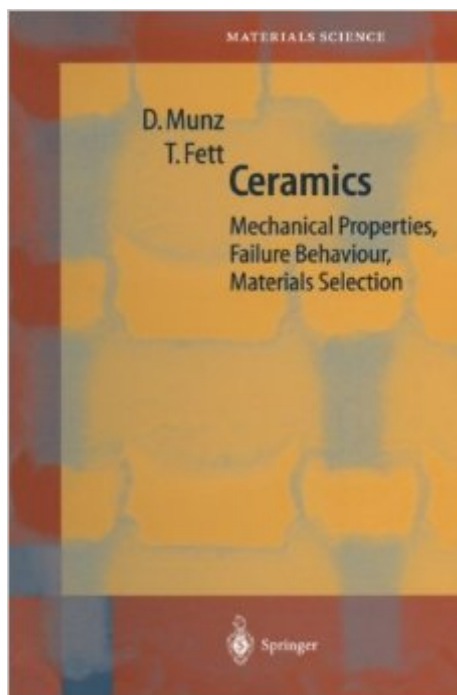


The book was found

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 stars See all reviews (1 customer review)

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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.

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