

图书基本信息

书名：<<智能材料在结构健康监测控制及生物力学中的应用>>

13位ISBN编号：9787308082662

10位ISBN编号：7308082660

出版时间：2012-4

出版单位：浙江大学出版社

作者：苏志强，等 编

页数：618

版权说明：本站所提供下载的PDF图书仅提供预览和简介，请支持正版图书。

更多资源请访问：<http://www.tushu007.com>

## 内容概要

Smart Materials in Structural Health Monitoring, Control and Biomechanics presents the latest developments in structural health monitoring, vibration control and biomechanics using smart materials. The book mainly focuses on piezoelectric, fibre optic and ionic polymer metal composite materials. It introduces concepts from the very basics and leads to advanced modelling ( analytical/numerical ), practical aspects ( including software/hardware issues ) and case studies spanning civil, mechanical and aerospace structures, including bridges, rocks and underground structures. This book is intended for practicing engineers, researchers from academic and R&D institutions and postgraduate students in the fields of smart materials and structures, structural health monitoring, vibration control and biomedical engineering.

书籍目录

1 Introduction2 Electro-Mechanical Impedance Technique3 Impedance Models for Structural Health Monitoring Using Piezo-Impedance Transducers4 Damage Quantification Using EMI Technique,Strength and Damage Assessment of Concrete6 Integration of EMI Technique with Global Vibration Techniques7 Sensing Region, Load Monitoring and Practical Issues8 Smart Beams: A Semi-Analytical Method9 Smart Plates and Shells10 Cylindrical Shells with Piezoelectric Shear Actuators11 Fiber Bragg Grating12 Applications of Fiber Bragg Grating Sensors13 Monitoring of Rocks and Underground Structures Using PZT and FBG Sensors14 Ionic Polymer-Metal Composite and its Actuation Characteristics15 IPMC-Based Biomedical Applications16 Bone Characterization Using Piezo-Transducers as Bio-Medical Sensors17 Future of Smart MaterialsAppendixIndex

版权说明

本站所提供下载的PDF图书仅提供预览和简介，请支持正版图书。

更多资源请访问:<http://www.tushu007.com>