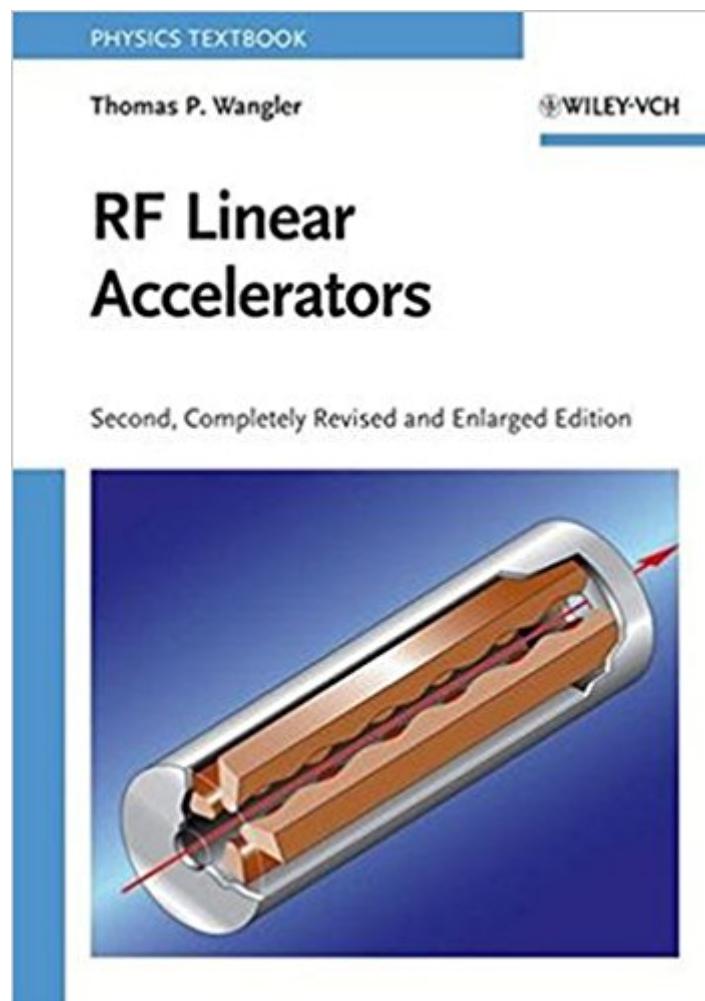


The book was found

# RF Linear Accelerators



## Synopsis

Borne out of twentieth-century science and technology, the field of RF (radio frequency) linear accelerators has made significant contributions to basic research, energy, medicine, and national defense. As we advance into the twenty-first century, the linac field has been undergoing rapid development as the demand for its many applications, emphasizing high-energy, high-intensity, and high-brightness output beams, continues to grow. RF Linear Accelerators is a textbook that is based on a US Particle Accelerator School graduate-level course that fills the need for a single introductory source on linear accelerators. The text provides the scientific principles and up-to-date technological aspects for both electron and ion linacs. This second edition has been completely revised and expanded to include examples of modern RF linacs, special linacs and special techniques as well as superconducting linacs. In addition, problem sets at the end of each chapter supplement the material covered. The book serves as a must-have reference for professionals interested in beam physics and accelerator technology.

## Book Information

Paperback: 466 pages

Publisher: Wiley-VCH; 2 edition (March 3, 2008)

Language: English

ISBN-10: 3527406808

ISBN-13: 978-3527406807

Product Dimensions: 6.7 x 0.8 x 9.4 inches

Shipping Weight: 2 pounds (View shipping rates and policies)

Average Customer Review: 4.0 out of 5 starsÂ  See all reviewsÂ  (1 customer review)

Best Sellers Rank: #1,681,588 in Books (See Top 100 in Books) #344 inÂ  Books > Science & Math > Physics > Nuclear Physics > Particle Physics #4441 inÂ  Books > Textbooks > Science & Mathematics > Physics

## Customer Reviews

Particle accelerators can be grouped into various types. Of these, perhaps the simplest to understand are linacs - linear accelerators. In a fairly concise book, Wangler offers a clear elucidation of the main principles underlying most linacs, which use radio frequency techniques to accelerate the charged particles. He discusses how the pulses of particles can drift, either transversely (that is, orthogonal to the beam direction), or longitudinally (in the beam direction). Both effects are bad, as they lead to a spreading out and diminution of the luminosity, in area or time. He

devotes separate chapters to these effects, as the countermeasures are somewhat different. When two beams collide, or when a beam collides with a fixed target, the space charge effect can also be significant. He covers the various dynamics of this effect. Overall, a good graduate text, aimed squarely at experimentalists.

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

RF Linear Accelerators Studies in linear and non-linear programming, (Stanford mathematical studies in the social sciences) Linear Algebra and Its Applications plus New MyMathLab with Pearson eText -- Access Card Package (5th Edition) (Featured Titles for Linear Algebra (Introductory)) Linear Algebra with Applications (9th Edition) (Featured Titles for Linear Algebra (Introductory)) Linear Algebra With Applications (Jones and Bartlett Publishers Series in Mathematics. Linear) A Linear Systems Primer Linear System Theory and Design (The Oxford Series in Electrical and Computer Engineering) Contemporary Linear Systems Using MATLAB (Bookware Companion) Coding the Matrix: Linear Algebra through Applications to Computer Science Fortran Codes for Classical Methods in Linear Dynamics Operational Amplifiers and Linear Integrated Circuits (6th Edition) Linear Genetic Programming (Genetic and Evolutionary Computation) The Analysis and Design of Linear Circuits, 8th Edition Linear Systems and Signals, 2nd Edition The Analysis and Design of Linear Circuits, Student Solutions Manual Fundamentals of Linear Electronics OP Amps & Linear Integrated Circuits Field Guide to Linear Systems in Optics (Field Guide Series) Binary Polynomial Transforms and Non-Linear Digital Filters (Chapman & Hall/CRC Pure and Applied Mathematics) Circuit: Engineering Concepts and Analysis of Linear Electric Circuits

[Dmca](#)