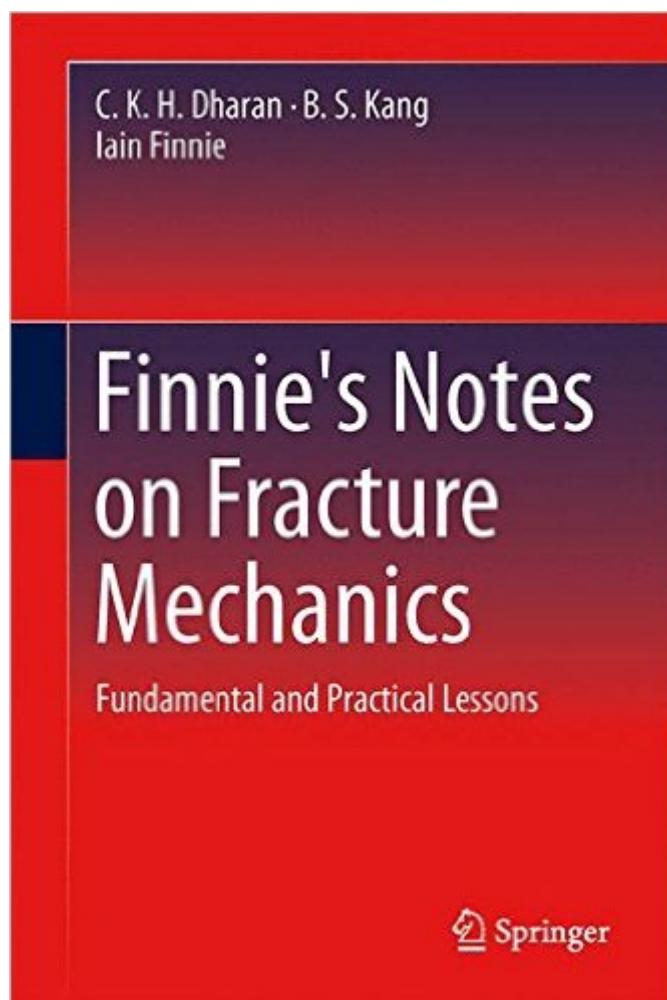


The book was found

# Finnie's Notes On Fracture Mechanics: Fundamental And Practical Lessons



## Synopsis

This textbook consists primarily of notes by Iain Finnie who taught a popular course on fracture mechanics at the University of California at Berkeley. It presents a comprehensive and detailed exposition of fracture, the fundamentals of fracture mechanics and procedures for the safe design of engineering components made from metal alloys, brittle materials like glasses and ceramics, and composites. Interesting and practical problems are listed at the end of most chapters to give the student practice in applying the theory. A solutions manual is provided to the instructor. The text presents a unified perspective of fracture with a strong fundamental foundation and practical applications. In addition to its role as a text, this reference would be invaluable for the practicing engineer who is involved in the design and evaluation of components that are fracture critical. This book also:  
Presents details of derivations of the basic equations of fracture mechanics and the historical context of the development of fracture theory and methodology  
Treats linear and nonlinear fracture mechanics methodologies beginning with a review of the basic equations of solid mechanics followed by solutions useful in fracture prediction  
Illustrates the basis of linear elastic fracture mechanics (LEFM), practical applications of LEFM in the design of fracture-tolerant structural components  
Offers interesting, practical, classroom proven problems at the end of most chapters  
Includes instructor's solutions manual

## Book Information

Hardcover: 249 pages

Publisher: Springer; 1st ed. 2016 edition (October 1, 2016)

Language: English

ISBN-10: 1493924761

ISBN-13: 978-1493924769

Product Dimensions: 6.1 x 0.8 x 9.2 inches

Shipping Weight: 1.7 pounds (View shipping rates and policies)

Best Sellers Rank: #530,765 in Books (See Top 100 in Books) #56 in Books > Engineering & Transportation > Engineering > Materials & Material Science > Strength of Materials #103 in Books > Engineering & Transportation > Engineering > Industrial, Manufacturing & Operational Systems > Industrial Design > Products #760 in Books > Textbooks > Engineering > Mechanical Engineering

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

Finnie's Notes on Fracture Mechanics: Fundamental and Practical Lessons Fracture and Fatigue

Control in Structures: Applications of Fracture Mechanics (Astm Manual Series) Fracture and Fatigue Control in Structures: Applications of Fracture Mechanics Practical Fracture Mechanics for Structural Steel The Practical Use of Fracture Mechanics Roofing (Fundamental Series) (Passbooks) (Fundamental Passbooks) Deformation and Fracture Mechanics of Engineering Materials Fracture Mechanics: Fundamentals and Applications, Second Edition Analytical Fracture Mechanics (Dover Civil and Mechanical Engineering) Fracture Mechanics: Fundamentals and Applications, Third Edition Principles of Fracture Mechanics Elementary engineering fracture mechanics Fracture Mechanics Fracture Mechanics, Second Edition Introduction to Fracture Mechanics Advanced Fracture Mechanics (Oxford Engineering Science Series) Fundamentals of Fracture Mechanics Fundamental Mechanics of Fluids, Fourth Edition Computational Fluid Mechanics and Heat Transfer, Third Edition (Series in Computational and Physical Processes in Mechanics and Thermal Sciences) Reinforced Concrete: Mechanics and Design (4th Edition) (Civil Engineering and Engineering Mechanics)

[Dmca](#)