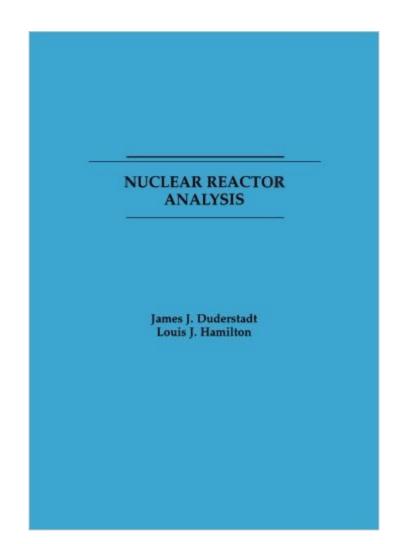
The book was found

Nuclear Reactor Analysis





Synopsis

Classic textbook for an introductory course in nuclear reactor analysis that introduces the nuclear engineering student to the basic scientific principles of nuclear fission chain reactions and lays a foundation for the subsequent application of these principles to the nuclear design and analysis of reactor cores. This text introduces the student to the fundamental principles governing nuclear fission chain reactions in a manner that renders the transition to practical nuclear reactor design methods most natural. The authors stress throughout the very close interplay between the nuclear analysis of a reactor core and those nonnuclear aspects of core analysis, such as thermal-hydraulics or materials studies, which play a major role in determining a reactor design.

Book Information

Paperback: 650 pages Publisher: Wiley; 1 edition (January 1, 1976) Language: English ISBN-10: 0471223638 ISBN-13: 978-0471223634 Product Dimensions: 7.2 x 1.5 x 10.4 inches Shipping Weight: 3.1 pounds (View shipping rates and policies) Average Customer Review: 4.7 out of 5 stars Â See all reviews (12 customer reviews) Best Sellers Rank: #202,338 in Books (See Top 100 in Books) #22 in Books > Engineering & Transportation > Engineering > Energy Production & Extraction > Nuclear #182 in Books > Engineering & Transportation > Engineering > Chemical #778 in Books > Science & Math > Nature & Ecology > Conservation

Customer Reviews

This book is one of the two "Bibles" of Nuclear Engineering. LaMarsh's "Introduction to Nuclear Engineering" is the other IMHO. For those interested in a broad overview of Nuclear Engineering, it is my opinion that you should start with the LaMarsh book. Duderstadt's book contains a lot more math and can be difficult to follow without some solid math background and a few Nuc Eng courses under your belt. There are a few cases in the book where a series of equations leading to a conclusion skip a few steps. It's not as bad as the old "A=B and from this we see that e = mc2!" joke, but some work is required. That said, this books drawbacks are also its strengths. It has stood the test of time [my copy is over 20 years old] and will probably remain relevant for another 20 years. It is to my knowledge well prepared and error free, and a must-have for anyone interested in

nuclear reactor engineering.

A good, solid, book for a undergraduate student in nuclear engineering or anyone with a physical sciences background who is interested in learning more about nuclear power operations and analysis. Very clear text with plenty of information on topics (i.e., reactor design) that often confuse students. -Mike Walker Thorsvedtt

This is a great introductory textbook for Nuclear Reactor Analysis/ One-Speed diffusion model/Multigroup Diffusion method and core design. It was published a while ago - in 1976, but remains to be one of the best textbook on the topic.

This book is one of the fundamental cornerstones of academic nuclear engineering. I just finished reading it from cover to cover (studying for my phd candidacy exam). The lack of commas after prepositional phrases drove me crazy, but it's definitely a thorough introduction to many different nuclear topics. In my opinion, it's getting a little dated. For example, the first page says "It is anticipated that some 500 nuclear power plants will be installed in the United States alone by the year 2000...". The book is nearly 40 years old now, but a suitable replacement just isn't out there. I also see a lot of room for improvement on the questions at the end of each chapter - they're often too vague and high-level. Regardless, I highly recommend this book for any future nuclear engineer's textbook collection. It shouldn't be used as an undergraduate textbook (though it was for me, unfortunately). If you're looking for an easier textbook with the same material, I highly suggest "Introduction to Nuclear Engineering" by Lamarsh.

Because this book contains adequate physics and mathematics for a good overview introduction to nuclear fission reactor physics/engineering I consider it as an excellent book in its theme. However I think it will be good to include also information on nuclear fission reactors electronic systems, etc. From Joseph-Christos Kondylakiss.n : you may interested about my scientific reseach mentioned in the scientific article with the title "Theoretically and under very special applied conditions a nuclear fission reactor may explode as nuclear bomb" by Joseph-Christos Kondylakis, published in the scientific proceedings of the Helenic Nucler Physics Society(HNPS) in its 19th scientific symposiumm held at the Aristotle University of Thessaloniki, Greece, on 28-29 May 2010 . This proceedings exists also in the Internet site: http://nuclpart.phys.uoa.gr/HNPS/Files/ANP2010.pdf

This is a must have book for anyone studying nuclear engineering or reactor physics.Duderstadt takes a very understandable approach to these topics which by necessity can be very complicated.The book is very easy to read compared to other texts on the subject. If you are in the field, you need to own thisbook.

Download to continue reading...

Nuclear Power Plant Reactor Training Manual: Boiling Water Reactor (BWR) Design at Japan TEPCO Fukushima Plant and U.S. Plants - Comprehensive Technical Data on Systems, Components, and Operations Nuclear Reactor Design (An Advanced Course in Nuclear Engineering) Nuclear Reactor Analysis Nuclear Reactor Engineering Photochemical Purification of Water and Air: Advanced Oxidation Processes (AOPs) - Principles, Reaction Mechanisms, Reactor Concepts Evaluation of the U.S. Department of Energy's Alternatives for the Removal and Disposition of Molten Salt Reactor Experiment Fluoride Salts Nuclear War Survival Skills: Lifesaving Nuclear Facts and Self-Help Instructions Nuclear Energy, Seventh Edition: An Introduction to the Concepts, Systems, and Applications of Nuclear Processes Nuclear Chemical Engineering (1957) (McGraw-Hill Series in Nuclear Engineering) Nuclear Weapons Databook: Volume I - U.S. Nuclear Forces and Capabilities Nuclear War Survival Skills (Upgraded 2012 Edition) (Red Dog Nuclear Survival) NUCLEAR WAR SURVIVAL MANUAL, PROTECTION IN THE NUCLEAR AGE Radiochemistry and Nuclear Methods of Analysis (Chemical Analysis: A Series of Monographs on Analytical Chemistry and Its Applications) Radiochemistry and Nuclear Methods of Analysis Nuclear Medicine: A Core Review ATOMIC WAR! SOVIET AGGRESSION - AMERICAN RESPONSE: 4 CLASSIC COLD WAR COMIC BOOKS FROM THE 1950s plus 3 NUCLEAR BOMB GOVERNMENT PAMPHLETS Nuclear War Survival Skills: 2001 Edition Plutopia: Nuclear Families, Atomic Cities, and the Great Soviet and American Plutonium Disasters Atomic Accidents: A History of Nuclear Meltdowns and Disasters: From the Ozark Mountains to Fukushima NUF Cram Notes: Rennhack's Concise Study Guide for the Contract Radiation Protection Technician Nuclear Utilities Fundamentals (NUF) Exam

<u>Dmca</u>