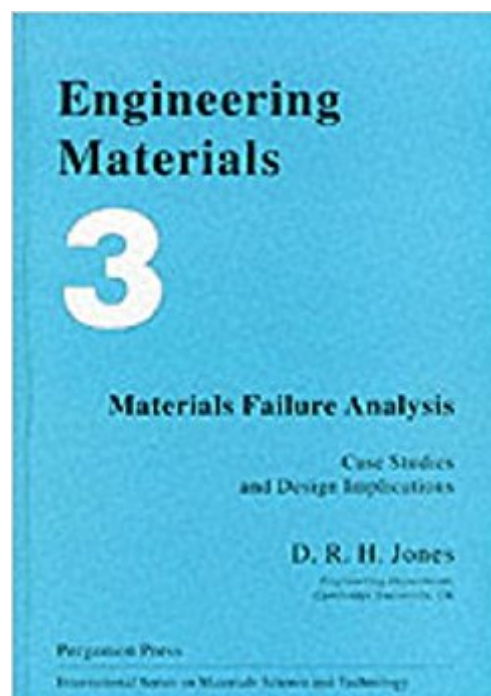




The book was found

# Engineering Materials 3: Materials Failure Analysis: Case Studies And Design Implications (International Series On Materials Science And Technology) (v. 3)



## Synopsis

Engineering Materials 3 provides undergraduate students and graduates with an excellent source of practical information on the design implications of material properties, building on the basic material contained in Engineering Materials 1 and 2. The book presents a series of case studies drawn from real situations involving the failure of materials. These are arranged in groups, each describing failures which were linked mainly to a particular material property. The case studies provide specific examples of the use of engineering materials in real applications and provide essential information for introductory courses on materials, structures, mechanics and design. Most of the case studies involve a fairly detailed analysis, and numerical solutions are obtained where this is appropriate, but the level of mathematics used is basic and standard results are quoted from related branches of engineering. A special feature is a basic "toolkit" of the formulae and data which are most frequently used in failure analysis and design. The book contains a comprehensive set of realistic examples and worked solutions. The final group of chapters - "Great Engineering Disasters" - emphasises the practical consequences of inadequate materials and design. The book has been written in a style to match the widely adopted and popular Ashby & Jones' Engineering Materials 1 and Engineering Materials 2. It draws on the basic material presented in these texts and provides the practical slant which is becoming increasingly important in engineering courses.

## Book Information

Series: International Series on Materials Science and Technology

Hardcover: 384 pages

Publisher: Pergamon; 1st edition (January 15, 1993)

Language: English

ISBN-10: 0080419046

ISBN-13: 978-0080419046

Product Dimensions: 1.2 x 7.2 x 10.5 inches

Shipping Weight: 2.6 pounds

Average Customer Review: 4.1 out of 5 stars 2 customer reviews

Best Sellers Rank: #1,636,745 in Books (See Top 100 in Books) #52 in Books > Engineering & Transportation > Engineering > Materials & Material Science > Fracture Mechanics #138 in Books > Engineering & Transportation > Engineering > Materials & Material Science > Testing #1638 in Books > Engineering & Transportation > Engineering > Materials & Material Science > Materials Science

## Customer Reviews

D.R.H. Jones This book provides an excellent source of practical information on the design implications of materials properties, and presents a series of case studies drawn from real situations involving the failure of materials. Materials Australia A. Gilat...highly recommended for individuals and libraries. Applied Mechanics Review, Vol 47, No 6, Part 1

I am a 17-year practitioner in the field of metallurgical failure analysis. I have a large number of texts and collections of case studies, so I picked this up used for a reasonable cost (and in new condition, very nice!). I judge the book to be written for metallurgical engineering students at the undergrad level. It turns out not to be very useful in my practice, the main reason being that it blends introduction of metallurgical concepts like fracture with case studies. Maybe that works well in the right course, but I find the approach not that useful. My personal view is that failure analysis should be pursued as a career only after a solid theoretical foundation is in place, and after a few years spent in a related field (welding engineering in my case).

Excellent experience Super portable work They shipped quickly, goods packaging is also very fine, This works so much better than I thought it would. You can't do better for the price. if you want an economical and cost items will never miss it. They are the perfect size, and look spectacular. Amazing product and fast service.

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

Engineering Materials 3: Materials Failure Analysis: Case Studies and Design Implications (International Series on Materials Science and Technology) (v. 3) Engineering Materials 2: An Introduction to Microstructures, Processing and Design (International Series on Materials Science and Technology) (v. 2) Freezing Colloids: Observations, Principles, Control, and Use: Applications in Materials Science, Life Science, Earth Science, Food Science, and Engineering (Engineering Materials and Processes) Handbook of Materials Failure Analysis with Case Studies from the Oil and Gas Industry Engineering Materials 2, Fourth Edition: An Introduction to Microstructures and Processing (International Series on Materials Science and Technology) Davis's Comprehensive Handbook of Laboratory and Diagnostic Tests With Nursing Implications (Davis's Comprehensive Handbook of Laboratory & Diagnostic Tests With Nursing Implications) Davis's Comprehensive Handbook of Laboratory and Diagnostic Tests With Nursing Implications (Davis's Comprehensive Handbook of Laboratory & Diagnostic Tests W/ Nursing Implications) Failure Analysis Case Studies

II The Trouble with the Congo: Local Violence and the Failure of International Peacebuilding (Cambridge Studies in International Relations) Failure Analysis of Engineering Materials Seismic Design and Assessment of Bridges: Inelastic Methods of Analysis and Case Studies (Geotechnical, Geological and Earthquake Engineering) Failure of Materials in Mechanical Design: Analysis, Prediction, Prevention, 2nd Edition The Ford Pinto Case (Suny Series, Case Studies in Applied Ethics, Technology, & Society) Biomagnetism: Applications and Theory (Pergamon International Library of Science, Technology, Engineering, and Social Studies) Inorganic Geochemistry (Pergamon International Library of Science, Technology, Engineering & Social Studies) Case Studies in Cardiovascular Critical Care Nursing (Aspen Series of Case Studies in Critical Care Nursing) Science and Technology in the Global Cold War (Transformations: Studies in the History of Science and Technology) Foresight for Science, Technology and Innovation (Science, Technology and Innovation Studies) Systems Engineering and Analysis (5th Edition) (Prentice Hall International Series in Industrial & Systems Engineering) Biomimetic Materials And Design: Biointerfacial Strategies, Tissue Engineering And Targeted Drug Delivery (Manufacturing Engineering & Materials Processing)

[Contact Us](#)

[DMCA](#)

[Privacy](#)

[FAQ & Help](#)