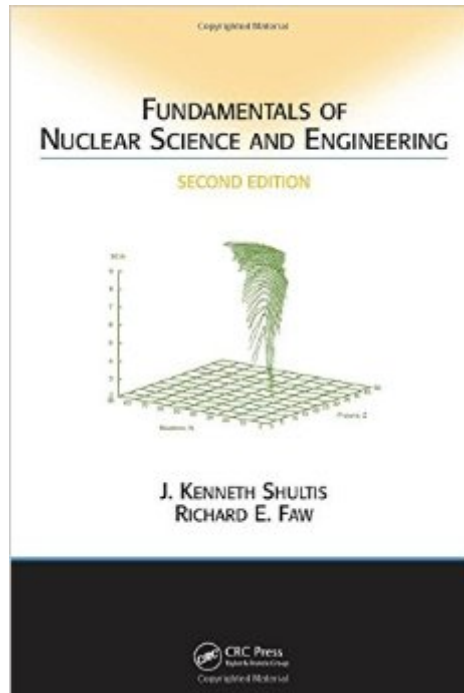


The book was found

Fundamentals Of Nuclear Science And Engineering Second Edition



Synopsis

Since the publication of the bestselling first edition, there have been numerous advances in the field of nuclear science. In medicine, accelerator based teletherapy and electron-beam therapy have become standard. New demands in national security have stimulated major advances in nuclear instrumentation. An ideal introduction to the fundamentals of nuclear science and engineering, this book presents the basic nuclear science needed to understand and quantify an extensive range of nuclear phenomena. New to the Second Edition • A chapter on radiation detection by Douglas McGregor Up-to-date coverage of radiation hazards, reactor designs, and medical applications Flexible organization of material that allows for quick reference This edition also takes an in-depth look at particle accelerators, nuclear fusion reactions and devices, and nuclear technology in medical diagnostics and treatment. In addition, the author discusses applications such as the direct conversion of nuclear energy into electricity. The breadth of coverage is unparalleled, ranging from the theory and design characteristics of nuclear reactors to the identification of biological risks associated with ionizing radiation. All topics are supplemented with extensive nuclear data compilations to perform a wealth of calculations. Providing extensive coverage of physics, nuclear science, and nuclear technology of all types, this up-to-date second edition of Fundamentals of Nuclear Science and Engineering is a key reference for any physicists or engineer.

Book Information

Hardcover: 616 pages

Publisher: CRC Press; 2 edition (September 7, 2007)

Language: English

ISBN-10: 1420051350

ISBN-13: 978-1420051353

Product Dimensions: 7.3 x 1.4 x 10.3 inches

Shipping Weight: 2.6 pounds (View shipping rates and policies)

Average Customer Review: 4.4 out of 5 stars See all reviews (13 customer reviews)

Best Sellers Rank: #117,018 in Books (See Top 100 in Books) #10 in Books > Engineering & Transportation > Engineering > Energy Production & Extraction > Nuclear #45 in Books > Science & Math > Physics > Dynamics > Thermodynamics #93 in Books > Textbooks > Science & Mathematics > Mechanics

Customer Reviews

This book is pure fun to read... easy to follow, clearly written, and full of cool graphs. It invokes the

engineer, physicist, and statistician in you all at once. If for nothing else but having fun, you should get a copy and read it. But wish it wasn't so expensive.

Fundamentals of Nuclear Science and Engineering is a perfect introduction to the field. It starts gently enough so that anyone with a basic high school understanding of chemistry and physics can easily pick up the quantitative and qualitative ideas behind the operations of subatomic particles. The graphics are an appropriate companion to the text and the indices and appendices are extremely useful for performing calculations. The only potential downside would regard the end of chapter problems tending towards a "plug and chug" nature.

But why only 4 stars? There is no answer for problems! But this is a "common disease" in nuclear eng. textbooks, in my humble and limited opinion & sample size. The authors give clear explanations and derivations are good too. I really suggest it as an nuclear introductory course for anyone, also not nuclear engineering students. I have tried Lamarsh before, but it is hard to follow. Duderstadt & Hamilton is great too, but it deals "only" with reactors.

I'm a senior in Mechanical Engineering and I'm using this book for an elective I thought would be fun. I'm not some guy that is blaming poor test scores on a book, I'm genuinely disappointed by it. This text is one of the worst I've ever had to deal with. There are very few examples in the book and the solutions for the problems are nowhere to be found online. The lack of good examples can make a simple question take obscene amounts of time. The book is formatted poorly as well, which makes it difficult to find things when you're flipping back and forth between pages. There are a few pictures and graphs but most pages are just block text which can take quite a bit of time to wade through if you don't already know exactly where to look. Unfortunately most people buying this book don't have the option to choose something else, however, if you're a professor wanting to change books, I would recommend looking elsewhere.

Junior in Mechanical Engineering. Pulled a B in the class no thanks to this awful text. Subjects in this book are very convoluted. Example problems often have pre made assumptions that are never stated making the problems hard to follow. Good luck if you are required to use this book for your class.

This book overall does a good job discussing the required theory for nuclear engineering, and then

discusses several applications. Some of its discussion is a little hard to follow, but that's likely due to the quantum mechanical nature of the material, not the author.

Really great textbook for the fundamental principles of nuclear science!! Recommend greatly.

[Download to continue reading...](#)

Nuclear Chemical Engineering (1957) (McGraw-Hill Series in Nuclear Engineering) Fundamentals of Nuclear Science and Engineering Second Edition Nuclear Reactor Design (An Advanced Course in Nuclear Engineering) Nuclear Energy, Seventh Edition: An Introduction to the Concepts, Systems, and Applications of Nuclear Processes Fundamentals of Earthquake Engineering (Civil engineering and engineering mechanics series) Nuclear War Survival Skills (Upgraded 2012 Edition) (Red Dog Nuclear Survival) Nuclear War Survival Skills: Lifesaving Nuclear Facts and Self-Help Instructions Nuclear Weapons Databook: Volume I - U.S. Nuclear Forces and Capabilities Nuclear Systems Volume I: Thermal Hydraulic Fundamentals, Second Edition NUCLEAR WAR SURVIVAL MANUAL, PROTECTION IN THE NUCLEAR AGE Computability, Complexity, and Languages, Second Edition: Fundamentals of Theoretical Computer Science (Computer Science and Scientific Computing) Face Image Analysis by Unsupervised Learning (The Kluwer International Series in Engineering and Computer Science, Volume 612) (The Springer International Series in Engineering and Computer Science) Fundamentals of Nursing: Human Health and Function (Craven, Fundamentals of Nursing: Human Health and Function Craven, Fundamentals of Nurs) Nuclear and Radiochemistry: Fundamentals and Applications, 2 Volume Set An Introduction to Nuclear Materials: Fundamentals and Applications NUF Cram Notes: Rennhack's Concise Study Guide for the Contract Radiation Protection Technician Nuclear Utilities Fundamentals (NUF) Exam Fundamentals of Air Pollution Engineering (Dover Civil and Mechanical Engineering) Biomedical Engineering and Design Handbook, Volume 1: Volume I: Biomedical Engineering Fundamentals Fundamentals of Engineering Thermodynamics/Book and Disk (Mcgraw Hill Series in Mechanical Engineering) Introduction to Nuclear Engineering (3rd Edition)

[Dmca](#)