New Functional Biomaterials for Medicine and Healthcare

New Functional Biomaterials for Medicine and Healthcare (Woodhead Publishing Series in Biomaterials Book 67) by Elena P. Ivanova

4.1 out of 5

Language	: English
File size	: 5894 KB
Text-to-Speech	: Enabled
Screen Reader	: Supported
Enhanced typesetting	: Enabled
Print length	: 247 pages

Biomaterials are materials used to replace or repair damaged tissue or organs in the body. They have a wide range of applications in medicine and healthcare, including tissue engineering, drug delivery, and medical devices.

The field of biomaterials is rapidly evolving, with new materials being developed all the time. These new materials offer a number of advantages over traditional materials, including improved biocompatibility, biodegradability, and bioactivity.

This comprehensive book provides an extensive overview of the rapidly evolving field of biomaterials, discussing the latest advances in materials research and applications in medicine and healthcare. The book is divided into four parts:

1. **to biomaterials**
2. **Biomaterials for tissue engineering**
3. **Biomaterials for drug delivery**
4. **Biomaterials for medical devices**

Each part of the book is written by a team of experts in the field, and provides a comprehensive overview of the latest research and developments. The book is also richly illustrated with figures and tables, making it an essential resource for anyone working in the field of biomaterials.

Key Features

- Provides a comprehensive overview of the rapidly evolving field of biomaterials
- Discusses the latest advances in materials research and applications in medicine and healthcare
- Written by a team of experts in the field
- Richly illustrated with figures and tables
- An essential resource for anyone working in the field of biomaterials

Table of Contents

3. Biodegradability and bioresorbability
4. Bioactivity

2. **Biomaterials for tissue engineering**
    1. to tissue engineering
    2. Biomaterials for bone tissue engineering
    3. Biomaterials for cartilage tissue engineering
    4. Biomaterials for skin tissue engineering
    5. Biomaterials for neural tissue engineering
3. **Biomaterials for drug delivery**
    1. to drug delivery
    2. Biomaterials for controlled drug delivery
    3. Biomaterials for targeted drug delivery
    4. Biomaterials for gene delivery
4. **Biomaterials for medical devices**
    1. to medical devices
    2. Biomaterials for cardiovascular devices
    3. Biomaterials for orthopedic devices
    4. Biomaterials for dental devices
    5. Biomaterials for other medical devices

Author Biographies

Editor:

Dr. Xian Jun Loh is a Professor in the Department of Materials Science and Engineering at the National University of Singapore. He is also the Director of the NUS Centre for Biomaterials and Tissue Engineering. Dr. Loh's research interests include the development of novel biomaterials for tissue engineering, drug delivery, and medical devices.

Contributors:

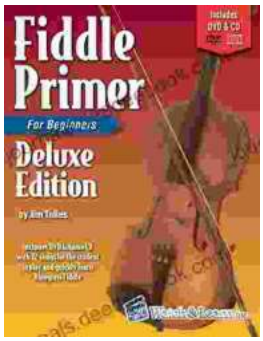
The book is written by a team of experts in the field of biomaterials, including:

- Dr. Ali Khademhosseini
- Dr. Samuel I. Stupp
- Dr. Robert Langer
- Dr. Cato T. Laurencin
- Dr. Molly S. Shoichet
- Dr. Anthony Atala

Order Your Copy Today

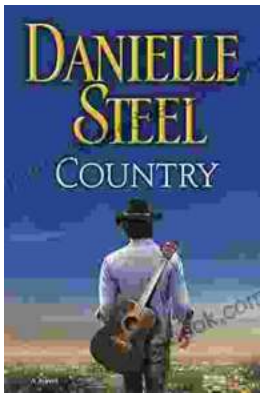
New Functional Biomaterials for Medicine and Healthcare is available for purchase on the Woodhead Publishing website: https://www.woodheadpublishing.com/biomaterials-medicine-healthcare

File size	: 5894 KB
Text-to-Speech	: Enabled
Screen Reader	: Supported
Enhanced typesetting	: Enabled
Print length	: 247 pages



Fiddle Primer for Beginners Deluxe Edition: Your Comprehensive Guide to Fiddle Playing

Embark on an extraordinary musical journey with 'Fiddle Primer for Beginners Deluxe Edition,' the ultimate guide to mastering the fiddle. This...



An Enchanting Journey into the Alluring World of Danielle Steel's Country Novels

Danielle Steel is an American novelist best known for her compelling and heartwarming romance novels. With over 170 books to her name, she is one of the world's most...