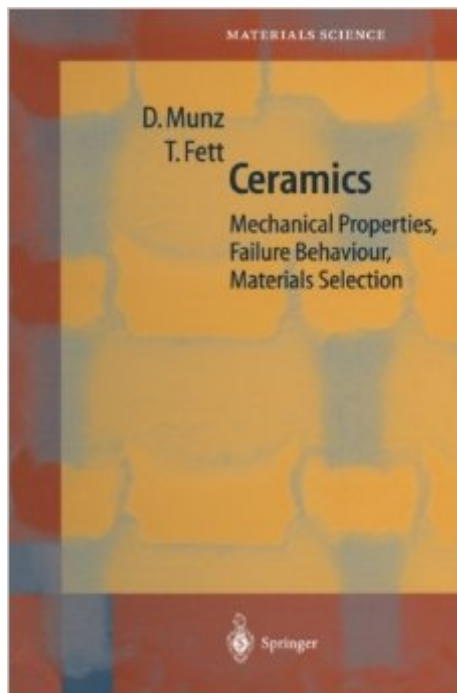


The book was found

Ceramics: Mechanical Properties, Failure Behaviour, Materials Selection (Springer Series In Materials Science)



Synopsis

The book gives a description of the failure phenomena of ceramic materials under mechanical loading, the methods to determine their properties, and the principles for material selection. The book presents fracture mechanical and statistical principles and their application to describe the scatter of strength and lifetime, while special chapters are devoted to creep behaviour, multiaxial failure criteria and thermal shock behaviour. XXXXXXXX Neuer Text Describing how ceramic materials fracture and fail under mechanical loading, this book provides methods for determining the properties of ceramics, and gives criteria for selecting ceramic materials for particular applications. It also examines the fracture-mechanical and statistical principles and their use in understanding the strength and durability of ceramics. Special chapters are devoted to creep behavior, criteria for multiaxial failure, and behavior under thermal shock. Readers will gain insight into the design of reliable ceramic components.

Book Information

Series: Springer Series in Materials Science (Book 36)

Paperback: 299 pages

Publisher: Springer; Softcover reprint of the original 1st ed. 1999 edition (March 11, 1999)

Language: English

ISBN-10: 3642635806

ISBN-13: 978-3642635809

Product Dimensions: 6.1 x 0.7 x 9.2 inches

Shipping Weight: 1.2 pounds (View shipping rates and policies)

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

Best Sellers Rank: #3,238,441 in Books (See Top 100 in Books) #121 inÂ Books > Engineering & Transportation > Engineering > Materials & Material Science > Fracture Mechanics #227 inÂ Books > Engineering & Transportation > Engineering > Materials & Material Science > Strength of Materials #422 inÂ Books > Engineering & Transportation > Engineering > Materials & Material Science > Testing

Customer Reviews

This book was exactly what I was looking for. I needed a clear, concise book on ceramic materials and material properties. The one thing I would suggest for improvement is to include a section on designing with ceramic materials, things like shrinkage factors and material specific rules of thumb.

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

Ceramics: Mechanical Properties, Failure Behaviour, Materials Selection (Springer Series in Materials Science) Code Check Plumbing & Mechanical 4th Edition: An Illustrated Guide to the Plumbing and Mechanical Codes (Code Check Plumbing & Mechanical: An Illustrated Guide) Dental Materials: Properties and Manipulation, 9e (Dental Materials: Properties & Manipulation (Craig)) Antique Trader Pottery & Porcelain Ceramics Price Guide (Antique Trader Pottery and Porcelain Ceramics Price Guide) Ceramics in America 2006 (Ceramics in America Annual) Perspectives in Dental Ceramics: Proceedings of the Fourth International Symposium on Ceramics Failure of Materials in Mechanical Design: Analysis, Prediction, Prevention, 2nd Edition Materials Selection in Mechanical Design, Fourth Edition PE Mechanical Engineering: Mechanical Systems and Materials Practice Exam Fundamentals of Ceramics (Series in Materials Science and Engineering) IEC 60605-6 Ed. 2.0 b:1997, Equipment reliability testing - Part 6: Tests for the validity of the constant failure rate or constant failure intensity assumptions Gender Selection: The Complete Guide: Choose the Sex of Your Baby with Easy and Proven Natural Methods (Gender Selection Methods) Tribology of Ceramics and Composites: Materials Science Perspective Practical Plant Failure Analysis: A Guide to Understanding Machinery Deterioration and Improving Equipment Reliability (Mechanical Engineering) Failure Analysis: Fundamentals and Applications in Mechanical Components Mechanical Design of Machine Elements and Machines: A Failure Prevention Perspective Shigley's Mechanical Engineering Design (McGraw-Hill Series in Mechanical Engineering) The Mechanical Design Process (Mcgraw-Hill Series in Mechanical Engineering) Fundamentals of Mechanical Vibrations: IBM PC 3.5 Version (Mcgraw Hill Series in Mechanical Engineering) Optical Properties of Bismuth-Based Topological Insulators (Springer Theses)

[Dmca](#)