality loss. Compression reduces the file size, making it easier to share and download. Can I fill out forms in a PDF file? Yes, most PDF viewers/editors like Adobe Acrobat, Preview (on Mac), or various online tools allow you to fill out forms in PDF files by selecting text fields and entering information. Are there any restrictions when working with PDFs? Some PDFs might have restrictions set by their creator, such as password protection, editing restrictions, or print restrictions. Breaking these restrictions might require specific software or tools, which may or may not be legal depending on the circumstances and local laws.

Find Students Solution Manual Radiation Detection :

[world geography and culture student workbook answer](#)

world war 1 paper topics

[world changers church prayer manual](#)

[world oral health report](#)

workshop manual xr125

workshop manual toyota landcruiser diesel 200 series

workshop manual jog cs50

~~world of warcraft trainer location guide~~

workshop manual hitachi ex 30

[workshop service repair manual peugeot 107](#)

worms 4 mayhem guide

[workshop manual international btd6](#)

workshop manual sh 300

~~world hiatory answers~~

~~workshop manual yamaha dtr 125~~

Students Solution Manual Radiation Detection :

Business Communication: Building Critical Skills Business Communication: Building Critical Skills was built to provide the ultimate in freedom, flexibility, and focused classroom. Broken into 30 modular ... Business Communication: Building Critical Skills Feb 28, 2013 — Business Communication: Building Critical Skills. 6th Edition. 0073403261 · 9780073403267. By Kitty O. Locker, Stephen Kyo Kaczmarek. © 2014 ... Business Communication - Business - College Business Communication: Building Critical Skills. Higher Education Business Communication: Building Critical Skills 6th Edition By Kitty O. Locker, Stephen ... Business Communication: Building Critical Skills Business Communication: Building Critical Skills is a contemporary, comprehensive, and engaging introduction to the core elements of oral, interpersonal, ... Business Communication: Building Critical Skills 6th edition Business Communication: Building Critical Skills 6th Edition is written by Kitty Locker, Stephen Kaczmarek and published by McGraw-Hill Higher Education. Business Communication Building Critical Skills | Rent COUPON: RENT Business Communication Building Critical Skills 6th edition (9780073403267) and save up to 80% on textbook rentals and 90% on used ... Business communication : building critical skills Business communication : building critical skills ; Authors: Kitty O. Locker, Stephen Kyo Kaczmarek ; Edition: Sixth edition View all formats and editions. Business Communication: Building Critical Skills - Hardcover "Business Communication: Building Critical Skills" by Locker and Kaczmarek represents a unique approach to a hands-on course. Written by the same author of ... Business Communication: Building Critical Skills (Irwin ... Business Communication: Building Critical Skills 6th Find 9780073403267 Business Communication: Building Critical Skills 6th Edition by Kitty Locker et al at over 30 bookstores. Buy, rent or sell. Prinz Max von Baden. Erinnerungen und Dokumente ... Prinz Max von Baden. Erinnerungen und Dokumente: Nachdruck der Originalausgabe. In Fraktur | von Baden, Prinz Max | ISBN: 9783863471101 | Kostenloser ... Prinz Max von Baden. Erinnerungen und Dokumente I ... Mit dem vorliegenden Werk liefert von Baden einen dramatischen wie präzisen Zeitzeugenbericht des 1. Weltkriegs. Dabei entwickelt seine minutiöse Aufzeichnung ... Prinz Max Von Baden. Erinnerungen Und Dokumente Mit dem vorliegenden Werk liefert von Baden einen dramatischen wie pr zisen Zeitzeugenbericht des 1. Weltkriegs. Dabei entwickelt seine minuti se Aufzeichnung ... prinz max baden - erinnerungen dokumente Erinnerungen und Dokumente. by Max Baden Prinz und Golo (Mitwirkender), Mann: and a great selection of related books, art and collectibles available now at ... Prinz Max von Baden. Erinnerungen und Dokumente [hrsg. ... Vermittlungshistoriographie, im guten Sinne. Frankfurt am Main. Hellmut Seier. Prinz Max von Baden. Erinnerungen und Dokumente. Hg. von Golo Mann und Andreas ... Prinz Max von Baden. Erinnerungen und Dokumente ... Vorliegende Abhandlung, die von Baden 1921 verfasste, bietet einen spannenden Einblick in zeitgenössische Ansichten von Badens über die politischen Verhältnisse ... Schreiben von Hermann Oncken an Prinz Max von Baden Mar 31, 2023 — Dokument. Schreiben von Hermann Oncken an Prinz Max von Baden; Einschätzung zur Publikation "Erinnerung und Dokumente". Mehr anzeigen Prinz Max von Baden. Erinnerungen und

Dokumente Prinz Max von Baden. Erinnerungen und Dokumente: Reihe Deutsches Reich VIII/I-II. Aus Fraktur übertragen (Hardback) ; Publisher: Severus ; ISBN: 9783863471231 Max von Baden Erinnerungen und Dokumente. Band I. Deutsche Verlags-Anstalt, Stuttgart 1927 ... Prinz Max von Baden und seine Welt. Kohlhammer, Stuttgart 2016. ISBN 978-3 ... Prinz Max von Baden. Erinnerungen und Dokumente Baden, Max von Prinz Max von Baden. Erinnerungen und Dokumente - Teil 1 und 2 (Ebook - pdf) ; ISBN · 9783863471361 ; Anzahl der Seiten · 796 ; Verlag · Severus Verlag. Armorial of railways in Great Britain Railways in Great Britain have a spotted history with heraldry. Though there are some examples of railway companies acquiring legitimate grants of arms from ... Railway Heraldry Railway heraldry. Discover heraldic devices created by a wide range of railway companies from the 18th to the 21st centuries, including company seals and ... Railway Heraldry: George Dow Book details · Print length. 272 pages · Language. English · Publisher. David & Charles PLC · Publication date. November 27, 1975 · ISBN-10. 0715371304 · ISBN- ... Railway Heraldry Railway heraldry. Discover heraldic devices created by a wide range of railway companies from the 18th to the 21st centuries, including company seals and ... Railway Heraldry Mar 28, 2013 — This symbolising the fertility and renewal of the country because of its rail infrastructure. These componants are seperated by four shamrocks ... Category:Locomotives in heraldry Jun 17, 2022 — All structured data from the file namespace is available under the Creative Commons CC0 License; all unstructured text is available under the ... Railway Heraldry with Gordon Casely Oct 30, 2021 — Scottish railways in modern times are no better. Casely recalled writing to the chief executive of the Great North Eastern Railway in 1996 ... RAILWAY HERALDRY by DOW GEORGE ISBN: 9780715358962 - 1st. - Hard Cover - DAVID & CHARLES - 1973 - Condition: VG - VG - Important standard reference work with details of the crests, ... Railway heraldry and other insignia: Dow, George Railway heraldry and other insignia ; FREE delivery November 20 - 24. Details ; Publisher, David & Charles; First Edition (January 1, 1973) ; Language, English.