

1. Record Nr.	UNINA9910450379903321
Titolo	Medicine meets virtual reality 13 [[electronic resource] ] : the magical next becomes the medical now // edited by James D. Westwood ... [et al.]
Pubbl/distr/stampa	Amsterdam ; ; Oxford, : IOS Press, 2005
ISBN	1-280-50478-1 9786610504787 1-4294-0196-6 1-60750-110-4 600-00-0484-2 1-60129-091-8
Descrizione fisica	1 online resource (660 p.)
Collana	Studies in health technology and informatics, , 0926-9630 ; ; 111
Altri autori (Persone)	WestwoodJames D
Disciplina	610.2856
Soggetti	Virtual reality in medicine Medicine Electronic books.
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Note generali	Description based upon print version of record.
Nota di bibliografia	Includes bibliographic references and index.
Nota di contenuto	Title page; Preface; Conference Organization; Contents; Dynamic Generation of Surgery Specific Simulators - A Feasibility Study; Haptic Laparoscopic Skills Trainer with Practical User Evaluation Metrics; Desktop and Conference Room VR for Physicians; A Biologically Derived Approach to Tissue Modeling; Grid Enabled Remote Visualization of Medical Datasets; Surface Scanning Soft Tissues; Validation of a Bovine Rectal Palpation Simulator for Training Veterinary Students; Predictive Biosimulation and Virtual Patients in Pharmaceutical R&D; Simulating Surgical Incisions without Polygon Subdivision 3D Real-time FEM Based Guide Wire Simulator with Force FeedbackDetermining the Efficacy of an Immersive Trainer for Arthroscopy Skills; Teaching Intravenous Cannulation to Medical Students: Comparative Analysis of Two Simulators and Two Traditional Educational Approaches; Validation of SimPL - A Simulator for Diagnostic Peritoneal Lavage Training; Challenges in Presenting High

Dimensional Data to aid in Triage in the DARPA Virtual Soldier Project; A Web-based Remote Collaborative System for Visualization and Assessment of Semi-Automatic Diagnosis of Liver Cancer from CT Images  
Heterogeneous Displays for Surgery and Surgical Simulation  
Visualization of Treatment Evolution Using Hardware-Accelerated Morphs; Real-time Rendering of Radially Distorted Virtual Scenes for Endoscopic Image Augmentation; Tracking the Domain: The Medical Modeling and Simulation Database; The ViCCU Project - Achieving Virtual Presence using Ultrabroadband Internet in a Critical Clinical Application - Initial Results; High Stakes Assessment Using Simulation - An Australian Experience; The Virtual Pediatric Standardized Patient Application: Formative Evaluation Findings  
The Visible Human and Digital Anatomy Learning Initiative  
Laparoscopic Task Recognition Using Hidden Markov Models; Intraoperative Augmented Reality: The Surgeons View; A Vision-Based Surgical Tool Tracking Approach for Untethered Surgery Simulation and Training; Haptic Simulation of the Milling Process in Temporal Bone Operations; Soft Tissue Deformation using a Nonlinear Hierarchical Finite Element Model with Real-Time Online Refinement; Modeling Biologic Soft Tissues for Haptic Feedback with an Hybrid Multiresolution Method  
Control of Laparoscopic Instrument Motion in an Inanimate Bench Model: Implications for the Training and Evaluation of Technical Skills  
Tearing of Membranes for Interactive Real-Time Surgical Training; Interactive Real-Time Simulation of an Endoscopic Polyp Removal; Surgical Robot Setup Simulation with Consistent Kinematics and Haptics for Abdominal Surgery; Development of a Navigation Function for an Endoscopic Robot Surgery System; Development of a 3D Visualization System for Surgical Field Deformation with Geometric Pattern Projection  
In Vivo Force During Arterial Interventional Radiology Needle Puncture Procedures

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Sommario/riassunto

Robotics and intelligence networks allow the healer's sight, hearing, touch, and judgment to be extended across distance, as if by magic. The moments when scientific truth is suddenly revealed after lengthy observation, experimentation, and measurement is the real magic. This book documents these moments, which are human ingenuity in progress.

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2. Record Nr.	UNINA9910585798703321
Titolo	Force microscopy [[electronic resource] ] : applications in biology and medicine // edited by Bhanu P. Jena, J.K. Heinrich Horber
Pubbl/distr/stampa	Hoboken, N.J., : Wiley-Liss, c2006
ISBN	1-280-50788-8 9786610507887 0-470-00770-2 0-470-00769-9
Descrizione fisica	1 online resource (312 p.)
Altri autori (Persone)	JenaBhanu P HorberJ. K. Heinrich
Disciplina	502.82 610.28
Soggetti	Medical electronics Scanning force microscopy Scanning probe microscopy Nanotechnology Electronic books.
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Note generali	Description based upon print version of record.
Nota di bibliografia	Includes bibliographical references and index.
Nota di contenuto	FORCE MICROSCOPY; CONTENTS; Preface; Contributors; Chapter 1. Porosome: The Universal Secretory Machinery in Cells; Chapter 2. Molecular Mechanism of SNARE-Induced Membrane Fusion; Chapter 3. Molecular Mechanism of Secretory Vesicle Content Expulsion During Cell Secretion; Chapter 4. Fusion Pores in Growth-Hormone-Secreting Cells of the Pituitary Gland: An AFM Study; Chapter 5. Properties of Microbial Cell Surfaces Examined by Atomic Force Microscopy; Chapter 6. Scanning Probe Microscopy of Plant Cell Wall and Its Constituents; Chapter 7. Cellular Interactions of Nano Drug Delivery Systems Chapter 8. Adapting AFM Techniques for Studies on Living CellsChapter 9. Intermolecular Forces of Leukocyte Adhesion Molecules; Chapter 10. Mechanisms of Avidity Modulation in Leukocyte Adhesion Studied by AFM; Chapter 11. Resolving the Thickness and Micromechanical Properties of Lipid Bilayers and Vesicles Using AFM; Chapter 12.

Imaging Soft Surfaces by SFM; Chapter 13. High-Speed Atomic Force Microscopy of Biomolecules in Motion; Chapter 14. Atomic Force Microscopy in Cytogenetics

Chapter 15. Atomic Force Microscopy in the Study of Macromolecular Interactions in Hemostasis and Thrombosis: Utility for Investigation of the Antiphospholipid SyndromeIndex

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Sommario/riassunto

A complete examination of the uses of the atomic force microscope in biology and medicineThis cutting-edge text, written by a team of leading experts, is the first detailed examination of the latest, most powerful scanning probe microscope, the atomic force microscope (AFM). Using the AFM, in combination with conventional tools and techniques, readers gain a profound understanding of the cell, subcellular organelles, and biomolecular structure and function.The text begins with three chapters describing the molecular machinery and mechanism of cell secretion and membrane fus

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